

Relationships of Reported State Measures of Performance  
to Self-Perceived Teaching Competence:  
An Intrapersonal Analysis of Ten Adult Educators

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In fulfilment of the requirements for the degree of Doctor of Philosophy

University of Sydney

2004

### **Supervisor's Certification**

I, Dr. Christopher Lennings, do certify that the Ph.D. thesis entitled Relationships of Reported State Measures of Performance to Self-Perceived Teaching Competence: An Intrapersonal Analysis of Ten Adult Educators by Lizbeth L. Wilson is in a form suitable for examination.

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*Dr. Christopher Lennings*

### **Certification**

I, Lizbeth Luther Wilson, do hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of a university or other institute of higher learning, except where due acknowledgement is made in the text.

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*Lizbeth L. Wilson*

## ACKNOWLEDGEMENTS

My sincere appreciation to all those adult educators who through their time, energy, and effort made this research possible.

This research study was conducted under the guidance and supervision of Dr. Christopher Lennings, psychologist and senior lecturer for which I am grateful. Guidance by Dr. Thomas Benjamin was appreciated for the supervision in the statistical analysis. Dr. Bruce Wilson greatly assisted me with the coding of the interviews. Ms. Karen Pepper assisted me with the SPSS, Mr. Michael Adamentidis, Ms. Rebecca Eckert, Mr. Bruce Wylie, Ms. Jennifer Garth, and Mr. Andrew Campbell assisted me in their own way. I am very thankful for your assistance, and I wish to express my sincere gratitude for your contribution on my behalf.

Finally, thanks to my beloved husband, Dr. Bruce A. Wilson for your everlasting encouragement and support. Love to you and our son, Tyler Chad.

## ABSTRACT

This study investigated intrapersonal self-reported, perceived teaching competence. Each of ten adult educators' teaching competence was analysed in a qualitative/quantitative study within ten interactive teaching sessions. Self-reported influences of performance variables pertaining to perceived arousal discrepancy, effort, performance state self-esteem, and telic/paratelic metamotivational states were related to self-perceptions of teaching competence.

Seven of ten adult educators demonstrated a relationship between their current state and perceived teaching competence. A higher perceived teaching competence was experienced when rating themselves nearer to their ideal teaching state. From a reversal theory perspective, the investigator determined telic/paratelic situational state balance by primarily utilising the Telic State Measure (Svebak & Murgatroyd, 1985), and conducting the Metamotivational State Interview Coding Schedule (O'Connell, Potocky, Cook, & Gerkovich, 1991) to code psychological lability (i.e., how easily and readily one shifts between states) and subjective experiences of the educator's perceived competent and "less" competent teaching sessions.

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## GLOSSARY

|        |  |
|--------|--|
| AMSP   | Apter Motivational Style Profile                         |
| ARSK6  | (six questions pertaining to arousal seeking in the TSM) |
| MSP    | Motivational Style Profile                               |
| MSICS  | Metamotivational State Interview Coding Schedule         |
| PDS    | Paratelic Dominance Scale                                |
| PLAY4  | (four questions pertaining to playfulness in the TSM)    |
| PSSE   | Performance State Self-Esteem                            |
| TDS    | Telic Dominance Scale                                    |
| TSM    | Telic State Measure                                      |
| TSMAD  | Telic State Measure-Arousal Discrepancy                  |
| TSME   | Telic State Measure-Effort                               |
| SPON5  | (five questions pertaining to spontaneity in the TSM)    |
| SPTC   | Self-Perceived Teaching Competence                       |
| SSE-PS | State Self-Esteem (performance) Scale                    |
| SSE    | State Self-Esteem  |
| SSES   | State Self-Esteem Scale                                  |
| T/P    | Telic/Paratelic  |
| TPPS   | Telic/Paratelic-Planned-Spontaneous                      |
| TPSP   | Telic/Paratelic-Serious-Playful                          |

## CHAPTER I

### Introduction

Adult educators' perceived teaching competence can be impacted by several influencing factors. When an adult educator perceives they have performed well, what are the psychological factors contributing to their perceived higher teaching competence? If they have low self-perceptions of their teaching ability at any given time, in that instance, what might these psychological factors be? The current study investigates the self-perceived teaching competence of ten adult educators through an intrapersonal analysis, which is based on a grounded theory approach (Glaser, 1998) via the continuous application of observation, conversation, and interview.

Perceptions of performance have been categorised into a variety of forms such as perceived competence, ability, achievement, goal orientation, control, and motivation. For example, ability attributions play an important role in understanding the ongoing stream of achievement behaviour. Various terms have been used to describe the construct, but it can be argued that there is a great deal of similarity in the function of this construct in the numerous theories, despite the variety of terminology, whether it is termed self-efficacy (Bandura, 1977a, 1986), perceived competence (Harter, 1978, 1981a), sense of competence (Maehr & Braskamp, 1986), or perceived capacity to meet environmental demands (Csikszentmihalyi & Nakamura, 1989). The self-concept of ability in its various forms is considered to be an important mediator of the ongoing stream of performance, competence and achievement striving. In performance, the individual is expected to assess their own competency to achieve the task, or have confidence in their capacity to meet the environmental demands; and this assessment of self affects one's maladaptive or adaptive achievement striving patterns (Roberts, 1992). The

inventories in the current study were designed to be unobtrusive to the adult educator's teaching experience to avoid interfering with their performance pattern.

The abovementioned achievement-related beliefs are made up of task values including factors of interest and perceived importance. Ability perception factors are comprised of beliefs about one's competence, expectancies for success, and general perceived performances. Achievement-related beliefs and ability perceptions assist researchers to examine perceptions of difficulty and the effort required to do well (Eccles & Wigfield, 1995).

Such perceptions of achievement are related to a performer's motivation and sense of control. Humans are unique in their motivational levels, both interpersonally and intrapersonally (i.e., within the individual). Motivation helps to explain one's behavioural intensity, persistence, choices, and performance outcomes. Roberts (1992) suggested that motivational theories must address the direction of behaviour and explain why the behaviour was energised. Thus, when a performer is preparing several hours for an event, it is assumed they are motivated to perform well; however, the variability of reasons for motivation is unique to each person (Apter, 2001).

It has been suggested that because performers differ in their perceived competence (Harter, 1981a), they might benefit by adapting a criteria to evaluate that competence. This could result in valuable research in the area of performance evaluation (Horn & Haasbrook, 1987).

According to Horn et al. (1987), self-perceived competence is the best predictor of performance evaluation. They suggested that one's subjective interpretation in a performance setting, including the processes, may be more important than the outcome itself in determining success and failure.

### *Reversal Theory*

The current investigation examines the perceived teaching competence of ten adult educators primarily from a reversal theory (Apter, 1982, 2001) perspective. The way individuals structure their experience, termed structural phenomenology, is the way reversal theorists examine human behaviour. Reversal theory is a general theory that explores certain tenets about human experience and formulates the theoretical basis of the current investigation.

General characteristics of the theory are:

1. The theory is about the structure of experience. Whatever the topic, it starts from subjective meaning and works outward into behaviour, physiology, performance, and relationships.
2. The theory emphasises the way in which motivation is fundamental to and pervasive in experience. That is, motivation enters into and provides a continuing internal context for all of our perceptions, thoughts, and actions.
3. Personality is seen by the theory as understandable in terms of intra- individual change rather than inter-individual differences.
4. The theory recognises the necessary self-contradictions of human nature. People want different, even opposite, things at different times, even in the same situation (Apter, 2001, p. 5).

Apter (1991), the founder of reversal theory described the theory as an approach that views conscious experience as the pivotal starting point by which to understand behaviour.

Reversal theory is phenomenological, meaning it is concerned with subjective interpretation

rather than behavioural processes. Reversal theory is essentially concerned with metamotives, or how a person tends to view their “in the moment” experience (Apter, 1982).

The theory, however, expands and explains many phenomena not specifically considered by other motivational theories and models. For example, reversal theory introduces the idea of motivational *style*, a seemingly important and relatively new concept linking goals and aspirations to everyday conscious experience (Apter International 1999a; Apter, Mallows, & Williams, 1998). Reversal theory is an intriguing challenge to the more traditional ways of observing and analysing people’s motives and behaviours.

This challenge has been taken seriously in the current investigation. For example, reversal theory begins with a disarmingly simple distinction: Sometimes a person acts to achieve goals (*telic*), and sometimes the same person acts because he/she enjoys the activity of the moment (*paratelic*). In the *telic* state, people are serious-minded, goal-oriented and plan ahead. In the *paratelic* state, people are playful, spontaneous and in the moment (Kerr & Vlaswinkel, 1993). The contrast of *telic* (serious/planned) and *paratelic* (playful/spontaneous) modes of human experience, as explored by reversal theory, opens the pathway to a broad scope of theory, research, and application in psychological science.

Reversal theory is currently being subjected to wider research, and essentially it needs to be applied as widely as possible not only among psychologists and specifically reversal theorists, but also by those individuals who want to enlarge their grasp of human life. To date, only one study has applied reversal theory to teaching, referring specifically to the “metamotivational analysis” of teaching. In her master’s thesis, Shelley (1999) metamotivationally analysed (exploring the metamotivational states for particular individuals in specific situations/activities) stress amongst teachers by investigating different kinds of disruptive behaviour in various

classroom scenarios. Nevertheless, there is a dearth of research within the intrapersonal (within subject) design, specifically, the analysis of telic and paratelic states in relation to teaching competence.

Each adult educator in the current investigation was observed, via self-report and coding of interviews, on an individual basis. The current investigation of perceived teaching competence is looking at intrapersonal change. Reversal theory, a systematic theory of individual change, was utilised to provide a theoretical basis for determining the uniqueness of perceived performances (i.e., self-rating and self-evaluation of performance competence) as well as possible shifts in self-perceived competence.

Within reversal theory, individuals are viewed as “consistently inconsistent” because a person can shift, reversing back and forth between two bipolar states instantaneously, depending on how they view their perception of their experience (Apter, 1982). To clarify, a “state” in psychology, according to Murgatroyd (1985) is used to describe something about a person at a given moment in time. Metamotivational states are higher-order states that do not determine any specific motive, according to Lachenicht (1988). He stated that it is rather the class of events which one finds pleasurable or painful and which aspects of one’s experience that are either prominent or vague at that particular moment.

Apter (1982) stated that according to reversal theory, some important aspects of the way in which an individual interprets his/her world, and what he/she is doing in it, fluctuate in various ways which may involve radically different interpretations being made by the person at various times. These shifts, or reversals, of metamotivational states are caused by inducing agents (or change agents) that consist of frustration, satiation (or being in one state for a sufficient length of time), or a contingent event.

Reversal theory, however, recognises that people have a preference or a tendency to spend more time in one state than another. Metamotivational state dominance refers to what state an individual tends to be in the most (Apter, 1982). Dominance of a state is a key concept in reversal theory, and it distinguishes the theory from trait theories in the personality psychology literature. Dominance, according to Apter, is a concept of consistently inconsistent behaviour (e.g., a bipolar construct), as opposed to a trait which Chaplin (1985, p. 475) defined as “a relatively persistent and consistent behaviour pattern manifested in a wide range of circumstances” (e.g., a unipolar construct). Significant differences have been found between successful and unsuccessful performers on a dominance or ideal state-of-being measure, and it is in this sense that researchers in reversal theory gain credibility and can go beyond conventional state-trait theory approaches in explaining individual motivational and emotional processes (Fontana, 1983).

Performers, unknowingly, can be affected by the metamotivational state in which they spend most of their time (Apter, 2001). Apter referred to state balance as the actual amount of time that an individual spends with one of a pair of states, and situational state balance as “the actual amount of time that the individual spends in one state rather than its opposite in some defined type of situation over iterations of that situation” (p. 49). To assist an individual’s self-awareness (i.e., self-understanding), Apter (1994) devised a criteria that asserts how being aware of and understanding multiple bistable selves (i.e., metamotivational states of two distinct ranges of an arousal level), each having positive and negative aspects, might help individuals to explain human behaviour. The criterion consists of 10 metamotivational states, of which 2 are subcomponents of the mean-ends (telic-paratelic) domain: telic and arousal-avoiding, paratelic

and excitement-seeking, conformist, negativistic, autic mastery, autic sympathy, alloic mastery and alloic sympathy (see Table 1).

Table 1

*Apter's (1994) Multiple Selves*

| <b>Multiple Selves</b>      | <b>Positive</b>   | <b>Negative</b>              |
|-----------------------------|-------------------|------------------------------|
| <b>Telic</b>                | Realistic planner | Bogged down in details       |
| <b>(Arousal-Avoidant)</b>   | Cautious          | Withdraws from challenge     |
| <b>Paratelic</b>            | Spontaneous       | Impulsive                    |
| <b>(Excitement-Seeking)</b> | Likes to explore  | Easily bored                 |
| <b>Conformist</b>           | Fits in well      | Avoids taking a stand        |
| <b>Negativistic</b>         | Autonomous        | Difficult                    |
| <b>Autic-Mastery</b>        | Determined        | Manipulative                 |
| <b>Autic-Sympathy</b>       | Cooperative       | Dependent                    |
| <b>Alloic-Mastery</b>       | Devoted to causes | Follows uncritically         |
| <b>Alloic-Sympathy</b>      | Unselfish         | Taken advantage of by others |

(Source: Wilson & Wilson, 1996; 1997)

Examples of reversals would include: from serious (telic) to playful (paratelic), from following rules (conformity) to refusing to follow rules (negativistic), from excitement-seeking to arousal-avoiding, from mastery to sympathy, and finally, from self-centred (autic) to other-centred (alloic). Each reversal can take place in the opposite direction. Appropriate reversals are believed to contribute to effective functioning while inhibited or inappropriate reversals are viewed as dysfunctional. An example of appropriate reversals in performance was investigated by Wilson (1992) when he utilised a multiple regression analysis to investigate academic performance. The results revealed significant F scores indicating that telic and conformity metamotive states were connected to higher grade point average (GPA). Wilson found that

preferred versus non-preferred metamotive states were linked to higher and lower GPA scores respectively.

A “healthy” reversal is shifting appropriately with the situational circumstances (e.g., being serious when a student has a personal crisis and playful when the students present a humorous skit or role-play). An inappropriate reversal is switching from a functional state to a dysfunctional state (e.g., shifting from spontaneous teaching to a lesson plan while students are learning through questions and answers). Also, inhibited reversals consist of locking into a state, or getting stuck and not shifting (Apter, 1982).

### *The Current Investigation*

The psychometric exploration of metamotivational research focuses on particular individuals and how they enter into specific situations, activities, or domains. This exploration has been referred to as “metamotivational analysis” (Apter, 1997a) and has only started to be taken up in reversal theory research in recent years. The current study of reversal theory incorporates self-perceived teaching competence of an adult educator through a method of metamotivational analysis and observation of variables based on a grounded theory approach to performance psychology (i.e., the study of performance variables and issues from a psychological perspective).

Apter (2001) emphasised that in future research, “a primary consideration is to isolate which metamotivational variables account for the relationships discovered” (p. 98). The emphasis of this study has been essentially to explore the relationship(s) of performance and metamotivational variables to self-perceived teaching competence. The performance variables included in the current investigation are derived from reversal theory and (sport) performance psychology literature. These consist of: self-perceptions of arousal discrepancy and hedonic tone (i.e., the degree of pleasure of an arousal experienced), effort, and metamotivational shifts within the means-ends domain (telic and paratelic states) including telic/paratelic situational state balance (in a teaching mode), and performance state self-esteem and its relationship to perceived performance. The researcher of the current investigation believes that performance variables derived from the sport psychology literature can be applied to a vast array of performance scenarios taken from everyday life experiences, of which teaching is one of these areas.

### *Metamotivational States*

In the abovementioned pairs of metamotivational states (see Table 1), the researcher analysed exclusively the telic and paratelic states (bistable modes) because these two metamotivational states in reversal theory specifically refer to one's goal-orientation (Apter, 1989) and the means-ends domain (Apter, 2001). In the performance literature, goal-orientation has been connected to self-perceived competence (Ames & Ames, 1984a). These perceptions of competence are self-referenced (sought out by self) and dependent upon progress and/or improvement. Success or failure has been shown to be determined by one's subjective assessment of performance (Nicholls, 1984a; Dweck & Elliott, 1983).

In this study, one's current dominance (key state) or the bias that an individual currently possesses with respect to a pair of states (Apter, 2001) is analysed. Ten adult educators identified their metamotivational state to be either telic or paratelic. Apter (1989) stated that a good way of determining whether someone is in the telic or paratelic mode would be to ask them if they would give up what they are doing in exchange for having already achieved the goals of their current actions. In the telic mode, one would answer "yes" and in the paratelic mode, one would answer "no" (Apter, 1989).

Reversal theorists, Wilson and Phillips (1995) compared performers' predominant metamotivational combinations (of states) pre, during, and post performance. They found that in sport performance, game outcome could be the contingency contributing to an athlete's metamotivational state, which is directly related to aspects of dominance.

### *Arousal Discrepancy*

The current investigation analyses an adult educator's telic and paratelic states (or the bimodality of the means-ends domain), it also investigates their arousal preference, arousability, and more specifically, their perceived arousal discrepancy (Apter, 2001). The investigation

asks, what are the relationships of an ideal telic/paratelic situational state balance, metamotivational state, arousal level, and hedonic tone (i.e., measurement of an experience as pleasant or unpleasant) for an adult educator to obtain a higher perceived level of competence?

As previously mentioned, the current study investigates the relationships of performance and metamotivational variables to self-perceived competence. The contention of the current investigation is that there is a relationship between adult educators' situational state balance in a teaching mode and their perceived teaching competence. Adult educators in their ideal telic/paratelic situational state balance might perceive a higher level of teaching competence than otherwise.

“Successful performers appear to be more able than less successful performers to achieve and maintain their desired levels of arousal and to experience them in a positive, pleasant, and non-stressful way” (Kerr, 1997a, p. 86). Kerr observed in his metamotivational research on performers that “...those who performed successfully were consistently more able than less successful performers to achieve and maintain their ideal levels of felt arousal when performing” (Kerr, p. 92).

### *Effort*

While striving for a successful performance, adult educators also have various kinds of stress and effort with which to contend. In reversal theory, tension-stress is concerned with the experience of unpleasant emotions while effort-stress has to do with how much effort the individual uses in attempting to cope with some threat or challenge (Apter, 1989). Telic and paratelic states can influence how tension-stress and effort-stress are perceived and experienced.

Differences between telic and paratelic dominant individuals are greater when levels of arousal are fairly low (Martin, Kuiper, Olinger, & Dobbin, 1987). Martin and his colleagues found that paratelic subjects seem to be relatively unaffected by moderately stressful conditions while telic subjects are substantially more affected.

Performers perceive performance anxiety in different ways. Jones and Hardy (1997) in their extensive review of performance psychology suggested that anxiety be measured qualitatively as well as quantitatively. A qualitative analysis emphasises the substance of results before determining its meaning. A quantitative analysis determines meaning through probability. Jones et al. stated that it is not enough to know the intensity and frequency of anxiety symptoms provided by quantitative analysis. They suggest that researchers also need to know the direction of these symptoms and the qualitative values, such as the positive or negative effects. Some of the symptoms of anxiety may be experienced as debilitating (i.e., distressful) to performance while other symptoms may be experienced as facilitative (i.e., eustressful).

### *Hedonic Tone*

Tension (see Operational Definitions) and effort affect one's hedonic tone, or perceived pleasure and displeasure, and it is important to be aware of any perceived stress. Reversal theory has proposed that people are generally motivated to increase hedonic tone, a measure of experiences on a continuum of pleasant to unpleasant. Best performances should occur within conditions associated with pleasant moods and during situations in which a performer's ideal level of arousal is matched by their actual felt level of arousal (Males & Kerr, 1996). When psychological characteristics of successful performers were examined by Kerr (1997a), the pattern was one of stability and little change. The pattern for unsuccessful performers was

accompanied by unpleasant psychological responses. In addition, hedonic tone was found to have a direct relationship to a performer's arousal discrepancy and actual performance.

#### *Performance State Self-Esteem*

Included in the current investigation of self-perceived competence are the following self-esteem (i.e., self-competence and self-worth) issues: self-confidence, self-efficacy, cognitive distortions, values, core beliefs, self-disclosure, self-evaluation (i.e., a judgement of oneself), self-report, feedback, support, and social desirability. The relationship of performance state self-esteem (see Operational Definitions *located near the end of this chapter*) to perceived competence is viewed by the researcher as having a possible influence on the process of self-perception and essentially one's exploratory process of the "self".

In a study on self-esteem, Martin and Murberger (1994) stated that high self-esteem subjects' self-perceived performance was better than the low self-esteem subjects' self-perceived performance. The (performance) state self-esteem scale refers to various performance areas including, self-efficacy, self-confidence, self-perceived comparison to others, self-perceived ability, perceived intelligence, cognitive anxiety, somatic stress, and current overall impression of one's performance. Inclusion of performance state self-esteem is believed to have enhanced the current investigation and was deemed essential to a broader scope of self-perceived competence.

#### *Self-Perceived Teaching Competence*

One's perceived competence is formulated by various issues influencing performance (Horn et al., 1987; Harter, 1981a). These issues of performance include: arousal and activation, cognitive processes, motivation, social cognitions, cognitions (and metacognitions), ability

perceptions, arousal, stress (tension-stress, effort-stress), strain, anxiety, emotion, mood, hedonic tone, environmental stressors, ambiguity, and perceived readiness.

The current investigation has undertaken an intrapersonal approach into the metamotivational analysis of an adult educator's self-perceived teaching competence. More specifically, the researcher has analysed telic/paratelic situational state balance (see Operational Definitions). The topical areas comprising the theory and included in this study are: reversals, bistability, lability, dominance, metamotivational states of the means-ends domain, arousal discrepancy, hedonic tone, and individual differences.

In the following section, the performance psychology literature is reviewed extensively for the purpose of fully demonstrating how the experience of interactive teaching and teaching competence can be regarded as areas within the "performing" arena. Specific topics investigated are: cognitive processes, motivation, ability perceptions, arousal, stress, anxiety, emotion, and mood. Each topic is reviewed in an attempt to understand intrapersonal change within the realm of interactive teaching. Self-esteem and issues of the self are also included as part of the review of literature. Areas reviewed include: self-confidence, self-efficacy, self-evaluation, self-report, and other related topics.

## Review of Literature

### *Reversal Theory*

#### *Metamotivational States*

Reversal theory is essentially concerned with metamotives. A metamotivational state is defined by Apter (1982) as a person's interpretation of their "in the moment" experience. For example, one might see oneself as playful in one state (i.e., paratelic), and serious in another state (i.e., telic), depending on how they subjectively interpret their experience. The theory is a phenomenological theory; it is concerned with the subjective interpretation rather than the person's behavioural processes. Since individuals are viewed as consistently inconsistent, the theory suggests "an individual's experience can change dramatically in a short time due to reversals in metamotivational states" (as cited in Males et al., 1996, p. 33).

#### *Reversals: Lability, Dominance, and Bistability*

Reversal theory promotes a bistable rather than a unistable perception of one's experience. This means that one can shift from one state to another instantaneously depending on their perception of their experience. This also explains the idea in reversal theory of people being viewed as being consistently inconsistent (Apter, 1989).

A healthy reversal is shifting appropriately to the situational circumstances. For example, feeling the shift of arousal through a contingent event just before a teaching session (i.e., class) might create the necessary physical, mental and emotional state for a good performance; whereas staying in a non-preferred state may not be productive and/or pleasant (Apter, 1989). Reversals are not voluntary, although one can set up the circumstances to increase the probability that a reversal will occur.

### *Lability.*

Within the context of reversal theory, healthy individuals are believed to be moving freely between one metamotivational state and its opposite (e.g., playful to serious). This movement is termed lability. Individuals who are reversing from one metamotivational state to another more often are usually considered to be more labile. An inappropriate reversal is switching from a functional state to a dysfunctional state. An example might be when an individual is so nervous before teaching that they become sick (Apter, 1989). An example of an inappropriate reversal in performance might be in the research conducted by Males, Kerr, and Gerkovich (1998) in which subjects spontaneously changed strategies in a canoe slalom competition in response to errors (e.g., causing panic or frustration) and/or external events (contingent events) creating further concerns with their performance.

Inhibited reversals (Apter, 1989) consist of locking into one state only (e.g., being serious at all times). Some clinical examples are (1) if fear and anxiety lead one to a serious neurosis, (2) avoiding all dangerous situations or products for fear of disease, (3) delinquent behaviour as a lifestyle, and (4) constant need for excitement with total disregard for consequences. An example of an inhibited reversal in performance would be when the adult educator gets “stuck” in the planning mode and then cannot be spontaneous or come up with a contingency plan to save the performance in a changing situation.

One’s metamotivational state is based on one’s subjective experience. Thus, it is impossible to predict what type of situation might induce a telic or a paratelic state. We cannot say teaching, for instance, will elicit a serious or playful state of being. One may be serious or playful depending on the person's own subjective view of the current moment.

### *Dominance.*

The concept of dominance is a key concept in reversal theory, and as previously mentioned, it distinguishes the theory from traditional trait theories in the personality literature. By dominance, Apter and Apter-Desselles (1993) imply that the individual has a tendency to spend more time in one state rather than its opposite.

Apter (1989) described metamotivational dominance with the example that if a person has a strong bias toward being in a certain mode, this does not mean that they will never be in the opposite mode. As Kerr (1997b) reiterated: “It is not the case that people never spend time in the opposite metamotivational state” (p. 15).

Apter continued by explaining that when a person is in the opposite mode, one will presumably be as “fully” in this mode as someone who is perhaps normally in this mode. Apter described the shift as a complete swing from one way of being to another. “Reversal theory received its name from this proclivity towards switching back and forth between the two orientations” (Cox, 1998, p. 122).

“Reversals have been thought to be involuntary” (Apter, 1982, p. 42). Potocky and Murgatroyd (1993) presented an additional aspect of reversals and explained “...people may place themselves in circumstances that will increase the possibility of reversals occurring” (p. 18). For example, after a stressful day at the office, a person in the telic state may intentionally go to a pub where the atmosphere of music, other’s laughter and alcohol are all external contingencies that increase the likelihood of a reversal to the paratelic state.

### *Bistability.*

Bistability implies individuals will reverse from one metamotivational state to its opposite under conditions of frustration, satiation, and/or contingency (i.e., a contingent event; Apter, 1982). Apter provided the following analogy of a bistable system, often referred to in reversal

theory literature as a light switch. Either the “on” or “off” position is stable, but any position in between these two is unstable. In reversal theory, bistability is concerned with which of the two metamotivational states (e.g., telic or paratelic) is operative. This is thought to be governed by the particular conditions pertaining at the time, such as aspects of the environment or biological functioning.

Frustration, satiation, and contingent events are inducing/change agents (see Operational Definitions). Frustration in real-life settings was researched by Purcell (1999a, 1999b). Examples of frustration through performers’ spoken monologues (in this case, golfers) displayed examples of frustration leading to a reversal.

Apter (1989) provided a definition for being satiated as “...the idea that there is an internal dynamic which leads naturally and inevitably to a reversal, unless something else happens (e.g., an environmental event) to bring about the reversal sooner” (p. 51). Apter then provided the example of a person’s sleep cycle, in which one is awake until becoming so tired that they eventually have to fall asleep. Then after being asleep for a while, the person automatically wakes up.

A contingent event causes a contingent reversal between states (Apter, 2001). Apter (1989) defined a contingency as:

...based upon some environmental event or situation occurring. Such events consist of all those things that happen, or aspects or contexts of things that happen, which cognitively interpreted by the individual, bring either a goal or an activity to the focus of the phenomenal field (p. 48).

A person's dominance, or key state, is determined when they are likely to spend more time in one metamotivational state than its opposite (e.g., more playful than serious or more rebellious than conforming). A key state is the state that tends to occur frequently and is focussed upon in an individual's experience (Apter, 2001). "A metamotivational state is said to be dominant, or 'state-dominant', if the individual is predisposed to spend longer periods in this state than in the other member of the pair which they together constitute" (Jones et al., 1997, p. 129; i.e., telic vs. paratelic).

Apter (1989) clarified:

Since the bias involved, therefore, cannot properly be thought of as a trait, this kind of personality characteristic has been given another name in reversal theory: it is known as mode dominance, or simply dominance. Thus, one can speak of someone being 'telic dominant' or 'paratelic dominant' to some degree or another (p. 55).

Martin (1985), Martin et al. (1987), and Martin, Kuiper, and Olinger (1988) investigated people's metamotivational preferences (i.e., dominance of an ideal state) and one's tendency to frequently reverse states (i.e., lability). As with bistability, individuals are believed to reverse (or shift) metamotivational states due to three triggers (inducing/change agents and sometimes referred to as change agents), either being frustrated, satiated (i.e., an internal dynamic which leads naturally and inevitably to a reversal -- like boredom) or to meet some new contingency (i.e., some environmental event or situation that brings either a goal or an activity to one's focus) (see Fig. 1).

## INDUCING/CHANGE AGENTS

Contingency/Contingent Events

Satiation

Frustration



*Figure 1. Inducing/change agents and telic/paratelic metamotivational reversals.*

*(Source: Kerr, 1994, 1997a).*

### *Means-ends Domain: Goal Orientation*

In reversal theory, there are four pairs of metamotivational states. However, for the purposes of the current investigation, the motivational domain of “means-ends” (i.e., goal orientation pair of states: telic or serious and paratelic or playful) is specifically salient in the area of performance because of the influence of goal orientation in the performance psychology literature (Ames et al., 1984a). Individuals are described as having dominance in either the telic or paratelic state. Telic-dominant individuals have a goal-directed orientation towards life, while paratelic individuals are fun-loving and have a here-and-now orientation. While an individual has the capability to be dominant in either telic or the paratelic orientation, each person has the capability to switch back and forth between the two (Apter, 1982, 1989, 2001).

#### *Telic versus paratelic: state balance.*

State balance, according to Apter (2001) is how balanced someone is in a general sense in terms of spending time in one metamotivational state versus another. There are specific kinds of state balance: (1) Situational state balance is “...the actual amount of time that the individual spends in one state rather than its opposite in some defined type of situation over iterations of

that situation” (p. 49); and (2) Event state balance is “...the actual amount of time that the individual spends in one state rather than its opposite on a particular defined occasion” (Apter, 2001, p. 49).

In the telic state people are serious-minded, goal-oriented, future-oriented, plan ahead, arousal-avoiding, prefer important activities, and they attempt to complete activities (Kerr, 1997a). Healthy individuals are believed to be in the telic state when they need to be in a serious and/or planning state of being.

In the paratelic state people are in the moment, playful, spontaneous, sensation seeking, arousal-seeking, present-oriented, prefer unimportant activities, and they attempt to prolong activities (Kerr, 1997a). Healthy individuals are believed to be in the paratelic state when they subjectively view their environment as a place where they prefer to be in a playful and/or spontaneous state of being.

Telic and paratelic states are a part of mental life that is structured in terms of means-and-ends. “That is, one is always aware of a certain directionality, however minimal, and of the routes that are implied by this directionality” (Apter, 2001, p. 6). For the adult educators in this study, there is always, at some level of awareness, a sense of where one is going and what one is doing to get there -- of purpose and action. Apter stated:

The telic state tends to be associated with planning ahead and the paratelic state with spontaneity.... In the telic state, the goal is of overriding importance, with the means being chosen in the attempt to achieve the goal. In the paratelic state, the ongoing behaviour and experience are of paramount importance, with any goals being seen as ways of facilitating or enhancing the behaviour or experience (p. 40).

Apter (1989) discussed the difference between the two metamotivational modes, stating: ...the metamotivational mode in which the goal is primary, the ‘telic’ mode, after the Greek word *telos*, meaning ‘an end’ or ‘goal’. And let us call the opposite mode, in which the activity is primary, the ‘paratelic’ mode, adding the ancient Greek word *para*, meaning ‘alongside’, to the word *telic*. Note that the word for ‘goal’ is still included in the term *paratelic*, which is as it should be, because there is no implication that there is not a goal in this mode. The implication is rather that there is an alternative mode ‘alongside’ the telic mode (p. 33).

#### *Telic versus Paratelic: Feelings, Emotions and Motivation*

Apter (2001) stated that the telic-paratelic pair deals with felt significance (the telic state preferring high felt significance and the paratelic preferring low). Felt significance is the degree to which the individual experiences themselves to be “...pursuing goals that are important beyond the current ongoing situation (high felt significance) or is doing things for the sake of those things themselves in the present moment (low felt significance)” (p. 41).

The telic-paratelic pair has been referred to as a somatic pair (Apter, 2001). Felt arousal is the degree to which the individual feels themselves “...to be worked up, emotionally involved, and intense” (p. 42). Apter stated that hedonic tone in the case of the somatic emotions “...is experienced as some degree of pleasure or displeasure. ...The emotional ranges are as follows (from low to high arousal): relaxation (telic), boredom (paratelic) to placidity (telic) to sullenness (paratelic)” (p. 43).

There are positive and negative aspects, as viewed by Wilson and Wilson (1996), which characterise the telic and paratelic metamotivational states. A person in the positive telic state is far-sighted and extremely aware of each implication of their actions. Often being willing to delay

gratification until it is appropriate, they will do unpleasant things momentarily for the sake of pleasant consequences in the future. They have the ability to distinguish between important and less important tasks, concentrating on the former. Long-term plans are realistic and maintain some degree of flexibility. They are responsible when in the telic state, keeping to commitments, both to themselves and others. In the positive telic state, individuals tend to be good at monitoring progress, taking corrective action when necessary. They are sensible in terms of what is achievable, and they take action in time to avoid crisis.

In terms of someone experiencing the negative telic state, according to Wilson et al. (1996), the person finds it difficult to make decisions because of the possible consequences of their actions and not being able to distinguish between important and unimportant tasks, attempting to do everything. Often, they get bogged down in details, being rigid and inflexible with long-term plans. Also in this state, these individuals cannot take advantage of new opportunities, when they arise, if they do not conform to a pre-arranged plan. They worry when things do not turn out exactly as expected, often being too critical of themselves and others when ambitious plans fail (i.e., perfectionistic). When in this state, a person will agonise over things in the future that cannot be controlled, tending to be grim and humourless. When in the negative telic state, people are not satisfied because of their constant awareness of more goals yet needing to be accomplished. Finally, they are unable to delegate -- since everything they do matters.

A person, when in the positive paratelic state, is able to enjoy both the big and little things in life, as they present themselves, sharing their "joie de vivre" with others. They tend to feel unthreatened, unstressed and easy-going, taking life as it comes at the time. They relish challenges and behave spontaneously, being very open to new ideas and ways of doing things.

In this state, individuals have a good sense of humour, not taking oneself or others too seriously. They are imaginative, making use of fantasy in creative ways, and have a tendency to enjoy the moment (Wilson et al., 1996).

Lastly, Wilson et al. (1996) describe that when a person is in the negative paratelic state, he or she is not able to see beyond immediate pleasures (i.e., short-sighted). The person in this state is usually hasty in judgment, often impatient of anything that involves delay of pleasure. Individuals in this state are unable to develop sustained courses of action. They are irritated by others over-exuberance or too much light-heartedness, often trivialising situations merely by their approach. They are unreliable, irresponsible, and tend to waste time. Eventually when in the dominant negative paratelic state, one can become nihilistic -- whereby nothing is seen to have value beyond itself, becoming depressed when there is not a new thrill on the horizon.

### *Arousal and Activation*

Arousal, according to Sage (1984), is viewed as an energising mechanism responsible for the harnessing of the body's resources for intense and vigorous activity. It has been suggested that the continuum of arousal responses range from extreme excitement to lethargy (Landers & Boutcher, 1998). In addition, Landers et al. stated that arousal is believed to be a response to input that affects perceptual processes. So without a certain level of arousal, people may be unable to perceive accurately the stimuli within the environment.

Factors affecting the performance-arousal relationship, according to Williams (1998) are (1) the performer's skills and experience, (2) the performer's cognitive appraisal, (3) the performer's emotional or physiological response (4) the performer's behaviour, and (5) the situation/context in which the performance is set.

The activation system, according to Sanders (1983) is considered to be responsible for the person's readiness to respond. Activation affects an individual's motor preparation. Sanders also stated that effort is the co-ordination system between arousal and activation systems and it establishes the relationship between perception and action. It is through effort that performance decisions are made. Effort, as a co-ordinating mechanism, attempts to correct imbalances between the arousal and activation systems in order to produce a maximum performance.

#### *Relationship of arousal and activation with effort and cognition.*

The entire relationship between arousal, activation and effort is dependent upon efficient functioning of our feedback and response mechanisms. For instance, if a performer's effort mechanism is overloaded they will not be able to receive the feedback, make the necessary corrections, and/or initiate the supply of resources required to perform correctly (Sanders, 1983). The idea is that stress will arise whenever the effort mechanism is either seriously

overloaded or fails to accomplish the necessary energy-balancing adjustments. Sanders stated that stress appears because effort fails a performer in correcting too low or too high a level of arousal, too low or too high a level of activation, and/or because there is a failure to supply sufficient energetic resources to decision-making due to the “cost” of performing its coordinating function.

A maximum performance, according to Sander’s (1983) model is impacted by the performer’s arousal state, which is influenced by their response to the stressors present in the environment. The individual’s arousal state is impacted by one's own cognitive appraisal and the processing of information, which activates the body’s readiness to respond. Their readiness to respond is impacted by the effective decision-making made by the effort mechanism.

This relationship between effort mechanisms and decision-making can be complex (Sanders, 1983). A task that is relatively complex will place high cognitive demands upon effort so that its ability to effectively coordinate the arousal and activation mechanisms is reduced, thus increasing the likelihood of stress. If a performer finds decision-making to be relatively simple, the cognitive demands upon effort are then relatively low. In teaching, cognitive processes available to devote to the “energetical” state of the system, reduce the probability of stress occurring whilst performing or preparing for a class (i.e., teaching session).

Sanders (1983) also predicted that an evaluation of arousal and activation leads the performer to exert effort, which determines the decision-making process. The underlying proposition is that the effects of stress are the result of transactions between energetical states and cognitive processes. Different stressors are affecting specific energetical supply mechanisms that, in turn, affect specific cognitive processes.

Lastly, the specific cognitive processes are factors involved in choice reactions, such as anticipation, perception, interpretation, decision-making, and response preparation (Sanders, 1983). Thus, when a person makes a series of rapid responses, the components of arousal, effort and activation may be disrupted individually, or collectively, by their reaction to stress, possibly causing a decrease in performance.

In 1982, Eysenck proposed a second two-dimensional system of arousal. He suggested that performance is not always impaired by too low or high of an arousal level, because performance may be maintained through a “higher-order” cognitive control system when it is processing information efficiently.

Eysenck (1984) contributed an important distinction to the research between *processing efficiency* and *performance effectiveness*. He stated that “effectiveness” is a measure of the quality of performance, whereas “efficiency” refers to the relationship between the quality of performance and the effort invested in it.

#### *Unidimensional Arousal Systems*

A brief history of unidimensional arousal systems includes that of Duffy (1962), who proposed a simple and common interpretation of the relationship between stress and performance. His proposal suggested that changes in performance while under stress are the result of changes in arousal. This explanation connects to previous theories of unidimensional arousal systems, such as the popular inverted-U hypothesis, originated by the early works of Yerkes and Dodson (1908), and further developed by Hebb (1955) and Fiske and Maddi (1961).

The inverted-U hypothesis has been the long favoured model for explaining the relationship between arousal and performance (Cox, 1998). According to Gill (1994): ...the

inverted-U theory rests on two assumptions: (1) small incremental increases in arousal result in small incremental increases or decreases in performance; and (2) moderate arousal results in optimal performance (p. 115).

The inverted-U hypothesis attempted to explain the relationships between arousal and performance, stress and performance, and anxiety and performance. In order to explain these relationships to performance there needs to be supporting evidence that accounts for actual and perceived demands of performance; the hypothesis needs to account for the different cognitive and somatic components of state anxiety; and some explanation of the role of cognition is required to clarify the arousal-performance relationship (Lazarus, 1966).

The inverted-U theory continues to draw support, as recognised by Jones et al. (1997), and it has been popular despite only being unidimensional. The validity of this theory still exists, as Jones et al. explained, in which the inverted-U proposes that for every type of behaviour there exists an optimum level of arousal, usually of moderate intensity, that produces a maximum performance and that this optimum decreases as performance complexity increases. Levels of arousal to any degree above or below this optimum amount are seen to produce an inferior performance. Thus, the hypothesis is straightforward and simply states that increases in arousal are accompanied by increases in performance up to a certain point, but further increases will cause deterioration in performance.

Landers et al. (1998) continued the support for the inverted-U and stated, "...the inverted-U has a much simpler formulation (e.g., than the catastrophe model, as discussed later in the literature review) and far more research evidence showing that the best performance occurs at intermediate levels of arousal" (p. 211).

Other critics, however, such as Cox (1998), Raglin (1992) and Weinberg (1990) have supported the notion that the inverted-U theory is far too simplistic. Their argument is that it fails to account for the complex relationship between performance and arousal. Nonetheless, the inverted-U hypothesis has existed for thirty years longer than the catastrophe model. Its longevity helps to explain the greater volume of research evidence supporting or refuting the claims made by the theory.

In general, there are several complex factors that negate any simplistic approach to the arousal-performance relationship. To summarise this topic, Neufeld and Paterson (1989) stated that tasks, which are either lodged in the environment or contained in a person's memory, might be performed differently as stress or arousal increases. Performance may increase or decrease, depending on task demands and the level of stress response that occurs. Yerkes-Dodson's (1908) inverted-U relationship between *performance* and *activation* "...has been etched into the minds of most behavioural scientists" (p.62). The primary emphasis of the inverted-U is on adverse rather than facilitative effects of stress on performance.

The inverted-U hypothesis and other unidimensional proposals have recently been considered to be simplified and incomplete theoretical explanations of the relationship between stress and performance (Raglin, 1992). As reported by Raglin, present-day researchers, including reversal theorists, believe the arousal-performance relationship most definitely extends to a multidimensional level. That is, levels of arousal are believed to arise from numerous factors within the environment and/or the performer. As a result, more recent theories, as discussed in the next section, are three-dimensional in order to address the interaction component.

### *Multidimensional Arousal Systems*

The development of multidimensional arousal models is briefly explained in this section. Several influences contributed to a fuller explanation of the arousal experience, but these have had the greatest influence on the psychology of performance.

An example of the possible multiple levels of arousal was initially proposed by Broadbent (1971). Rather than using a mechanistic model to explain the relationship between stress and performance, this multidimensional arousal system suggested that performers actively attempt to cope with and ameliorate any potentially harmful effects arising from factors within the surrounding environment.

In 1975, Thom, a mathematician developed a theorem to explain naturally occurring discontinuities in objects and processes, which normally function on a continuous basis. The following year, Zeeman (1976) drew attention to Thom's theorem by applying it to behavioural and natural sciences. More recently, Hardy and Fazey (1987) proposed a model of anxiety and performance. Their multidimensional theory attempts to explain the relationship between cognitive and somatic anxiety, and performance. In reality it makes predictions about separate effects of the cognitive and somatic anxieties of performance.

Essentially, Martens, Burton, Vealey, Bump, and Smith (1990), Burton (1988), and Landers et al. (1998) argued that according to multidimensional theory, at least two different components could be distinguished in the anxiety response. These are (1) a cognitive component associated with fear about the consequences of failure, and (2) a somatic component reflecting perceptions of the physiological response to psychological stress.

The influence of cognitive anxiety on performance is perpetual and can negatively influence performance, and it can vary throughout the performance due to one's subjective

evaluation of success or failure of that performance as found by Martens and his colleagues (1990). However, the influence of somatic (physiological) anxiety may dissipate after performance begins.

Criticism of the multidimensional anxiety theory rests primarily on contradictions in research findings. These contradictions arise from the consequences of using different paradigms and analyses. Support for the multidimensional anxiety theory is inconsistent (Landers et al., 1998), as demonstrated by a negative linear relationship between cognitive anxiety and performance (Gould, Petlichkoff, & Weinberg, 1984), and an inverted-U relationship between somatic anxiety and performance (Landers, 1994).

Another consideration, articulated by Eysenck (1989), is the reasonable evidence given that at least some individuals who appear low in anxiety (as assessed verbally) are rather high in anxiety (as assessed physiologically and behaviourally). While it might be argued that such individuals are most likely faking their questionnaire responses, it appears rather that "...they are people who exercise considerable cognitive self-control and who have a preoccupation with mastering negative emotional states such as anxiety" (p. 141).

The value of Eysenck's (1989) comments to the multidimensional theorist is profound. Many levels of anxiety operate during performance. Although it is important to be aware of somatic and cognitive components, situational and social variables appear to operate as well. For example, an individual who maintains self-control may conceal the effects of anxiety in their performance.

#### *Cusp catastrophe model.*

The cusp catastrophe model has three dimensions: two control parameters (cognitive anxiety and physiological arousal) and one behavioural parameter (motor performance). Fazez

et al. (1988) adapted the popular cusp catastrophe model developed by Zeeman (1976) and proposed that cognitive anxiety acts as a splitting factor. This factor determined whether the effect of physiological arousal is slight or catastrophic, or in between these two extremes. The catastrophe model infers that the physiological response (arousal) to performance anxiety is a generalised response and that as Fazey et al. explained, "...small incremental increases in arousal result in small incremental increases or decreases in performance" (p. 115).

Jones et al. (1997) explained that the most fundamental prediction of the cusp catastrophe model is the notion that, "...under conditions of high cognitive anxiety and physiological arousal, performance is determined by qualitatively different states between which the performer may shift" (p. 102).

There are three theoretical implications of Hardy et al.'s (1987) cusp catastrophe model, which are (1) the model gives an explanation of the possible interactions between cognitive anxiety and physiological arousal that influence performance, (2) following a catastrophic fall-off in performance, physiological arousal would need to be reduced to enable performers to cope before increasing their efforts, and (3) coping mechanisms may assist performers who are distracted or who have decreased processing capacities.

Coping may promote the performer's ability to selectively attend to the demands of the task at hand. Trying harder or putting in an increased effort may not be appropriate in all performance circumstances. For example, a performer may waste valuable resources telling themselves to "try harder" instead of focusing their attention on the task they need to perform, (as noted later in this literature review).

*Butterfly catastrophe model.*

The model that encompassed higher dimensional catastrophes is commonly referred to as the butterfly catastrophe and has five dimensions, (whereas the cusp catastrophe model has only three dimensions). Fazey et al. (1988) developed the butterfly catastrophe model that included the fourth dimension of task difficulty as a bias factor and the fifth dimension of self-confidence, referred to as a “butterfly” factor (i.e., a performance predictor). Task difficulty was selected as a bias factor on the following premises, which are (1) when increases in perceptual complexity are known, (2) when performers advance to the point at which performance decrements occur, and (3) when performers are required to perform tasks under high level of stress. Self-confidence was included in the model as a butterfly factor because it is viewed as a predictor of performance.

Martens et al. (1990) found it difficult for the model to be totally independent of cognitive anxiety. Self-confidence covers the possibility that some highly confident performers perform at intermediate levels under moderate levels of cognitive anxiety. Nevertheless according to Martens et al., these two control dimensions, task difficulty and self-confidence, allow for bias to increase or decrease, and to have intermediate levels of performance, rather than brilliant or dismal performances.

A strong argument for catastrophe theory, as clarified by Cox (1998), specifically challenged the inverted-U hypothesis by stating that small incremental increases in arousal result in small incremental increases or decreases in performance. However, at critical points in the performance curve, quite the opposite may be observed. When faced with debilitating stress and arousal, performers do not experience small incremental decreases in performance; on the contrary, they suffer large and dramatic decrements that may be described as catastrophic in nature (Fazey et al., 1988). Fazey et al. suggest that once the performer suffers a catastrophic

decrement in performance, small incremental reductions rarely bring performance back to the pre-catastrophic level.

A supporting argument for the catastrophe model was offered by Guastello (1987) in his development of a method that fits catastrophe curves to real life data. Hardy (1996a) used Guastello's method with eight performers, all experienced golfers. The golfers were monitored for levels of cognitive anxiety, somatic anxiety, self-confidence and physiological arousal prior to each putt during a golf competition. The results did not offer evidence that the catastrophe model of stress and performance is superior to the multidimensional anxiety theory. The results did however point to the importance and relevance of self-confidence as an independent factor in performance.

#### *Reversal Theory and Arousal Theory*

Reversal theory directly challenges other theoretical explanations of arousal and performance. Findings are in conflict with optimal level of arousal theories. In addition, these findings are not in agreement with the multidimensional anxiety theories, initially investigated by Broadbent (1971) and catastrophe theory (Fazey et al., 1988) because they tend to focus exclusively on a single negative emotion, this being anxiety.

Arousal, according to Apter (1989) is:

...the degree to which one feels oneself to be 'worked up' or emotionally intense about what one is doing. Thus one might be highly aroused in an argument, especially if it is about something one believes in passionately, but low in arousal while sitting with one's feet up doing nothing in particular after Sunday lunch (p. 9).

It should be noted, “(a)rousal preference is assumed by reversal theory to be different from arousability, which is the ease with which someone can actually be aroused (whether they want this or not)” (Apter, 2001, p. 94).

The optimal arousal theory or the inverted-U (Fiske et al., 1961; Hebb, 1955) is essentially a homeostatic theory. It argued that an individual’s level of arousal would be in the moderate range, when positive hedonic tone (i.e., pleasure) and performance are optimal. This is not the stance taken by reversal theory.

According to Cox (1998), the attractiveness of reversal theory is closely associated with its flexibility and dynamic nature. Cox stated: “The theory underscores the importance of taking a situation-specific and individualistic approach to studying the relationship between arousal and performance” (p. 126). Kerr (1997a) explained that “(t)he bistable arrangement between metamotivational states in reversal theory gives it considerable advantage over homeostatic theories...” (p.16) concerning the experience of arousal.

Reversal theory views hedonic tone as essential to one’s bistability of metamotivational states (Apter, 1989). It contends that people can be in one of two stable states with regard to arousal. The theory recognises that people experience high and low unpleasant arousal, and it disagrees with traditional theories (i.e., Hebb, 1955) that arousal is homeostatic, in which people have a certain optimal level of arousal that they try to maintain.

According to reversal theory, both high and low arousal can be experienced as pleasant. Pleasant high arousal is experienced (in the paratelic state) as excitement. Pleasant low arousal is experienced (in the telic state) as relaxation. The theory proposes that the way in which arousal is experienced depends on the state the person is in. “In reversal theory, felt arousal has no intrinsic pleasant or unpleasant meaning. It may be perceived as an unpleasant emotion or as

pleasant excitement, depending on the individual's experience of the situation" (Males et al., 1996, p. 19).

In terms of arousal, there are two major components of experience. Firstly, there is the intensity variable to consider, which is defined as just how worked up one feels oneself to be. This determines how high or low one's arousal may be. The second variable to consider is the hedonic tone, defined as how pleasant or unpleasant the arousal is being experienced by someone, as was first introduced by Beebe-Center (1932, and cited by Apter, 1989).

#### *Arousal-avoidant versus excitement-seeking*

Arousal-avoidant individuals are in a state in which any strong emotion will be experienced as unpleasant (Apter, 1992). Individuals experiencing positive arousal-avoidant states are appropriately cautious when approaching serious problems. They avoid unnecessary and gratuitous risks for themselves as well as for others. They are sensible and sound in dealing with problems and "leave well enough alone" when things are running smoothly. In this state, individuals do not need continual distraction and diversion because they enjoy peace and relaxation. Lastly, they usually feel contemplative and reflective (Wilson et al., 1996).

Individuals experiencing negative arousal-avoidant states are feeling excessively worried (to the point of worrying about getting worried). When in this state, a person avoids confronting problems that need to be faced up to. They never take risks of any kind, often withdrawing from challenging situations. They get angry when things do not turn out as they should. Usually they tend to make life too bland, therefore missing out on some of the colour (Wilson et al., 1996).

Individuals in the excitement-seeking state experience any strong emotion as pleasant (Apter, 1992). Positive excitement-seeking individuals are alive and vital. They thrive on risks,

problems, and challenges. In this state, individuals welcome the unknown and unexpected. Being curious and expressing inventiveness, they like to explore new ways of doing things and are open to new and interesting experiences (Wilson et al., 1996).

Individuals in the negative excitement-seeking state are easily bored and restless. In this state, individuals are highly distractible and cannot feel settled. They take unnecessary risks, often causing problems for themselves and others. They have extreme difficulty carrying out essential routine activities (Wilson et al., 1996).

#### *Arousal and hedonic tone.*

Within reversal theory there is a range of pleasant as well as unpleasant moods or emotions, each being dependent upon the operation of a particular combination of metamotivational modes of consciousness (Apter, 1988). A rugby study, Wilson (1999), included athletes rating their perceptions of hedonic tone by selecting the performance as pleasant or unpleasant. Wilson found that pre-game experiences of both winners and losers were similar, reporting pleasant emotions, such as excitement. Post-game experiences of emotions, however, were different. Winners were relaxed, or still somewhat excited, maintaining a sense of pleasant emotions; whereas the losers experienced unpleasant emotions (e.g., sullenness or anger).

Apter (1989) combined the arousal level with hedonic tone, and recognised four emotions as (1) anxiety (unpleasant high arousal) (i.e., telic state), (2) excitement (pleasant high arousal) (i.e., paratelic state), (3) relaxation (pleasant low arousal) (i.e., telic state), and (4) boredom (unpleasant low arousal) (i.e., paratelic state). Apter includes the experience of boredom and excitement (paratelic state), whereas traditional arousal theories (e.g. Hebb, 1955) only include the experience of relaxation and anxiety (telic state). The inclusion of

hedonic tone with arousal levels represents a broader scope of the human experience, as individuals have self-patterns of change and shift between these four emotions.

*Relevance to the current investigation.*

Adult educators are believed to shift between these four levels of arousal as their metamotives change in a teaching session, and their situational state balance reflects these metamotivational state shifts. For example, an adult educator might be completely absorbed in the lesson plan and be highly aroused, or the adult educator might have low arousal perhaps finding the group under stimulating. As an adult educator, one's ability to perceive what is happening in the environment may be adversely affected by an inappropriate state of arousal. Not being in one's ideal situational state balance during a teaching session may interfere with the adult educator's ability to make the proper response (i.e., activation) or the appropriate decision (i.e., effort) for how and when to respond in a controlled manner. The role of the appropriate arousal is to assist the adult educator to meet the required task demands at the right moment.

The goals of the adult educator can form a large part of the driving force and productivity of the class. One affective state might be more desirable than another in a given situation because it may afford a host of cognitive and motivational aspects that are most congruent with the goals of the individual (Parrot, 1993). In the current study, the goal(s) of the adult educator were used in determining which inducing/change agents cause shifts in one's self-patterns of achieving goals.

### *Motivation*

Several theoretical approaches to motivation, as extensively investigated by Roberts (1992), have been connected to perceived performance and self-esteem. Roberts defined motivation as “...those personality factors, social variables and/or cognitions that come into play when a person undertakes a task at which they are evaluated, enter into competition with others or attempt some personal standard of excellence” (p. 5). How achievement is perceived and the psychology of achievement behaviour are central themes within the motivation literature.

#### *Need Achievement Theory*

Need achievement theory has two central constructs, which are (1) the motive to achieve success, and (2) the motive to avoid failure. According to this theory, “...these motivational states are the mainsprings of action...” (Roberts, 1992, p. 7). Research compiled by Atkinson (1957, 1958) and McClelland (1961) suggested that as motives interact with cues in the environment they arouse affective states, which then elicit an instrumental approach or avoidance behaviour. In essence, the approach incorporated a hedonic quality of behaviour (e.g., the experience of pleasure and displeasure) into an essentially affective arousal model (Dweck & Elliot, 1983).

Roberts’ (1992) investigation of the literature has supported the prediction that individuals driven by the motive to achieve success tend to select challenging tasks and demonstrate heightened performance. Research, however, as reported by Roberts, has “...not always supported the prediction that individuals driven by the motive to avoid failure avoid intermediate risk and demonstrate low performance” (p. 7).

Thus, need achievement theory has been criticised by Maehr (1974) and Roberts (1982) for its ethnocentric bias, the weight it places upon personality as the crucial variable, and

its failure to account for heightened performance of low-achievement motivated individuals in certain situations. Nevertheless, the approach is significant in contributing to the understanding of motivational processes.

*Expectancy of reinforcement theory.*

Expectancy of reinforcement theory (Crandall, 1963) focused on an individual's expectancy of reinforcement. This theory was based on social learning theory (Roberts, 1992). An area of performance emphasised is intellectual achievement, particularly in situations in which personal skill was deemed as important (Crandall, 1963, 1969). In Crandall's view, achievement behaviour is behaviour directed towards the attainment of self-approval and the approval of others. It is specifically contingent upon criteria for performance competence. Overt or outward behaviour is emphasised rather than the person's motives.

*Cognitive Approaches to Motivation*

The cognitive approach is widely accepted amongst the current mainstream researchers. Cognitive theorists are primarily sought after for describing and explaining what constellation of cognitions affects the ongoing stream of achievement behaviours in performance. According to Roberts (1992), some researchers, however, do not fully recognise and support this view. Nevertheless, cognitive theory is currently dominant in the study of motivation.

The premise of cognitive theory is that "thought governs action". The essential task for a cognitive perspective on motivation is to study how knowledge is acquired, represented, and used by humans. "The emphasis is on the creation of models to understand how cognitions or thoughts govern behaviour" (Roberts, 1992, p. 8).

An initial cognitive motivation theorist, Tolman (1932), utilised the cognitive approach stating that a person might have a belief that a particular event will be followed by another event,

and that a particular course of action will have consequences. Thus, Tolman introduced expectancy into the psychological literature. At that point, choice and decision making began to replace stimulus-response associations to explain achievement behaviour.

Popular terminology in the literature includes coined terms of *origin* (proactive) and *pawn* (reactive) by deCharms (1968) to describe the perception of control that people have over their behaviour. Heider (1958), White (1959), and McVicker-Hunt (1965) utilised and distinguished the terms *extrinsic motivation* (traditional behaviouristic research) and *intrinsic motivation* (recent cognitive research forms).

A hypothesised relationship between perceived competence and perceived control has been supported by Harter (1981a) who demonstrated a direct link between perceived competence and performance (of a skill). Two opposing strategies performers tend to utilise when perceiving pressure to maintain control and competence are (1) an approach strategy, in which the threatening stimuli are thoroughly attended to and processed, and (2) an avoidance strategy, in which there is minimal attention to, and processing of, the threatening stimuli (Eysenck, 1989).

A performer using an approach strategy to deal with a problem may intellectualise, ruminate, worry, and/or become obsessive and generally act in ways that are over-sensitive to the problem. On the other hand, using an avoidance strategy, when taken to the extreme, may exacerbate the situation increasing the effects of stress; and while performing, each strategy may interfere with successful processes and/or outcomes.

#### *Attribution theory.*

Weiner, Frieze, Kukla, Reed, Rest, and Rosenbaum (1971) contributed to the study of motivation through attribution theory, which argued that individuals who were high or low in

need achievement would cognitively perceive success and failure differently. Thoughts and particularly causal attributions were viewed by Weiner et al. as the important variables to consider in understanding motivation. Maehr (1989) stated that Weiner's modest attempt to insert causal attributions into the achievement motivation equation transformed the focus of "motivation" research. The situation and its meaning evolved as less important, whereas individual differences and personality aspects became more important.

Attribution theory (Weiner, 1979, 1986; Weiner et al., 1971) deals with the rules that the average individual uses in attempting to account for the causes of behaviour. The researcher takes on the assumption of the phenomenological outlook of the "subjective" individual who attempts to determine the causes of common events (Heider, 1958). Attribution theory is essentially concerned with the methods people use and the naive theories that individuals adopt in order to make sense of their lives. This approach regards individuals as an active information-processing organism with the inclusion of higher mental processes as determinants of human action.

Attribution theory emphasises the "expectancy X value" framework, meaning much of the focus is on the changes in one's expectancy as a function of success and failure outcomes. The manner in which one attributes the causes of an outcome affects expectancies of future success and failure, and it is assumed to affect achievement striving (Roberts, 1992). Roberts suggested the findings pertaining to specific individual differences remain the most robust and important. Overall, the different attributions reflect different expectations of future outcomes.

Attribution theory has been viewed as merely the social psychology of perception, and its main weakness, according to Dweck et al. (1983) is that even though it may be useful in explaining why things go wrong, it does not necessarily explain a way to put them right. The

theory has not addressed value in any systematic manner; rather it has focused upon why individuals expect to succeed, but not on why they want to succeed.

### *Social Cognitive Approaches to Motivation*

#### *Self-efficacy.*

Self-efficacy (Bandura, 1977a, 1986), perceived teaching competence (Harter, 1975, 1980), and the various achievement goal perspectives (e.g., Dweck, 1986; Dweck et al., 1983; Maehr et al., 1986; Maehr & Nicholls, 1980; Nicholls, 1981, 1984a, 1984b, 1989) are valued theories in the performance-related literature. Every performer and performance is in some way affected by these concepts.

The theory of self-efficacy is a significant theory in performance-related issues. Originally proposed by Bandura (1977a) as an explanation of the various intervention procedures used in the treatment of anxiety, self-efficacy has been used in the performance literature as an explanation of achievement behaviour (Feltz, 1992). Bandura used the term *self-efficacy* to describe the conviction an individual needs to successfully execute the necessary behaviour to produce a certain outcome.

“The motivational mechanism of self-efficacy theory is the assessment of one’s capability to perform at a given level in an achievement context of value to the participant. In short, mastery expectations influence performance” (Bandura, 1977a, p. 194). Self-efficacy is not necessarily concerned with one’s ability, but rather with a person’s assessment of what they can do with their abilities (Feltz, 1992; McAuley, 1992).

#### *Ability perceptions and related behaviours.*

Several researchers have given evidence suggesting that the perception of ability, in a variety of guises, is the central mediating construct of achievement behaviour (e.g., Bukowski &

Moore, 1980; Covington & Omelich, 1979; Diener & Dweck, 1978; Dweck, 1986; Dweck et al., 1983; Duda, 1989a, 1992; Nicholls, 1976, 1978, 1984b, 1989; Roberts, 1975, 1984; Roberts, Kleiber, & Duda, 1981; Spink & Roberts, 1980). Adapting achievement behaviours through adapting perceptions of positive ability has been shown to promote a sense of achievement (Dweck, 1986).

These patterns of adaptive achievement behaviours are characterised by challenge seeking and effective persistence in the face of failure (Dweck, 1986). Dweck stated that adaptive behaviours are those in which the person exerts effort, values the process of the task, enjoys putting forth the effort, and exhibits sustained persistence.

Maladaptive behaviours are those in which the person has patterns of behaviour that do not promote effective strategies for achievement. In this scenario, the person avoids challenges and tends not to persist in the face of difficulty. Individuals with maladaptive behaviours escape challenge, do not put forth effort, resist persistence in the midst of a challenge, and withdraw from desired goals if it all appears too difficult (Roberts, 1984).

Evidence of these predictions of adaptive and maladaptive behaviours has been supported by Duda (1992) and Roberts, Hall, Jackson, Kimiecik, and Tonymon (1990). Duda stated that the perception of one's own ability is predicted to be a mediator in the adoption of maladaptive or adaptive achievement behaviours, depending upon the perception of the motivational climate and one's goal for action. In other words, if high ability is salient (i.e., more frequently demonstrated in the performance), then adaptive behaviours can be predicted and vice versa.

Various studies have revealed unique findings in perceived ability. For instance, goal orientation combined with perceived ability was examined by Miller, Behrens, and Greene

(1993). In their study, they predicted the interaction of two factors, namely *dominant goal orientation* and *perceived ability*, but these two variables failed to emerge as significantly interacting.

In a sport-related performance study by Roberts and Duda (1984), gender differences emerged in the athletes' perceived ability. For males, outcome and attributions to task difficulty and strategy predicted perceptions of ability; whereas for females, attributions of skill and luck were found to be the most salient. In a study by Newton and Duda (1999), perceptions of ability affected beliefs about the causes of success. It was reported that motivational climate was the strongest predictor of enjoyment and degree of pressure, while goal orientation was the strongest predictor of effort. Both one's ego orientation and perceptions of an ego-involving motivational climate (e.g., competition, recognition, status) were related to ability-centred beliefs about success.

#### *Achievement Behaviour: Competence and Mastery*

Perceived competence has been analysed by researchers investigating the processes of motivation. Based on the earlier work of White (1959), Harter (1978, 1981b) examined sport competence. Harter based her research on why individuals feel impelled to engage in mastery attempts in achievement contexts. Success and failure in such domains are frequently evaluated by significant others. Harter revealed that the perceived competence and intrinsic pleasure gained from such success are believed to increase achievement striving. In addition, perceived incompetence and displeasure are assumed to lead to anxiety, along with a decrease in achievement striving.

Harter's model assumes a mastery perspective to achievement striving (Ames, 1992; Duda, 1992). However, the weakness of Harter's model (1981b) is its reliance on ego

perspectives rather than task perspectives. According to Nicholls (1978), people are not always accurate in the comparison of self to others. Nicholls stated that such inaccuracy of comparison is most extreme for young performers.

It has been argued that to totally understand motivation and achievement behaviours in its vastness, the function and meaning of behaviour must be taken into account so that the goals of performing might be identified. Multiple goals of action must be recognised. Variation in an individual's behaviour may not be a result of having high or low motivation. Instead, it might be caused by the manifestation of different perceptions or possibly a change in perception of appropriate goals. "An individual's investment of personal resources such as effort, talent and time in an activity is dependent upon the achievement goal of that individual for that activity" (Roberts, 1992, p. 14).

The initial step toward understanding achievement behaviour is to recognise that success and failure are psychological states based upon the interpretation of the effectiveness of one's intrapersonal achievement striving (Maehr et al., 1980). Maehr et al. continued by stating that the performance outcome is interpreted as successful when the achievement striving is seen to reflect desirable qualities of the self (e.g., good preparation and putting forth high effort). Conversely, the outcome is viewed as a failure when it is seen to reflect undesirable attributes of the self (e.g., lazy in preparation and putting forth little effort).

Success, failure, and achievement, according to Dweck (1986), Maehr et al. (1986), and Nicholls (1984a), can only be recognised in terms of one's goal of a particular behaviour. In other words, what is perceived as success for one may, in fact, be seen as failure for someone else. Therefore, it is important to note that the achievement goal approach assumes

that the major focus of individuals in achievement contexts (e.g., a teaching environment) is to demonstrate competence or ability.

The concept of ability has two achievement contexts; these have led to the development of two major goal perspectives assumed to be sought after by individuals in achievement settings. One of these achievement goals is to maximise the probability of attributing high ability to oneself and, in turn, to minimise the probability of attributing low ability to oneself (e.g., Ames et al., 1984a; Dweck, 1986; Maehr et al., 1986; Nicholls, 1984a, 1984b). This goal drives achievement behaviours under circumstances of which social comparison is inevitable. In this instance, perceptions of ability are primarily based on another's ability. Success and failure are, therefore, dependent upon one's subjective assessment of comparing the ability of self with the ability relevant to another. Four terms for this type of goal are made evident in the literature are (1) ego involvement (Nicholls, 1984a), (2) Dweck's performance goal, (3) Ames et al.'s ability-focused goal, and (4) a competitive goal (Duda, 1989a).

Another achievement goal is one of demonstrating mastery (or learning) and developing a task (e.g., Ames et al., 1984a; Dweck, 1986; Maehr et al., 1986; Nicholls, 1984a). The purpose of this goal is its drive toward achievement behaviour in circumstances of which learning and/or mastery is deemed vitally important. In this case, perceptions of ability are self-referenced (sought out by self) and dependent upon the progress or improvement of learning. Success or failure in this situation is dependent upon one's subjective assessment of whether one learned, achieved mastery or demonstrated improvement on a task. This type of goal reflects three terms that have been used in the performance-related literature. These are (1) task involvement (Nicholls, 1984a), (2) learning a goal (Dweck et al., 1983), and (3) mastery of a goal (Ames et al, 1984a).

Situations can make people more competitive or mastery involved (Nicholls, 1989). Nevertheless, this is not to deny that individual differences in the susceptibility to those types of involvement do exist. According to Nicholls, to better understand achievement behaviours, researchers need to recognise multiple goals-of-action, and that to assume a common goal is to ignore the unique dynamic of the motivational processes.

### *Reversal Theory and Motivation Theory*

Lafreniere (1993) stated that reversal theory is essentially about the different ways in which a person interprets various aspects and shifts within his/her motivational experience. More specifically, Apter (2001) suggested reversal theory to be a state theory of change. An example Apter provided stated that:

...everyone is normally subject to reversals and to intra-individual change with respect to a pair of states, even if they are strongly dominated by one state in that pair; it is this notion of the dynamic nature of human experience that distinguishes reversal theory from any kind of trait theory (p. 89). ...An interesting, possible complication that arises from all this is that people who are telic dominant and people who are paratelic dominant might, in some respects, experience the telic and paratelic states differently (p. 92).

Reversal theory presents itself as distinct from other theories of personality. It is a bistable theory and one that diverges from traditional psychological theories. The theory offers several examples of this divergence, such as implying that it would be perfectly possible to have a high tendency for arousal and a low arousability, and conversely, a low tendency for arousal and a high arousability (Apter, 2001).

Reversal theory is general in that it examines certain rules about human experience. Apter (1997a) stated that there are a number of identifiable and discrete ways of experiencing the world, in which people experience by shifting between metamotivational states, each being associated with their own range of emotions. Reversal theory proposes that the subjective experiences of human beings are indeed bistable rather than homeostatic, implying that individuals reverse back and forth between perceived appropriate (which may be inappropriate) states. “These fundamental states occur in pairs of opposites, so that change consists of movement between members of each pair, only one of them being ‘operative’ at a given time” (Apter, 1997b, p. 217). Subjective metamotivational states can determine one’s cognitive and affective experience. Apter and Larsen (1993) stated that:

Not only do people behave in different ways at similar times in similar circumstances, they also behave in different ways in diverse circumstances, and further, they may behave in similar ways at different times with underlying motivations! Although it may appear that processes underlie such human inconsistencies, reversal theory instead argues that these inconsistencies have certain identifiable patterns (p. 14).

“In a sense, people are said to be not only changeable over time, but self-contradictory” (Apter, 1997b, p. 217). Lafreniere (1993) stated that reversal theory is “...close to the interactionist perspective in that both share an emphasis on the psychological meaning of situations and behaviour and both move away from the idea that personality is based on consistent patterns of behaviour” (p. 63).

Apter (2001) explored the notion that people display metamotivational dominances, or the preference to be in one state more than another. Apter explained that:

Dominance described in this way sounds like a trait, and in a certain sense it is. But it is very different from the typical mainstream trait concept because, for example, someone can be extremely telic dominant but still spend time in the paratelic state and be as paratelic in that state as someone who is paratelic dominant. Again, we see the necessity to think in terms of at least two levels: (a)... how someone is at a given time (state) and (b)... how they tend to be over time (state balance influenced by dominance) (p. 30). ...This has now been abundantly demonstrated through psychometric testing, but at the same time it has been demonstrated in the laboratory and elsewhere that such dominances are not traits in the traditional sense, because people spend periods of time in their nondominant states (p. 316).

*Relevance to the current investigation.*

The current investigation takes into consideration the uniqueness of a performer's perception of achievement and motivation. The study hypothesises that being in one's ideal (or preferred) state may promote a higher level of perceived competence and satisfaction in one's performance.

Different performance attributions might affect one's motivation. Also, intrapersonal differences probably exist in relation to the self-efficacy and perceived effort of each performer. All these variables are believed to be potentially influencing factors of an adult educator's perceived teaching competence.

## *Stress and Anxiety*

### *Stress*

Several researchers are responsible for the theoretical conceptualisation of the stress and performance relationship (e.g., Burton, 1988; Gould et al., 1984; Gould, Petlichkoff, Simons, & Veveva, 1987; Jones & Cale, 1989b; Parfitt & Hardy, 1987). Stress is a condition that results when a person interacts with their environment, and this transaction leads them to perceive a discrepancy - whether real or not - between the demands of the situation and the resources they possess. The performer's personal resources include their biological, psychological and social systems (Sarafino, 1998). Stressors are the stimuli or environmental situations that set the whole process in motion. The stress response is the consequence of these stressors within the performer (Neufeld et al., 1989).

A variety of different descriptions of stress have opened up considerable debate. Firstly, stress as an independent variable, is considered a stimulus characteristic of a disturbing environment. As a dependent variable, stress is the response one has to disturbing environments (Cox, 1978; Meister, 1981). Secondly, stress is a non-specific response of one's body to any demand because humans are constantly experiencing demands of some kind and are, therefore, always under some stress (Selye, 1956). Thirdly, stress is not always negative in nature, but rather it is a combination of external factors that may or may not be negatively stressful. The crucial difference in this is one's response to the external factor (Jick & Payne, 1980).

### *Anxiety*

Performance anxiety has two components. These are (1) worry, which is defined as cognitive or intellectual concern about one's performance (cognitive anxiety), and (2)

emotionality, which is defined as autonomic reactions to the stress of one's situation (somatic anxiety; Jones et al., 1997).

Two perspectives currently accepted amongst researchers are (1) state anxiety, which is the emotional reaction one has to a situation that is experienced as threatening, and (2) trait anxiety, which is a disposition one has for reacting to situations in an anxious manner (Bakker, Whiting, & van der Brug, 1990).

The multidimensionality of competitive anxiety, referring to the notion of states and traits, has been generally accepted (Spielberger, 1989). Furthermore, competitive state anxiety is regarded as a multidimensional construct and consists of two primary components, namely cognitive and somatic anxiety (e.g., Gould et al., 1984; Jones & Hardy, 1989; Martens et al., 1990).

Cognitive anxiety has been defined as: "...negative expectations and cognitive concerns about oneself, the situation at hand and potential consequences" (Morris, Davis, & Hutchings, 1981, p. 541). For example, cognitive anxiety would be characterised by negative expectations, lack of concentration, and images of failure.

Somatic anxiety has been defined as "...one's perception of physiological-affective elements of the anxiety experience, that is, indications of autonomic arousal and unpleasant feeling states such as nervousness and tension" (Morris et al., 1981, p. 541). For example, somatic anxiety refers to the perception of physiological symptoms such as sweaty hands or muscle stiffness/tension.

State anxiety can be broadly measured via three indicators, being (1) cognitive, (2) physiological, and (3) behavioural. The measurement of anxiety at the cognitive level has primarily relied upon self-report (self-evaluation) questionnaires. Several (sport-specific)

questionnaires have been developed to measure state anxiety primarily applied for performance evaluation (e.g., Martens, 1977; Martens, Burton, Rivkin, & Simon, 1980; Martens et al., 1990).

Achievement in task performance is a primary focus of the test anxiety approach, which is based on academic performance anxiety. Roberts (1992) stated that the major motivational variable is the anxiety associated with evaluation, whether it exists in the form of test-taking or performing before peers. He added that in the literature, performance on achievement tasks and before peers is strongly influenced by motivational factors. The test anxiety approach gives insight into the affective-cognitive linkages and how these affect the ongoing stream of behaviour in the achievement context.

Physiological indicators of anxiety are: (1) respiratory and cardiovascular, such as pulse rate, blood pressure, and respiration rate, (2) biochemical, including adrenaline and noradrenaline, and (3) electrophysiological, such as EEG and skin resistance (Hackfort & Schwenkmezger, 1989). Behavioural indicators of anxiety present distinctive problems in performance-related studies, as it can be quite difficult to distinguish between anxious behaviour and coping behaviour. Thus, according to Hackfort et al. observation methods become useful only in conjunction with self-statements and self-reports.

#### *Precursors to anxiety.*

Precursors to anxiety (Jones et al., 1997) include feelings or cognitions that a performer has previously experienced. They are deemed important due to their potential to initiate worry or increase physiological arousal. Performance expectations are antecedents of both cognitive anxiety and self-confidence (Martens et al., 1990). Martens and his colleagues noted that a

performer's perception of their ability appears to be an important antecedent of cognitive anxiety. They also stated that these antecedents are self-evaluative in nature.

Jones et al. (1997) added that temporal patterns of anxiety explain the emergence of different anxiety patterns prior to a performance. Pre-performance reactions tend to be cognitive in nature. Performers of all kinds frequently worry about whether they will meet their own and/or others' expectations. They also added that worrying thoughts might set off physiological activity that puts the performer in a mentally/emotionally/physically aroused state.

According to the current investigation, the researcher adds that this state may be appropriate or inappropriate for the performer depending on the demands of the specific task at hand and their ideal state of being. Prior to the performance, one needs to be directed toward the appropriate task demands, which could help one to avoid experiencing a state of fragmented attention.

Antecedents to somatic anxiety, however, appear to be non-evaluative. They have a shorter duration and consist mainly of conditioned responses to environmental stimuli (Morris et al., 1981). Environmental stimuli include such things as venue preparation and pre-performance routines (Martens et al., 1990).

Lastly, an interesting relationship between goal-setting and performance anxiety has been researched; namely, that goal difficulty appears to be a vital determinant of both cognitive anxiety and self-confidence. According to Parfitt (1988), a major predictor of self-confidence is perceived readiness prior to a performance, with the external environment contributing significantly. Parfitt's research helped to explain why self-confidence and cognitive anxiety could be dissociated at times. Looking at this possibility of dissociation, through an intrapersonal

perspective, could potentially assist the researcher in understanding the need for one's preferred metamotivational state at the onset of a performance.

### *Flow*

Flow is an intrinsically enjoyable experience (Csikszentmihalyi, 1975). A performer's effort is more effective and appropriate when in a state of "flow" (e.g., Csikszentmihalyi, 1991; Ravizza, 1977; Gallwey, 1974). According to Csikszentmihalyi, when in the paratelic state (i.e., spontaneous and playful), individuals have a tendency to experience flow more readily.

Young's (1998) doctoral dissertation, examined flow in professional tennis players. Metamotivational states were shown to be related to performers' experiences of flow. Young also challenged traditional flow theory. The researcher found that flow experiences could be categorised to be either telic or paratelic. Interestingly, she also found that players were reporting experiences during play that represented a state opposite from their dominance as shown on the Paratelic Dominance Scale (Cook & Gerkovich, 1993).

An example of flow in which performance results improved was a doctoral dissertation on reversal theory by Weinberg (1999). She suggested that both challenge and mastery were primary motivators for ultradistance runners. These two metamotives undergo reversals as runners switch back and forth between their need for challenge and their need for mastery. When challenge and mastery were in balance, in Weinberg's study, a "flow state", as it is referred to, became increasingly likely. This appears to support a need for determining one's situational state balance while performing at an intrapersonal level.

### *Environmental Stressors*

Stress has been described by McGrath (1976) as "...the result of the interaction of an individual with his or her environment which forces on the person a demand, a constraint or an opportunity for behaviour" (p. 4). He concluded that an imbalance or a mismatch between the environmental demand and the capability of the individual could be stressful in either the

overload or the underload direction. This conclusion was supported by Kerr (1997a), a reversal theorist, who stated that the extent to which a demand on a person is stressful (i.e., causing strain) depends on whether the individual perceives the situation as stressful.

### *Strain.*

The concept of strain has helped explain why individuals experience stressors differently. Strain is the specific response to a performer's negative appraisal of their adaptation to the demands of a particular context or environment (Lazarus, 1966). It is the "...person's psychological and physiological response to a stressor" (Sarafino, 1998, p. 70).

Some performers do not appear to be "strained" by external factors and they seem to cope quite well with a stressor, while others have a potentially stressful response, or strain, to the same stressor (Cherry, 1978; Jick et al., 1980). Furthermore, according to Kerr (1997a), on any given day, performers may or may not perceive strain from the same stressor and/or stressful event. Also, some individuals respond to a stressor with avoidance, while others respond to the same stressor with an approach motivation.

### *Uncontrolled stress.*

There are three conditions when stress, unless somewhat controlled, will debilitate performance and/or probably cause a decrement in performance. These are: (1) choking; (2) warm-up decrement, and (3) "paralysis by analysis". A description of choking is when the performer with a high fear of failure is prone to "freezing" under pressure because they are concentrating more on the feared consequences of mistakes or failures rather than on what needs to be done in a positive sense (Smith, 1986).

An insufficient, interrupted, or poor warm-up/preparation could result in warm-up decrement (especially for motor or physical tasks) (Schmidt, 1988). Warm-up decrement effect

is caused by loss of internal adjustment during a rest period that might occur prior to or in the midst of a performance (Jones et al., 1997). Explanations for warm-up decrement include (1) feeling inhibited (Eysenck, 1956), (2) forgetting (Adams, 1961), and (3) loss of activation (Schmidt, 1988).

Under pressure, some performers emphasise the process of performing more than the outcome, leading to possible paralysis by analysis (Jones et al., 1997). This occurs when a performer becomes mentally “stuck” in the actual mechanics of the skill, unable to envision the flow of a successful process and outcome of the skill. According to Jones et al., by focusing on general task cues, it is likely that performers may hinder themselves from consciously monitoring the detailed movements that prevent a smooth and well-co-ordinated performance. Therefore, automaticity (occurring when skills are executed automatically), at least in this instance, happens when the performer avoids specific task cues and focuses their thoughts on the general overall performance.

Finally, ambiguity is a psychological variable worth mentioning, as it can contribute to uncontrolled stress while performing. It basically refers to situations where some or all of the information about the stressor is unknown. According to Neufeld et al. (1989), ambiguous stressors are enigmatic, whereas “known” stressors are more predictable and manageable. Five advantages of known stressors, as suggested by Neufeld and his colleagues, are (1) they help the performer prepare psychologically for their impact, (2) they provide relatively safe periods when it is known that the stressor will not occur, (3) they allay fears of being overwhelmed and defenceless, (4) they lessen the startled response upon impact, and (5) they satisfy one’s need to eliminate ambiguity either through past associations with ambiguity and negative outcomes or through natural selection. These stressors, being known, are more likely to be controlled.

### *Reversal Theory and Stress*

There are three propositions that relate specifically to stress in the reversal theory literature (Apter, 2001):

1. If there is a discrepancy between the ideal level of a variable that is related to a metamotivational state and the actual level of that variable, giving rise to an unpleasant emotion or feeling, this will be experienced as a form of *tension* whose strength will be proportional to the degree of the discrepancy. Such tension constitutes *tension-stress* and is inversely related to hedonic tone.
2. Tensions from different discrepancies involving different motivational variables may combine to produce an overall level of tension-stress at a given time.
3. The individual may respond to tension-stress with some degree or another of effortful striving. This is known as effort-stress (p. 48).

Reversal theory has some unique perspectives regarding stress and handling stressors. It has been suggested within reversal theory that vulnerability to stress may be more prevalent among people unable to reverse readily and appropriately out of their preferred mode (Fontana & Valente, 1993b). This means that performers under stress might stay in or shift to their preferred state, despite that state being inappropriate for coping with the stressor at hand.

According to Jones et al. (1997), reversal theory also makes a paradoxical prediction that an increase in the frequency or severity of stressful events may bring about improvement(s) in a performer's emotional and physical functioning. This possible improvement through repeated stressful situations might lead a performer to better cope with the experience of various stressors in the performance.

For example, it was reported by Martin (1985) and supported by Martin et al. (1987) and Martin et al., (1988) that paratelic dominant individuals (i.e., those preferring the playful and spontaneous state) are adversely affected by the absence of stressors in their everyday lives. These individuals actually thrive on moderate amounts of stress. Stress seekers, according to Martin and his colleagues, are somewhat of an enigma; however, the notion is that some performers are prone, through positive experience, to seek stress.

It appears that performers who prefer high levels of arousal, or high levels of mental or emotional stimulation, may possibly benefit from the stressful situations others avoid. When high stimulation is absent, at least for these performers, the negative effects of stress are present in low stimulation, such as in boredom or relaxation. In addition, Martin (1985) stated that differences between telic (i.e., serious and planning-oriented) and paratelic dominant individuals have been found to be greater when stress levels are not so severe, but range from low to moderate.

In a subsequent study, support was given for these abovementioned findings stating that telic and paratelic dominant individuals differ in their response to stress (Martin et al., 1987). It was found that paratelic dominant individuals experience greater dysphoria, or depression accompanied by anxiety, in the absence rather than in the presence of ongoing stressors. Yet a third study revealed that paratelic dominant subjects were relatively unaffected by moderately stressful conditions while telic dominant subjects were adversely affected (Martin et al., 1988). All three studies have suggested that paratelic dominance (or the paratelic state) may have a stress-moderating effect.

Martin et al. (1988) stated that reversal theorists do not view stress as always deleterious or noxious, but see it as invigorating for some people, providing them with an

enhanced sense of challenge and excitement. In a similar vane, it has been suggested that a distinction may be made between eustress and distress (Selye, 1976) or good stress and bad stress (Ursin & Murison, 1983). Reversal theory (e.g., Martin et al.) suggests that differences between the two reside not so much in the nature of the actual events but rather in the metamotivational state of the individual who is experiencing the stressors.

The summary by Martin et al. (1988) supported the phenomenological approach whereby a performer's subjective view of an experience determines the affect of that experience. In addition, other researchers have identified differences in a performer's appraisals of stress and coping styles based on metamotivational dominance (e.g., Kerr, 1987b; Kerr & van Lienden, 1987; Svebak & Kerr, 1989; Wilson, 1993). These statements imply that individuals having paratelic state balance probably view stress and coping with stressors differently than those having a telic state balance.

*Tension-stress and effort-stress.*

According to reversal theory, stress is thought to arise as a result of tension. This tension has been defined as a "discrepancy" between the actual (real) and ideal (preferred) levels of a variable. "The term tension stress refers to the discomfort that people feel when (they perceive) a discrepancy between their actual and ideal levels of a given phenomenological dimension..." (Potocky et al., 1993, p. 24). There are two possible forms of arousal discrepancy, according to Kerr (1997a), that arise not only because arousal levels can be too high or too low, but also because these levels are too high or too low in relation to two different levels of arousal. These two forms of arousal are referred to as (1) tension-stress, and (2) effort-stress.

Jones et al. (1997) outlined four possible forms of stress according to reversal theory in relation to these forms of arousal:

- 1) Telic tension-stress is thought to arise when conditions of high arousal are experienced by the individual in the telic state, resulting in unpleasant feelings of anxiety.
- 2) Paratelic tension-stress is more likely to arise from conditions of low arousal experienced as unpleasant boredom.
- 3) Telic-effort stress is experienced during coping efforts aimed at reducing tension.
- 4) Paratelic effort-stress is concerned with increasing levels of arousal to an ideal level, often by means of pleasant present-oriented coping activities (p. 112).

Tension-stress is defined as the uncomfortable experience of a discrepancy between the ideal and actual level of a variable. Both anxiety and boredom are forms of tension-stress, because they both represent deviations from the level of arousal desired at the time (Apter, 1989). Apter explained the differences in tension-stress in the telic and paratelic states by suggesting:

Stress arising as a result of too high demand (e.g., arousal levels higher than ideal, posing a threat which results in anxiety) is known as telic tension-stress. Stress arising as a result of too low demand (e.g., arousal levels lower than ideal, resulting in a lack of stimulation or threat which leads to boredom) is known as paratelic tension-stress (Apter, 1989, as cited in Kerr, 1997a, p. 157).

Effort-stress is defined as the experience of expending effort to avoid or reduce tension-stress (Apter, 1989). Effort-stress refers to the actual effort that people must expend to reduce tension (Potocky et al., 1993). Effort-stress occurs as a response to tension-stress, as a result of the individual's attempt to cope with some threat or challenge, (i.e., effort aimed at reducing

tension-stress) (Apter & Svebak, 1990). So telic effort-stress, according to Apter et al. (1990), seems to be similar to the medical model of stress, which looks at one's coping efforts to reduce tension.

Effort-stress is experienced differently in the telic and paratelic states. When the telic-dominant individual handles effort-stress it takes the form of effortful attempts at coping with the stressor (Apter & Svebak, 1989). When a paratelic-dominant individual handles effort-stress, the concern is with an active setting up of challenges (Apter et al., 1989). Kerr (1997a) explained:

Paratelic effort-stress is an interesting concept because it allows for the fact that some people may actually enjoy having to cope with stressful conditions. In other words, what would otherwise be stressful, and is conventionally regarded as stressful, becomes instead something that is pleasant and joyful. In this sense, paratelic effort-stress is not really stressful at all (p. 158).

#### *Stress response and individual differences.*

Traditional research on stressors and performance has used terms such as stress, arousal, and anxiety interchangeably. Nevertheless, the topical area of individual differences within the stress-related research has been explored in regard to the uniqueness of each individual's stress response. Individual differences to performance emphasise gender, personality, the role of effort and different stressors. The most popular individual difference variables include, for example, competitive trait anxiety (Martens, 1977; Martens & Gill, 1976) and skill level (Martens et al., 1990). In reversal theory, telic dominance, as investigated by Matthews (1985) could be related to these existing constructs in individual-differences research.

Although several researchers (e.g., Mulder, 1986; Humphreys & Revelle, 1984; Sanders, 1983) have suggested that effort might play an integrative role in moderating the stress response, Apter (1989) included effort as potentially part of the problem. According to Apter, some individuals respond with more effort than is needed, thus the effort becomes the primary stressor. So in reversal theory, effort-stress can create more distress.

Various stressors (e.g., fatigue and fear) may have different effects upon components of performance. The effects of stress appear to be individual and task-specific. Thus, stress effects are dependent upon the information-processing skills of individuals to meet different task demands. Understanding how different stressors impact on our stress and performance explains why some individuals may be vulnerable to specific demands within the performance, such as taking risks while feeling threatened. The contention is that stress effects appear to be individual and specific to each person in every unique performance situation (Humphreys et al., 1984). These stressors are unique and complex.

#### *Coping strategies.*

If stress is such an important factor, such as in academic situations or competitive sports performance (Patmore, 1986), then the ability to cope with it is clearly crucial. Coping has been defined as "...effort, both action-oriented and intrapsychic, to manage (that is, master, tolerate, reduce, minimise) environmental and internal demands, and conflicts among them which tax or exceed a person's resources" (Cohen & Lazarus, 1979, p. 219).

As previously mentioned, stress does not always have negative connotations. In order to function at an optimal level, a performer must learn to appropriately cope with various internal and external distractions. By "optimal", reversal theory takes into consideration both the ideal

amount of arousal for a most successful task performance and having the best sense of hedonic tone, or the most pleasure while doing so (Apter, 1989).

The telic dominant individual, as investigated by Howard (1988), engages in predominantly problem-focussed coping strategies, as supported by Apter (2001). On the other hand, paratelic dominant individuals may thrive on moderate amounts of stress while being adversely affected by a lack of stressors in their lives (Martin et al., 1988). Paratelic dominant people engage themselves in emotion-focussed strategies, such as wishful thinking (Apter, 2001).

Finally, reversal theorists Svebak and Apter (1984) contended that telic dominance might be a factor that predisposes an individual to high cardiovascular reactivity. However, they differentiated this predisposition factor from the Type A personality. Svebak et al. (1985) supported the previous study after taking physiological measurements during task performance. The study demonstrated that telic dominant subjects had steeper EMG gradients; higher tone skin conductance and greater thoracic respiratory amplitudes than did paratelic dominant subjects.

*Relevance to the current investigation.*

Stress may be interpreted negatively (e.g., boredom or anxiety) by one performer (e.g., adult educator), but perceived positively (e.g., excitement, challenge) by another. Generally speaking, mismatches or discrepancies between ideal arousal and “felt” (i.e., physically experienced) arousal are thought to provoke stress in the individual.

Note however, that the relationship between the telic-paratelic pair and arousal takes the form of a preference and that, under certain conditions, high levels of felt arousal in the telic state or low levels in the paratelic state may well be tolerated (Kerr, 1997a). This concept, that

performers are unique in their perception of stress, is crucial for the current investigation; the generalisation of the stress response is undermining a person's unique individuality. As one of the performance variables is perceived effort, tension-stress and effort stress are considered in relation to their possible effects on perceived competence.

### *Mood and Affect*

There is no universally accepted definition of mood (affect) (Prapavessis & Grove, 1994). Hanin (2000) stated, “(m)ood is the global set of affective states experienced on a day-to-day basis” (p. 269). Prapavessis et al. agreed that mood is best defined as a relatively short-term feeling state or emotional tone. They described these tones as involving various specific types of both positive and negative emotions, such as joy, anger, tension, vigour, excitement and so forth.

Mood states (or affect) and performance appear to be closely connected, as they are specific to each individual in a manner consistent with Hanin’s (1980) Zone of Optimal Functioning (ZOF) model. The ZOF teaches performers to recall their best ever performance and then complete a state anxiety measure on the basis of their recollected feelings (Hanin, 1989). These affective reactions are determined in part by the individual’s attributional conclusions (how they emotionally perceive the reasons) for their success and/or failure experiences.

In performance, emotions are usually triggered by success and failure. Affective reactions are assumed to subsequently influence both a performer’s expectancy of future outcomes (i.e., results) and levels of persistence (Robinson & Howe, 1989). Emotions are, therefore, a significant part of a performer’s motivation and anticipation of performance outcome. Research of any link between causal (rational) attributions and affective (emotional) reactions (e.g., Hill & Biddle, 1985; McAuley, Russell, & Gross, 1983; Robinson & Howe, 1987; Vallerand, 1987) has been limited, according to Robinson et al. (1989).

### *Mood Inventories*

The most widely used mood inventory has been the Profile of Mood States (POMS) (McNair, Lorr, & Droppleman, 1971). This inventory measures 6 identifiable mood or affective states: tension, depression, anger, vigour, fatigue, and confusion. The POMS has received much criticism as an assessment tool in performance research, primarily due to the fact that all but one of the moods in the POMS are negative (Heyman, 1982; Miller & Eddington, 1984). Steptoe and Cox (1988) rectified the POMS with the addition of 3 positive moods to provide a balance between the negative and positive moods.

Another widely used survey is the Stress Arousal Check List. It measures the component of activation in the experience of pleasant and unpleasant moods (Mackay, Cox, Burrows, & Lazzarini, 1978). Prapavessis, Berger, and Grove (1992) made the suggestion to compare mood states at training with mood states prior to an important performance, which would then determine the moods' distinct and combined influence on one's performance. Various researchers have suggested that chronic mood disturbance (Morgan, Brown, Raglin, O'Connor, & Ellickson, 1987) and acute mood disturbance (Prapavessis et al., 1992) might both be directly related to a performer's training/work load (e.g., staleness, burnout) level.

Despite the advantages of using self-report measures of mood, there is legitimate concern over their validity (e.g., Barret, 1996; Cartensen et al., 1983; Gotlib, 1984). Prapavessis et al. (1992) reported that to simply average mood states across subjects (i.e., inter-group comparisons) fails to control for individual reactions to a given level of mood or pattern of mood change. He stated that moods need to be examined in relation to intra-subject variations.

Nevertheless, self-reported mood represents the most reliable and possibly the only window that researchers have on conscious, subjective emotional experience (Barret, 1996).

Physiological measures have been found to have uncertain and inconsistent relationships to consciously reported emotional states (Feldman, 1993; Lang, 1994). In many circumstances, self-report measures are the only way to access aspects of emotional experience occurring outside the laboratory in the context of people's daily lives (e.g., Feldman, 1995a; Larsen, 1987; Oatly & Duncan, 1994; Penner, Shiffman, Paty, & Fritzsche, 1994) (Barret, 1996, p. 48). Thus, self-report measures of mood continue to be one of the most commonly used tools in research on human emotions because such measures are quick, easy, and they offer a more direct measure of emotional experience than behavioural, facial observations, or physiological measures.

#### *Mood, Affect, and Reversal Theory*

Reversal theorists are believed to have a well-balanced approach toward examining moods by incorporating both positive and negative emotions in relation to performance (Kerr & Svebak, 1994; Males et al., 1996). Reversal theory's systematic structure of 16 primary emotions provides the theoretical bases for studies stemming from the reversal theory perspective. These emotions consist of eight somatic mood adjectives (i.e., relaxation, excitement, placidity, provocativeness, anxiety, boredom, anger, and sullenness) and eight transactional mood adjectives (i.e., pride, modesty, gratitude, virtue, humiliation, shame, resentment, and guilt).

Reversal theorists, Cox and Kerr (1990) stated that the relationship between performance and mood takes either one of two directions. Either mood determines performance or performance determines mood. They concluded that success and failure may affect mood, and in turn, that mood may determine some aspects of subsequent performances. According to Cox and Kerr (1989, 1990), mood reflects the individual's primary appraisal of their interactions with the total situation and their secondary appraisal of how well they are

coping with any problems arising from the interaction. Two rugby studies (Kerr & van Schaik, 1995; Wilson & Kerr, 1999) showed players' mental states, in terms of perceived emotions and arousal levels, as being consistent across different matches (i.e., performances).

The current study investigates hedonic tone in terms of an adult educator's perceived arousal discrepancy. According to Kerr (1997a), the emotionality examined within arousal discrepancy emanates from the positive and/or negative, somatic moods specifically of the telic and paratelic states, which are (1) relaxation, (2) excitement, (3) anxiety, and (4) boredom. Only one other study examined an academic teaching session from a reversal theory perspective. Shelley (1999) examined teacher's stress levels and examined moods emanating specifically from the positive and/or negative, transactional mood adjectives experienced during a disruptive class.

Another study broadened the range of stressful events examined, and once again, a positive linear relationship was found between stressful event levels and relative mood disturbance for telic-dominant subjects (Martin et al., 1988). Previous research supported this claim regarding paratelic-dominant individuals, in which Martin et al. (1987) stated that paratelic (i.e., playful) subjects showed an initial decrease in mood disturbance as the level of stressful events increased from low to moderate. Interestingly, at more extreme levels of stress, paratelic subjects showed a significant increase in mood disturbance.

#### *Hedonic tone.*

Hedonic tone is a dimension from low/negative/bad mood to high/positive/good mood. Apter (2001) described it as:

(m)ovement toward the preferred level of a motivational variable...accompanied by increasingly pleasant emotions or feelings, and increasingly positive hedonic tone, these

reaching their optimal levels at the preferred level itself. The opposite is the case when there is movement away from the preferred level (p. 39).

Many investigators have considered the valence (or combination of positive and negative emotions) to be the single most important dimension of one's affective experience (e.g., Diener, 1993; Izard, 1977; Russell, 1991). Barret (1996) stated that given the importance of valence in affective experience, it was deemed necessary in her research to demonstrate the valence dimension or hedonic tone (i.e., experienced degree of pleasure) of the mood (e.g., "I feel good" vs. "I feel bad"), rather than to merely evaluate the value of the mood (e.g., "This is a good feeling to have" vs. "This is a bad feeling to have").

In reversal theory, arousal is linked to two different metamotivational states, known as telic and paratelic. The relationship between arousal and hedonic tone (i.e., experienced pleasure) is bistable (or two preferred levels of arousal) rather than homeostatic (only one preferred level of arousal) (Kerr, 1997a; Apter, 1981b). In other words, when the performer is in the ideal level of arousal for the state they are in, positive hedonic tone results.

In the telic and paratelic states there is an ideal arousal, and this ideal level is different in each state. According to Kerr (1997a), individuals in the telic state prefer low arousal and individuals in the paratelic state prefer high arousal. In the telic state individuals relax, and in the paratelic state individuals experience excitement. Conversely, high levels of arousal for the telic person and low levels of arousal for the paratelic person are associated with negative hedonic tone (i.e., experience of displeasure) (see Table 2). In addition, reversal theory, according to Kerr, proposes that the intensity of emotions experienced by an individual will vary the level of felt arousal (i.e., somatic emotions), as well as the transactional outcome (i.e., transactional emotions between two people) being experienced.

Table 2

*Arousal Levels and Telic and Paratelic Reversals*

|                     | <b>Telic State</b>    | <b>Paratelic State</b> |
|---------------------|-----------------------|------------------------|
| <b>High Arousal</b> | Unpleasant (anxiety)  | Pleasant (excitement)  |
| <b>Low Arousal</b>  | Pleasant (relaxation) | Unpleasant (boredom)   |

*(Source: Kerr, 1997a, p. 17)*

*Relevance to the current investigation.*

The current investigation has observed through self-reported mood, affect, and hedonic tone while teaching. The adult educators' perceptions of pleasure and displeasure were observed specifically as one of the performance variables of their teaching experience.

## *Individual Differences*

### *Gender Issues*

Some individual differences within the performance realm have been identified by gender. It has been found that females focus more on personal goals and standards, whereas males focus more on interpersonal comparison and winning (Jones, Swain, & Cale, 1990). Females have reported less confidence and lower expectation of success than males (Gill, Ruder, & Gross, 1982).

Jones and his colleagues (1990) found that predictors of cognitive anxiety levels and self-confidence in females related to self-perceptions of how they personally value “doing well” in a performance. Perceived mental readiness was also a strong influence for females. On the other hand, males’ cognitive anxiety and self-confidence are predicted by levels of self-efficacy (or the extent to which they think they will be successful) in a performance. Comparison to another’s ability in relation to their own was also a strong influence for males.

Martens (1977) reported that females are consistently prone to higher levels of performance-specific trait anxiety. As revealed in a study by Jones et al. (1989) females reported higher levels of competitive state anxiety than did males. They also reported that cognitive anxiety increases as the performance draws near. Jones et al. also found that female anxiety measures are generally higher immediately before performance and they demonstrated a quicker increase in somatic anxiety.

According to Durkin (1987), there tends to be a greater social acceptability of females reporting anxiety symptoms than males. Because females have been found to have a greater willingness to report feelings (especially unpleasant feelings) than males, these findings could be somewhat biased (Jones et al., 1997).

Lastly, some gender differences are explained by other sociological differences. Using examples from sport, Andersen and Williams (1987) suggested that males are exposed to competition earlier and are socially conditioned to have a more competitive orientation than females.

### *Subcomponents of Performance*

Subcomponents of performance, which are thought to be important in enhancing competence, are one's reaction time (e.g., Jones, Cale, & Kerwin, 1988; Parfitt, 1988) and one's working memory and perceptual speed (e.g., Idzikowski & Baddeley, 1987; Jones et al., 1989; Parfitt, 1988; Parfitt et al., 1987). During early research to determine the influence of arousal on efficient processing of information, Hockey and Hamilton (1983) argued that different performance patterns emerge under a variety of environmental stressors. They identified multiple forms of environmental stressors during performance. As they discovered how different stressors affected performance, these two researchers mapped out detailed performance patterns for individual stressors as they occurred in a laboratory setting. Variables that were tested included speed, accuracy, alertness, selectivity, and capacity of short-term memory.

### *Metacognitive skills.*

There are many stressors in the competitive environment that may prevent a performer from attaining a peak performance (Czikszenmihalyi, 1975; Privette & Landsman, 1983). After reviewing the literature, Hardy (1989) suggested that five metacognitive skills could be identified within the experimental literature. He suggested these skills are important determinants of peak performance. These skills are goal setting, imagery, anxiety, activation control, and attentional control. This is consistent with the finding that elite performers are characterised by (1) greater motivation, self-confidence, and self-efficacy; (2) more highly developed attention control

strategies (with the ability to focus more appropriately and to visualise internally, rather than visualising only externally), and (3) having lower levels of anxiety than novice performers (Mahoney & Avener, 1977; Mahoney, Gabriel, & Perkins, 1987).

#### *Goal setting.*

Goal setting is regarded as an important strategy for the enhancement of both motivation (e.g., Deci & Ryan, 1985; Latham & Locke, 1975; Roberts, 1986) and self-confidence in performance (e.g., Bandura, 1977a; Locke, Frederick, Lee, & Bobko, 1984). In their research on goal-setting and performance, Locke and Latham (1985) made a number of proposals, which included (1) specific, challenging goals lead to a superior performance more than moderate or easy goals, (2) feedback is crucial to the goal-setting process, (3) the acceptance of goals (by the performer) is important if goal setting is to be effective, and (4) competition may improve performance through the setting of higher, more challenging goals. In addition, Cale and Jones (1989) stated that levels of cognitive anxiety and self-confidence need to be considered when assessing a performer's level of goal difficulty.

Imagery, also a cognitive skill, is being able to visualise or form a picture in one's mind. Imagery can be used to reduce anxiety (Suinn, 1983) and to increase self-confidence (Bandura, 1977a). Despite considerable evidence in favour of imagery as a valuable skill in performance, the exact mechanisms by which it exerts its influence are often misunderstood (Hardy & Nelson, 1988).

#### *Attentional control skills.*

Performance depends on the ability to attend to task-relevant cues while ignoring task-irrelevant information. A performer's ability to remain focused in this manner is termed attentional control. Different types of attentional focus, or having the ability to attend to

appropriate stimuli, are required for different types of situations and events (Nideffer, 1985, 1998).

Three areas of research on attentional control have contributed to performance routines, which are (1) distraction theories, concerned with loss of attention caused by shifting the focus of attention to task-irrelevant cues, thus ignoring critical task cues; (2) self-awareness theories, concerned with being self-conscious and the effects of social facilitation of the tasks-at-hand; and (3) capacity theories, concerned with attaining a performer's full focal capacity and ability to comprehend new information.

Attentional control may be lost due to increased physiological arousal. According to Landers (1981), increased physiological arousal can create peripheral narrowing (i.e., tunnel vision). Anxious performers, as observed by Nideffer (1985, 1998), are more susceptible to task-irrelevant thoughts (or thoughts that are not relevant to the task-at-hand) than performers who are not in anxiety overload. Anxious performers also tend to experience negative thoughts when under pressure, which may become self-debilitating to performance. Schmidt (1988) agreed stating that performers suffering from distractibility tend to experience sudden and significant decrements in performance. Cox (1998) supported the previous research and added that high levels of arousal may lead to the phenomenon of distractibility.

The performer who has the ability to shift attention as the situation demands has a better opportunity to meet performance task demands (Nideffer, 1998). Nideffer stated that being able to exclude irrelevant information allows the performer more time for meeting task demands. Davies (1989) agreed, stating that being able to exclude irrelevant information can adversely affect anticipation skills, such as the way a person makes decisions of what to do and when to do it.

An important aspect of attentional control involves focusing on process goals rather than outcome goals (Cox, 1998). According to Cox, the performer who focuses on the process of a task in the moment tends to have an advantage. The performer's ability to meet task demands improves by staying in the moment.

Empirical studies on attentional control skills are lacking, as reported by Jones et al. (1997). Even though cognitive anxiety can impair performance by disrupting attention (Wine, 1971, 1980), the research is surprisingly limited.

Two distinct forms of self-regulation training that have been identified by Hardy et al. (1988) are (1) one-to-one teaching by a clinician, and (2) programmed learning using mental teaching packages in the form of books, tapes, and workbook packages. Relatively little research evaluating these packages has been published, according to Seabourne, Weinberg, Jackson, and Suinn (1985) and Straub (1986).

#### *Individual Differences and Reversal Theory*

According to Apter (2001):

Individuals differ, among other things, in respect to:

1. Their current dominance in relation to each pair of metamotivational states. The profile of such dominances over all pairs of metamotivational states is known as the individual's self-pattern.
2. Their *lability*, or ease with which reversals occur, either overall or for each specific pair.
3. The relative *salience* that they tend to experience for each pair of metamotivational states (i.e., the relative importance of each domain of experience in their lives).

4. Their key states—the states that tend to occur frequently in their experience and to be focal when they do occur.
5. The way in which coactive states in an array tend to articulate with each other.
6. The kinds of events or situations that tend to induce different metamotivational states (p. 46).

*Relevance to the current investigation.*

Overall, as a group, adult educators can be looked at in terms of having similar goals.

However, individuality needs to be considered when observing intrapersonal differences of self-perceived teaching competence.

### *Self-Esteem*

In 1998, Aidman stated, "...that both valence-based and self-worth/self-competence models may need to be combined in a more realistic conceptualisation of global self-esteem" (p. 735). Aidman stressed "...the importance of capturing the affective nature of self-esteem and, hence, the need for more indirect measurement procedures sensitive to implicit self-views" (p. 735).

Self-esteem is also a process of one's cognition. Cognitions are functions of emotion and motivation (Apter, 2001). It is thought that individuals seek cognitions that resonate with their metamotivational states. Thus, cognitive approaches are not excluded when they are integrated with affective or motivational processes.

The self, as defined by Chaplin (1985), is "the individual as a conscious being, the ego, the personality or organization of traits, and the proprium, or the body senses; the awareness on the part of the individual of his identity, continuity, striving, and image" (p. 414). Research on self-esteem, as observed by Markus and Wurf (1987), started to make serious progress since abandoning the uni-dimensional concept of self-esteem. They stated that the self is defined as "...a dynamic interpretive structure that mediates most significant intrapersonal processes (including information processing, affect and motivation) and a wide variety of interpersonal processes (including social perception and reaction to feedback)" (p. 300).

Self-esteem is essentially having the combined feeling of self-competence and self-worth. According to Malhi (1997), self-esteem empowers individuals to attain desired goals and to optimise their potential. He explained that being competent is normally associated with *doing* something well. But to *be* competent is also being self-aware, knowing yourself, meaning

understanding one's self. So, in essence, self-worth is about one's sense of doing and one's sense of being.

Malhi (1997) created a self-esteem model that focused on a positive belief system. This model emphasised self-renewal, which involves a physical, mental, spiritual, and social renewal of one's self. He described the model as one that enhances self-esteem through various steps of combining the sense of *being* and *doing*.

Self-esteem refers to the way one feels about oneself. DeVito (1998) described the two kinds of self-esteem as (1) situational, and (2) characterlogical. Situational self-esteem is when a person has high or low self-esteem in a specific context (e.g., teaching).

Characterlogical self-esteem is when a person has high or low self-esteem that is global and is evident in all areas of the person's life (e.g., general self-esteem). Situational self-esteem could be considered as state self-esteem, whereas, characterlogical self-esteem could be viewed as trait self-esteem (McKay & Fanning, 1998).

According to Riessman (1993), teaching demands much self-investment (of talent, personality, skills, and ideas) and much self-expression. More specifically, Pollard (1985) emphasised that a teacher's personal self-image can be at stake. Nias (1989) recognised the vulnerability of the teacher by stating that classroom events can confirm or threaten a teacher's image of professional competence. Riessman concluded, that it is natural to draw a distinction between a teacher's self as part of the professional role and the teacher's self as a person.

### *Performance Self-Esteem*

Elko and Ostrow (1991) worked with gymnasts and their self-esteem. The athletes often believed they were much better individuals when performing well than when not performing well. A self-esteem study by Martin et al. (1994) found supportive results stating that high self-

esteem subjects perceived their performance to be better than low self-esteem subjects perceived their performance to be. It has been reported that individuals high in self-esteem tend to attribute success to internal, stable, and controllable factors more than individuals in low self-esteem (e.g., Marsh, Cairns, Relich, Barnes, & Debus, 1984; Weiss, McAuley, Ebbeck, & Wiese, 1990).

In terms of tests, Stake (1979) developed a 33-item scale of performance self-esteem. Its purpose was to tap self-evaluations of ability and performance. It was primarily intended to identify gender issues, and was not treated as a state measure.

### *Self-Expression and Performance*

#### *Self-Evaluation*

Leadership competencies consist of emotional self-awareness, accurate self-assessment, and self-confidence (Goleman, 2002). Adult educators can be viewed as leaders. Adult educators conduct learning in a group environment and are believed to be psychologically competent based on the following three areas of leadership competence (Goleman, 2002:

*Emotional self-awareness.* Leaders high in emotional self-awareness are attuned to their inner signals, recognizing how their feelings affect them and their job performance. They are attuned to their guiding values and can often intuit the best course of action, seeing the big picture in a complex situation. Emotionally self-aware leaders can be candid and authentic, able to speak openly about their emotions or with conviction about their guiding vision.

*Accurate self-assessment.* Leaders with high self-awareness typically know their limitations and strengths, and exhibit a sense of humour about themselves. They exhibit a gracefulness in learning where they need to improve, and welcome constructive

criticism and feedback. Accurate self-assessment lets a leader know when to ask for help and where to focus in cultivating new leadership strengths.

*Self-Confidence.* Knowing their abilities with accuracy allows leaders to play to their strengths. Self-confident leaders can welcome a difficult assignment. Such leaders often have a sense of presence, a self-assurance that lets them stand out in a group (pp. 253-254).

Self-awareness is “insight into the reasons for one’s own behaviour...” (Chaplin, 1985, p. 414), and it is a significant part of the self-evaluation process. Individuals possessing self-understanding and who have a healthy self-esteem are aware of their strengths (McKay et al., 1998).

Self-criticism is “the ability to recognise one’s weaknesses or limitations...the recognition that one’s accomplishments do not measure up to social standards or to expectations set by the self” (Chaplin, 1985, p. 414). Some individuals deceive themselves by not recognising their limitations. Chaplin states that self-deception is the “failure to recognise one’s own limitations...” (pp. 414-415).

Affect may influence perception indirectly through its impact on the cognitive processing involved in the evaluation of a performance. This was revealed in a study by Robbins and DeNisi (1994) in which they identified affect as influential to the process and outcome of performance evaluation.

Research by Feldman (1981) stated that both “affect-consistent” performance and “affect-inconsistent” performance were perceived as more meaningful and weighed more heavily

than “affect-neutral” performance. He commented that if the ratee’s performance is consistent with the rater’s affect, it is likely that the performance will be easier to evaluate.

Three motives guide one’s self-evaluation (Wayment & Taylor, 1995). These consist of accuracy, self-enhancement, and self-improvement. Self-perception theory takes “the position that people often make inferences about their attitudes as a result of observing their own behaviour” (Chaplin, 1985, p. 415). For example, an adult educator may perceive that they are becoming a more effective teacher because they believe themselves to be showing less signs of incompetence in their delivery of the lesson. Wayment et al. also added that self-esteem might also contribute to one’s self-evaluation strategies. Individuals having low self-esteem tend to use more social-comparison information (interpersonal), and those with high self-esteem tend to use more personal standards of information (intrapersonal).

The concept of processing self-evaluations based on an individual’s vulnerability to others’ evaluations was supported by Crowley (1999), who provided four quadrants in which people find themselves. The first quadrant consists of those who have high self-evaluations plus low vulnerability to others’ expectations. The second quadrant is made up of those who have a high self-evaluation plus high vulnerability to others’ evaluations. The third quadrant contains those who have a low self-evaluation plus a high vulnerability to others’ evaluations. And lastly, the fourth quadrant describes those who have a low self-evaluation of self plus a low vulnerability to others’ evaluations. Within Crowley’s theory of empowerment therapy, he stated that fluctuations and movement from one quadrant to another might be subject to certain variations including mood and social circumstances. A high vulnerability to others is seen as detrimental to one’s self-esteem, while a low vulnerability to others is conducive to a higher self-esteem.

One's self-concept (i.e., the evaluation and appraisal of oneself) is a product of experience. Individuals acquire their self-concept primarily from what others reveal they think about them, observations of their own behaviour, and the consequences thereof. Bower and Bower (1991) stated that having internalised the standards and beliefs of those who judge, people gradually come to describe themselves in terms of how they deviate from the norm. Consequently, people become anxious when their performance is being closely evaluated due to the fear of possible inadequacy.

In the process of self-observation (i.e., introspection) and self-evaluation, being able to self-accept without the need for social acceptance is a sign of true self-acceptance. "Self-acceptance is an attitude of being essentially satisfied with oneself, one's qualities, and one's aptitudes, and of recognising one's limitations" (Rosenfeld, 1979, p. 414).

#### *Motivated reasoning.*

Motivated reasoning and wanting to not appear faulty in any way to oneself or to another person may create a dilemma for some people to objectively rate their own performance. Motivated reasoning can come in a form as extreme as a total denial and lack of awareness of any seemingly negative performance issues, and having low self-acceptance.

The rules on which "reasoned denial" is based are similar to those governing the individual's normal cognitive activity. Reasoned denial has been represented in the form of "if-then" implications, where the "to-be-denied" belief plays the role of a consequence drawn from a given premise (Miceli & Castelfranchi, 1998). So, in order to deny such a consequence one may either deny its premise, or search an alternative consequence or premise. The remaining option is to deny the very relation of the implication. According to Miceli et al., each type of

reasoning is logically biased, while at the same instance, psychologically plausible and convincing to self and/or another.

Individuals tend to be more sensitive when processing information they do not want to believe than they are with regards to information they do want to believe (Ditto, Scepansky, Munro, Apanovitch, & Lockhart, 1998). Ditto et al. stated that people believe the information about themselves more readily when they want to believe it.

Kunda (2000) supported these observations with considerable evidence further demonstrating how individuals are more likely to gather the conclusions that they want. However, according to Kunda, often their ability to do so is somewhat constrained by their inability to construct seemingly reasonable justifications for their conclusions. Kunda also speculated the possibility of motivation affecting reasoning through reliance on a biased set of cognitive processes, such as strategies used for accessing, constructing, and evaluating beliefs.

### *Self-Disclosure*

Several influences upon self-disclosure include culture, gender, and personality. Self-disclosure is communication in which a person reveals information about oneself (DeVito, 1998). Self-disclosure concerns thoughts, feelings, and behaviours that have a significant bearing on the individual. Thus, self-disclosure could refer to one's own actions. DeVito stated that although by definition self-disclosure may be any information about the self, it is in practice most often used to refer to information that an individual would normally keep hidden, rather than information that simply had not been previously revealed.

According to DeVito (1998), individuals who have a high self-esteem tend to self-disclose more than those who are low in self-esteem. Individuals who are more competent tend to perceive themselves to be more competent, and therefore they have the self-confidence

necessary to take more risks with self-disclosure (McCroskey & Lawrence, 1976). According to Rosenfeld (1979), a major reason for not self-disclosing is the fear of projecting an unfavourable image. McCroskey et al. suggested that perhaps those individuals with a higher perceived competence might have more positive things about themselves to disclose than those who perceive themselves to be less competent.

### *Self-Report of Mood and Affect*

#### *Social desirability.*

Self-reports of mood and affective experience are the most frequently used measure of subjective emotional experience (Barret, 1996). Social desirability is defined as (1) the need of an individual to respond in a culturally appropriate manner to gain social approval or avoid negative evaluation, (2) the tendency to deny socially undesirable traits while claiming socially desirable ones, and (3) the tendency to protect one's self-esteem from ego threat (Weinberger, Schwartz & Davidson, 1979).

Self-reported emotion or related reports are primarily determined by social desirability concerns (Carstensen & Cone, 1983). Emotions are, in part, social phenomena. Therefore, the meaning of "mood" words may primarily reflect social phenomena and may primarily indicate social impact or appropriateness (Hochschild, 1979; Kemper, 1978).

#### *Hedonic tone.*

The observed correspondence between social desirability and hedonic quality may take several different forms and may be related, however, they are distinct conceptual phenomena associated with one's affective experience. Although both the valence, or the psychological attractiveness of objects (Chaplin, 1985) and the arousal dimensions are represented in the structure of affective ratings, valence plays a dominant role in self-reported ratings of mood (e.g., Feldman, 1995b; Mayer & Gaschke, 1988; Meyer & Shack, 1989; Russell, 1978, 1980; Russell & Mehrabian, 1977; Smith & Ellsworth, 1985.)

According to Fisher, Heise, Bohmstedt, & Lucke (1985) desirability (e.g., social desirability and appropriateness) of mood states, rather than hedonic tone (e.g., pleasant vs. unpleasant), is the key component in the semantic structure of emotional words that influences

how individuals label their mood. In Western cultures, positive moods are more desirable than negative moods (Morgan & Heise, 1988; Sommers, 1984). Thus, an individual may select certain words to describe their experience because they are similar in desirability (e.g., happy and enthusiastic) rather than because they are similar in hedonic tone (or degree of pleasantness) (Fisher et al., 1985).

Barret (1996) developed the research further and stated that self-reports of mood reflect the hedonic tone, the level of arousal, and the desirability associated with the different emotional states. According to Barret (1996), assessing moods with a performer's cognitions will reveal not only their changing states, but also give added insight to perceptions of their competence. She also stated that desirability of an affective state is empirically related to both its hedonic quality and the level of arousal denoted by that state.

In Barret's (1996) research of people's motives in self-report of affective experience, the findings indicated that a person's level of social desirability does not mask important dimensions of affective experience. Instead, the social desirability of affective states was communicated in self-reports of mood, in turn, reflecting the hedonic tone. As Barrett explained, these desirability concerns do affect the self-report rating that are often used in psychological research, but such ratings also reflect some aspects of a respondent's internal state.

#### *Gathering valid self-reports.*

The variables used by Hockey et al. (1983) (i.e., speed, accuracy, memory, etc.) are only some of the dimensions used for measuring cognitive performance. Gradual mapping of the effects of different stressors presented within environments on subcomponents of performance is likely to lead to a much more accurate and detailed knowledge (Jones et al., 1997). Wilson and

North (1995) used a handheld computer to take in-the-field recorded information about a performer's perceived performance. Wilson et al. noted that this information would determine which psychological symptoms are contributing to the perceived superior and inferior performances. Perceptions of superior performances were those aligned with perceived successful performances, while perceptions of inferior performances were those aligned with perceived unsuccessful performances.

The possibility of response biasing, however, remains an inherent weakness in every psychological self-report instrument (Ryska, 1993). For example, a study of adolescent figure skating competitors using self-report measures of achievement orientation, led the researchers (Vealy & Campbell, 1988) to question the limits and validity of self-report.

Due to the lack of empirical research on the potential response biasing effect of social desirability on self-report inventories, the "performance" researcher cannot simply assume that a performer's response is completely precise and genuine. To ignore the concern of response biasing is to assume that performers are always completely forthright when filling out psychological inventories, and that conclusions derived from these inventories are always accurate (Williams & Krane, 1989).

Lastly, self-reporting has been connected to reversal theory in the athletic performance domain. Self-reported moods have been observed of runners under natural conditions by Kerr et al. (1993). These self-reports were successfully applied in the investigation of changes in perceived stress and emotion brought on by performances in running, basketball, and rugby (Kerr et al., 1994).

### *Other Issues of the Self in Performance*

#### *Feedback.*

Perceived competence can be affected by external evaluation and is an example of a possible contingency during performing. A conceptual model has been devised describing how a performer's metamotivations (i.e., the motive supporting the motivation) can determine the desire to engage in mastery attempts (Weiss & Chaumeton, 1992). These attempts are due to feedback from significant others as well as one's developmental processes defining success and/or failure. Weiss et al. stated that information from significant others and the criteria which subsequently influence a performer's perception of competence (and control), in turn, influence their affect.

Feedback needs to be positive in order to facilitate high self-esteem levels in performers because it assists them to obtain their goals (Dossett, Latham & Mitchell, 1979). Data has suggested that the relations between self-views and feedback preferences are mediated by individuals' perceptions of the accuracy of the feedback (Bosson & Swann, 1999). Individuals with low self-esteem are affected by negative feedback more than those with high levels of self-esteem. According to Dossett et al., negative feedback given to individuals with low self-esteem tends to result in a decrease in performance success.

Whereas, individuals with high self-esteem work harder and need less practical rewards, while appearing to be pleased with the task completion itself (Yuki & Latham, 1978). Research has shown that controlling feedback, which involves the perception that one must meet someone else's expectations, leads to reduced levels of negative affect and intrinsic motivation (Deci et al., 1985; Ryan, 1982).

### *Support.*

Perceived support may possibly play a role in performance according to Saronson, Saronson, and Pierce (1990). Those high in social support report experiencing less cognitive interference than those with lower levels of perceived support. Two concepts are strongly linked with perceived support (relating to skill development and performance) are (1) the sense of support, and (2) the sense of acceptance. Saronson et al. stated that if support is not perceived to be available, then it is not likely to be of much benefit. Having a sense of support and acceptance may free a performer to be more task-focused and reduce the likelihood of extraneous thoughts that may interfere with performing.

### *Self-Involvement versus self-forgetting.*

Self-involvement has been identified as being related to various personality variables and situational contingencies through affinity-seeking constructs (Bell & Daly, 1984). Self-involvement is a form of self-generated narcissism in which an individual attempts to regulate one's self-esteem (Gratch, 2001). For example, it is possible for persons being evaluated to respond to written questionnaires, verbal questions, and other evaluations based on the motive to be liked. In an investigation by Nederhof (1989) it has been shown that individuals who are self-involved may exert a moderating effect upon the intended and subjective experiences, meaning their preferred experience and their reported experience may not be as distinct.

### *Reversal Theory and the Self*

Having too much self-attention while performing may deter performance. This level of self-focus can take away a performer's attention to task cues. Thus, paradoxically, self-forgetting (or the absence of self-awareness) skills may actually enhance performance. Fontana (1988) described self-awareness as those experiences when someone becomes aware of

oneself as the doer of one's own actions. Such experiences include when an individual has a sense of monitoring their own activity, and is able to judge oneself and add to one's self-concept and self-esteem. Fontana described:

The 'inherently inconsistent' model of the psychologically healthy personality identified...can only have one meaning if it is viewed as static. In terms of self-awareness, this must of necessity imply reversal between episodes of self-monitoring is a central feature of one's phenomenological field, and episodes in which it is either absent or at most peripheral. Reversal, for example, between episodes in the notion 'I am doing well' or 'I am doing badly' is a defining characteristic of one's psychological state, and episodes in which not only is self-evaluation suspended, but the sense of 'I' as doer disappears (p. 350).

In order to be in a telic state, it would be a requirement that the individual manifests a persistent tendency towards a consciousness of self. The telic individual does this with such consciousness constituting not only their current phenomenological state, but also potentially influencing the core constructs through which self-definition is obtained (Fontana, 1988).

Fontana continued by stating that for the paratelic state, the opposite case is true. Self-awareness is of a peripheral or retrospective kind. It is a requirement of the paratelic state that the individual shows a tendency towards the absence of self-awareness, or self-forgetting.

Fontana stated:

The model that emerges from all this in terms of the telic-paratelic dimension is that if the individual shows a persistent tendency towards self-awareness (is mostly self-aware) then he will be in the telic state, while if he shows a persistent tendency towards the

absence of self-awareness (is mostly self-forgetting) then he will be in the paratelic state.

This holds good regardless of the activity in which he happens to be engaged (p. 351).

Fontana (1988) suggested that in any given activity the individual may of course reverse several times between these modes and thus between self-remembering and self-forgetting. He utilised the following example:

(O)ne moment an individual may be lost in an activity and in the next moment become conscious that self-interest demands the activity meets with a successful outcome. One moment he or she may be concerned with self-assertion and with resisting the wishes of others, the next there may be reversal into a desire to identify with the group rather than risk the isolation to which this self-assertion may lead. One moment there may be the desire to dominate and lead, the next this desire may reverse into sympathy as one recognises how distressing this masterful behaviour may be for others. One moment there may be self-identification, with pleasure or displeasure focused on oneself, the next there may be other-identification with the focus of pleasure or displeasure shifted outward (p. 289).

#### *Protective frames.*

When individuals experience the world as being ultimately safe and are in a paratelic metamotive state, even if danger is present, they are in a protective frame (Apter, 2001). The three protective frames discussed in reversal theory are (1) a safety-zone frame, (2) a confidence frame, and (3) a detachment frame. Protective frames make it possible for the high arousal experienced with risk behaviour to be experienced in the paratelic state as excitement rather than anxiety. This can be applied to performance as well.

The safety-zone frame provides feelings of safety through the perception there is no source of threat. The confidence frame provides feelings of safety in the face of risk through confidence in one's skills and those of others, the dependability of equipment, and so forth. The detachment frame provides feelings of safety through the fact that one is merely an observer (Apter, 1992; 2001).

Of the three protective frames, present in the paratelic state only (Apter, 2001), the safety-zone frame was experienced through one's perception of being in a safe classroom. As the confidence frame implies, adult educators would function with higher perceived competence when believing in their abilities and their support sources (e.g., assistants or equipment). Lastly, the detachment frame has three sub-components consisting of (1) self-substitution, (2) make-believe, and (3) retrospection (Apter, 1992).

Self-substitution is when "...the spectator is in an excitement-seeking state, free from threat, and is seeking to gain arousal through identification and empathy with the action and/or players" (Wilson & Wilson, 1999, p. 35). For example, a leader of a group might step back while observing the action of another giving a presentation. Wilson et al. continued with the definition of make-believe as "...when the person manufactures their own imaginative material (i.e., daydreaming, fantasizing, playful wish-fulfillment)" (p.35). For example, in a learning environment, a teacher might instigate a role-play of a personal fantasy. Retrospection is when "...the individual may be contemplating or reliving something that actually happened to them but with the knowledge that any danger is perceived as being in the past" according to Wilson et al. (p. 35). For example, someone might self-disclose a personal experience from the past which was immoral or against the law.

*Relevance to current investigation.*

The current investigation measures the adult educator's performance state self-esteem. Recording the affective reactions of performance state self-esteem during metamotivational shifts is one mechanism believed, by this researcher, to provide a measurement procedure for self-perceived competence. These issues are considered in the case studies and independently revealed by each adult educator.

*Conclusion*

It is important to note that the current investigation focused on self-perceptions in specific areas of human performance. This study focuses on adult educators' self-patterns of change (i.e., shifts) over time through their experiences of satiation, frustration, contingent events, lability, hedonic tone, arousal discrepancy, self-esteem, and ideal metamotivational states (i.e., a phenomenological state characterised by one's interpretation of their own motivation).

Despite alluding to the significant areas of confidence, self-efficacy, stress, anxiety, motivation, and issues pertaining to the self as salient information, it is necessary to point out that these areas are considered only supportive performance issues in relation to the concept of change and self-perceptions of competence. Investigating all these secondary issues independently is beyond the scope of the current investigation.

### Operational Definitions

1. Adult educator: Interactive teacher, instructor, facilitator, tutor, organisational trainer.
2. Arousal discrepancy: The difference between one's ideal and actual felt arousal (Apter, 2001).
3. Array: The set of states that is active at a given time may be referred to as the state (Apter, 2001, p. 39).
4. Bistability/Bistable: Two distinct ranges of an ideal arousal level/value of a variable (Apter, 1989, p. 25). A system exhibits bistability if it tends to maintain a specified variable, despite external disturbance, within one or another of two ranges of values of the variable concerned. (This contrasts with homeostasis, or balance, in which only one range of values is involved.) (Jones et al., p.129).
5. Class: Teaching session. It is used in this study when referring to *before* class and *after* class, referring to when the state measures are self-reported.
6. Competence: "Appropriateness or ability of teaching for a task" (Chaplin, 1985, p. 93).
7. Confidence frame: A protective frame that "provides feelings of safety in the face of risk through confidence in one's skills and those of others, the dependability of equipment, and so forth" (Apter, 2001, p.47).
8. Current dominance: The underlying bias that currently characterises the individual with respect to a pair of metamotivational states (Apter, 2001, p. 49).
9. Detachment frame: A protective frame that "provides feelings of safety through the fact that one is merely an observer" (Apter, 2001, p.47).
10. Domain: A state within a pair of states (Apter, 2001).

11. Dominance: Each individual person has some degree of internal bias toward one or the other metamotivational state within each pair of metamotivational member of a pair of metamotivational states is known as the degree of *dominance* of that state (Apter, 2001, p. 39).
12. Effort-stress: The stress experienced as a concomitant of the expenditure of effort in order to reduce tension-stress; the effort expended to overcome some cause of anxiety or to avoid boredom (Jones et al., p. 129).
13. Event state balance: The actual amount of time that the individual spends in one state rather than its opposite on a particular defined occasion (Apter, 2001, p. 49.)
14. Experience sampling: Self-reports from an individual over time by aggregating the reports from state measures actually completed in real time (Apter, 2001).
15. Felt arousal: The degree to which one feels oneself to be 'worked up' or emotionally intense and emotionally involved about what one is doing (Apter, 1989, 2001). The degree to which an individual feels himself to be 'worked up' at a given time, and in this sense the degree of intensity of his feelings of motivation. The felt arousal dimension defined in this way is different from the sleep-wakefulness dimension. Felt arousal should also be distinguished from tension (Jones et al., 1997, p.128).
16. Felt significance: The degree to which the individual experiences oneself to be pursuing goals that are important beyond the current ongoing situation (high felt significance) or is doing things for the sake of those things in themselves in the present moment (low felt significance) (Apter, 2001, p.41).

17. Focus: The focality of a state at a given time is its relative degree of importance, in comparison with other coactive states, in the individual's phenomenological field at that time (Apter, 2001, p. 39).
18. Grounded theory: An emergent (i.e., discovered in the data) methodology conducted mostly through observation, conversation, and interview; a research situation involving the phases of data collection, note taking, coding, memoing, sorting, and writing (Glaser, 1978; 1998). Comparison within the investigation is a continuous process.
19. Halo effect: The tendency to rate individuals either too high or too low on the basis of one outstanding trait. The halo effect is a characteristic defect in rating scales (Chaplin, 1985, p. 204).
20. Hawthorne effect: The tendency of people to work harder when experiencing a sense of participation in something new and special (Chaplin, 1985, p. 205).
21. Hedonic tone: How pleasant or unpleasant the level of arousal or feelings of significance is being experienced by someone (Beebe-Center, 1932, as cited in Apter, 1989).
22. Homeostasis: Balance. A homeostatic system can be defined as a system, which is so constructed that it tends to maintain one of its output variables within a given range of values (Apter, 1989, p. 24).
23. Inducing/change agent: The instigator of a shift in metamotivational states through frustration, satiation, and/or a contingent event (Apter, 2001).
24. Influences: The effects (positive and negative) on perceived performance.
25. Key states: The states that tend to occur frequently in their experience and to be focal when they do occur (Apter, 2001, p. 46).
26. Lability/Labile: How easily and readily people reverse between states (Apter, 2001).

27. Make-believe: “The person manufactures their own imaginative material (i.e., daydreaming, fantasizing, playful wish-fulfillment)” (Wilson et al., 1999, p. 35).
28. Means-ends domain: Telic and paratelic are the two metamotivational bistable states in reversal theory that specifically refer to one’s goal-orientation (Apter, 1989) and the means-ends domain (Apter, 2001).
29. Metamotivation: The motive supporting the motivation (Apter, 1982).
30. Metamotivational analysis: The psychometric exploration of the metamotivational states for particular individuals in specific situations, activities, or domains (Apter, 1997a).
31. Metamotivational state: A phenomenological state, which is characterised by a certain way of interpreting some aspect(s) of one’s own motivation. Such metamotivational states as have been identified in reversal theory go in pairs of opposites, only one member of each pair being operative at a given time but reversal always being possible between members of a pair (Jones et al., 1997, p. 129).
32. Metamotives: Modes, which are about motivation, involving different ways of organising or interpreting motivation (Apter, 1989, p.17).
33. Motivated reasoning: When individuals preferring to reach a particular conclusion, such as when taking a risk, search for reasons to accept supportive information while discounting disconfirming information (Kunda, 1990).
34. Overall dominance: The metamotivational state an individual tends to be in, in the four categories throughout this study: (1) key state; (2) telic/paratelic situational state balance (in a teaching mode); (3) perceived teaching competence; and, (4) perceived “less” teaching competence.

35. Paratelic-dominant adult educator: An adult educator whose situational state balance in a teaching mode is in the paratelic state.
36. Paratelic state: A metamotivational state in which the individual is oriented towards, or feels the need to be oriented towards, some aspect of his continuing behaviour and its related sensations. It forms a pair with the telic state. It tends to be associated with an interest in activity for its own sake, playfulness, spontaneity and a preference for high-intensity experiences (Jones et al., 1997, p. 129).
37. Perceived performance: Self-evaluation and self-rating of performance competence.
38. Performance psychology: The study of performance variables and issues from a psychological perspective.
39. Performance state self-esteem: Self-esteem referring to one's current esteem in the area of performance.
40. Performance variables: In the current study, these influences of performance specifically refer to telic/paratelic metamotivational shifts, arousal discrepancy (and hedonic tone), effort, and performance state self-esteem in relation to self-perceived teaching competence.
41. Proactively paratelic: A pre-decision to act in a paratelic way.
42. Proactively telic: A pre-decision to act in a telic way.
43. Protective frame: "When one experiences the world as being ultimately safe, even if danger is present" (Apter, 2001, p. 47).
44. Retrospection: "The individual may be contemplating or reliving something that actually happened to them but with the knowledge that any danger is perceived as being in the past" (Wilson et al., 1999, p. 35).

45. Reactively paratelic: A consequent decision to act in a paratelic way.
46. Reactively telic: A consequent decision to act in a telic way.
47. Reversal: Switching from an opposite metamotivational mode to the other (Apter, 1989, p. 17). In its strictest sense in reversal theory, a reversal is a switch from one metamotivational state being operative to the other member of the pair of states which they together constitute being operative. The term is also used to refer to other kinds of sudden switches between opposites within experience, such as switches between opposite meanings of a given identity (Jones et al., 1997, p. 130).
48. Reversal theory: "...is often defined as a structural-phenomenological theory of motivation, emotion, and personality" (Apter, 2001, p. 3).
49. Safety-zone frame: "Safety-zone frame provides feelings of safety through the perception that in fact there is no source of threat" (Apter, 2001, p.47).
50. Salience: How important and dominant a domain is over time (Apter, 2001).
51. Satiation: In the reversal theory sense this refers to the way in which, as one member of a pair of metamotivational states remains operative over time, some innate force for change builds up in such a way as to facilitate a reversal to the opposite member of the pair of states. Eventually, this process of satiation of the operative state may lead to reversal, even in the absence of any other factors that might tend to induce a reversal (Jones et al., 1997, p. 130). Simply being in one state for a sufficient length of time.
52. Self: "The individual as a conscious being" (Chaplin, 1985, p. 414).
53. Self-administering test: "A test in which the teachings have been formulated in such a manner that the testee can readily follow them without assistance" (Chaplin, 1985, p. 414).

54. Self-awareness: “Insights into the reasons for one’s own behaviour; self-understanding” (Chaplin, 1985, p. 414).
55. Self-concept: “The individual’s evaluation of himself; the appraisal of the individual himself” (Chaplin, 1985, p. 414).
56. Self-evaluation: “A ration or judgement made by the individual about himself” (Chaplin, 1985, p. 415).
57. Self-esteem: Having the combined feeling of self-competence and self-worth.
58. Self-forgetting: A tendency towards the absence of self-awareness (Fontana, 1988) while teaching.
59. Self-involvement: A form of self-generated narcissism in which an individual attempts to regulate one’s self-esteem (Gratch, 2001).
60. Self-observation: “Introspection; objective examination of one’s own conscious processes...observing one’s own behaviour, motives, traits, etc.” (Chaplin, 1985, p. 415).
61. Self-report: Self-evaluation and recording of one’s own internal experience.
62. Self-substitution: “The spectator is in an excitement-seeking state, free from threat, and is seeking to gain arousal through identification and empathy with the action and/or players” (Wilson et al., 1999, p. 35).
63. Situational state balance: The actual amount of time that the individual spends in one state rather than its opposite in some defined type of situation over iterations of that situation (Apter, 2001, p. 49); in this case, while teaching. (See operational definition of *Telic/paratelic situational state balance*.)
64. Social desirability of others: (a) the need of an individual to respond in a culturally appropriate and acceptable manner to gain social approval or avoid negative evaluation,

- (b) the tendency to deny socially undesirable traits while claiming socially desirable ones, and (c) the tendency to protect one's self-esteem from ego threat (Weinberger et al., 1979).
65. State: One particular type of experience in a moment in time (Apter, 1989, p. 16).  
"State" in psychology is used to describe something about a person at a given moment in time (Murgatroyd, 1985).
66. State balance: The actual amount of time that the individual spends in one metamotivational state rather than its opposite over some defined period (Apter, 2001, p. 49).
67. Structural phenomenology: The study of the structure of experience, and the way in which the nature of this structure changes over time. It primarily concerns the structure of experience itself, rather than particular structures that occur within experience (Jones et al., 1997, p. 130).
68. Teaching session: When the adult educator is teaching in the classroom.
69. Telic-dominant adult educator: An adult educator whose situational state balance in a teaching mode is in the telic state.
70. Telic/paratelic situational state balance: Situational state balance in the means-ends domain. In the current study the situation is 'in a teaching mode' (or also referred to as 'while teaching'). (See operational definition of *Situational state balance*.)
71. Telic state: A metamotivational state in which the individual is oriented towards, or feels the need to be oriented towards, some essential goal or goals. It forms a pair with the paratelic state. It tends to be associated with serious-mindedness, planning ahead and a preference for low-intensity experiences (Jones et al., 1997, pp. 130-131).

72. Telic State Measure (TSM): A short paper-and-pencil test designed principally to disclose whether the testee is in the telic or paratelic state of mind at a given moment of time (Jones et al., 1997, p. 131).
73. Tension: In reversal theory, a feeling that accompanies, and is proportional to, any discrepancy between an ideal and actual level of some variable, the ideal level of which characterises a metamotivational state. Unlike arousal, tension is always unpleasant (cf. arousal, felt) (Jones et al., 1997, p. 131).
74. Tension-stress: The stress experienced as a concomitant of tension. For example, both anxiety and boredom would be experienced as forms of tension-stress. It contrasts with effort-stress (Jones et al., 1997, p. 131).
75. Valence: Combination of positive versus negative moods (e.g. "I feel good" versus "I feel bad" rather than "This is a good feeling to have versus "This is a bad feeling to have") (Barret, 1996).

### Significance of the Problem

This study of a metamotivational analysis of adult educators investigated the relationship between metamotivational and performance state self-esteem variables to self-perceived teaching competence. It examined possible shifts in telic/paratelic situational state balance (in a teaching mode) and how these identified metamotivational shifts and psychological lability relate to self-reported shifts in each adult educator's perceived teaching competence. It is believed that the investigation of relationships of an adult educator's perceptions in performance state self-esteem, arousal discrepancy and hedonic tone, effort, and telic and paratelic metamotivational states will assist in the identification of influences and shifts in perceived teaching competence.

Several studies have explored metamotivational analysis (Apter & Spirm, 1997; Apter & Batler, 1997; Kerr & Tacon, 2000; O'Connell & Brooks, 1997). The current investigation is an inquiry into a metamotivational analysis of teaching, utilising the means-ends domain (i.e., a state within a pair of states) of telic and paratelic states. Apter (2001) supported such an analysis by stating:

Should there be marked differences between opposing states, this would be particularly helpful to know in such areas as sports, school teaching, medicine, and workplace skills. ...it would be invaluable to know which particular skills are best performed in which state or state combinations" (p. 306).

Inquiry is needed in the area of "experience-driven research" (Apter, 1989). To date, only one study has investigated teaching from a reversal theory perspective. Shelley (1999) metamotivationally analysed stress amongst teachers through studying different kinds of

disruptive behaviour in various classroom scenarios. The teachers reported how they coped using the Telic Effort Stress Inventory (Svebak, 1987, 1993). Shelley looked at the autic-sympathy and alloic-mastery states (respectively, concerned primarily with self or others) as experienced and self-reported by teachers in a disruptive classroom.

### Statement of the Problem

The purpose of the current investigation has been intended to further research in “experience sampling” (i.e., self-reports compiled over time from state measures actually completed in real time). The identification of psychological factors and processes influencing self-perceived teaching competence was investigated through a metamotivational analysis of perceived performance. In this intrapersonal study, the intention was to explore, primarily from a reversal theory perspective, the psychological influences of each adult educator’s perceived competence while teaching.

The aim of this study was to determine the relationship, if any, of an adult educator’s performance state self-esteem, arousal discrepancy, hedonic tone, perceived effort and telic/paratelic situational state balance (while in the teaching mode) to self-perceived teaching competence. The researcher implemented (quantitatively and qualitatively) a methodology for identifying self-perceived changes that uniquely influenced an adult educator’s perceived teaching competence.

The current investigation examined a methodology of self-reported measurements and metamotivationally coded interviews in the exploration of the telic and paratelic situational state balance in a teaching mode. Self-reports from each adult educator’s teaching sessions were compiled from the Telic State Measure and the Metamotivational State Interview Coding Schedule. Coded interviews of perceived competent versus perceived less competent teaching sessions were used in conjunction with the analysis of these self-reported influences.

### Research Questions

1. Do the performance variables of (1) performance state self-esteem, (2) arousal discrepancy (i.e., ideal versus actual), (3) hedonic tone (i.e., pleasure within the teaching process), and/or (4) perceived effort relate to an adult educator's self-perceived teaching competence?
2. How do the inducing/change agents of frustration, satiation, and contingent events relate to psychological lability and shifts in an adult educator's perceived teaching competence?
3. Does movement toward (1) a preferred telic/paratelic situational state balance (in a teaching mode), and (2) performance state self-esteem relate to an increase in self-perceived teaching competence?
4. Does the method of applying qualitative, quantitative, and self-report (based on a grounded theory approach of observation and comparison) assist in the identification of intrapersonal shifts within an adult educator's self-perceived teaching competence?

### Assumptions

1. The adult educators will respond to the questionnaires as honestly and accurately as possible.
2. The adult educators will fill out the questionnaires as close to the commencement and conclusion of the teaching session as possible.
3. The adult educators will fill out the questionnaires on a regular basis.
4. The adult educators will cooperate and freely take part, self-disclosing within the explanatory process of the interview.
5. The adult educators will not fully understand the aim of the research investigation.
6. The Hawthorne effect will have minimal influence in the rating scales.
7. The study is about the intra-individual relationships, and does not attempt to determine cause and effect.
8. The study attempted to observe within-subject variation, and not intended to be a comparison between-subjects.

### Limitations

1. As a psychological self-report method, the possibility of response biasing exists (Ryska, 1993). To ignore the concern of response biasing is to assume that performers are always completely forthright when filling out psychological inventories, and that conclusions derived from these inventories are always accurate (Williams et al., 1989).
2. Some individuals may lack the self-awareness and ability to self-assess (Goleman, 2002).
3. “Subject mortality” may enter the study via incorrectly entered data by the subject or forgetting to enter it, thus eliminating their data from the research study.
4. Adult educators in their narrative interview could recall perceived incidents according to a process referred to as episodic memory, which includes additional incidents outside of the ten sessions measured.
5. The possibility that subjects might respond to any leading question in a socially desirable way.
6. Intercoder reliability was not established for the MSICS. Rather, the consensus between two judges determined the results of the coding units.

## CHAPTER II

### Method

#### *Methods of Inquiry*

##### *Grounded Theory Approach*

The current research study was conducted from a methodology based on grounded theory (Glaser, 1978; 1998) using a qualitative/quantitative design. Grounded theory, according to Glaser, is an emergent (i.e., discovered in the data) methodology conducted mostly through observation, conversation, and interview. Reversal theory is observed at the onset of the study, but performance self-esteem and perceived competence, not derived from reversal theory, was the 'emergence' being observed. Comparison within the investigation is a continuous process. After each bout of data collection, key issues are noted and memoed. Categories are identified (e.g., competent vs. less competent) along with their properties (e.g., telic vs. paratelic) through theoretical sampling (e.g. ten adult educators).

The current investigation utilised quantitative data followed by qualitative data, (overlapping data; i.e., Data Set 1 and Data Set 2) as characterised by grounded theory research (Glaser, 1998). The inventories used in the current study were designed to be unobtrusive to the adult educator's teaching. The researcher's goal was to apply a method of enquiry that would not interfere with the process of teaching, applying self-administering tests (i.e., tests that are formulated in such a way that the testee can follow them without assistance). The short time needed to fill out the questionnaires before and after the adult educator's teaching session should not have been a disruption to the typical pattern of teaching.

The statistical analysis used was Spearman's Rank Correlation (Ferguson, 1971), as it observes relationships. The interview data were coded (i.e., Metamotivational State Interview

Coding Schedule), and agreement and/or disagreement were determined by two independent raters.

According to Glaser, explanations (e.g., performance psychology), better understanding (e.g., reversal theory) and lastly, better action (e.g. methodology) incorporate a successful approach based on grounded theory. Glaser stated that the literature is accessed as it becomes relevant, and the writing of the discussion connects to the relevant research in the field.

### *Case Studies*

#### *Doctoral study examples.*

The current investigation is an analysis of ten independent cases. Each individual case is applied as a primary tool within the investigation process. Case studies as a primary research technique have been rare in doctoral dissertations. Nevertheless, case studies have more recently been accepted as an appropriate and innovative approach for doctoral investigations. One doctoral study researching five subjects has been recognised as an acceptable subject load due to the nature of individual case studies (Kennedy, 1979). Some examples of doctor of philosophy dissertations utilising a case study methodology are: Suozzo (2001), Patt (2001), Gobodo-Madikzela (2001), Tenenbaum (2000), Pitts (1996), Fortunato (1996), and Knapp (1995).

#### *Advantages and disadvantages.*

There are clear advantages and disadvantages of the case study approach in research. According to Thomas and Nelson (1985), one of the principal advantages of individual cases being analysed is in formulating new ideas and hypotheses about problem areas. This is particularly true in studies of no clear-cut structure or model. According to Thomas et al., the independent analysis can yield valuable information in specific areas. In addition, case studies

facilitate discoveries in intrapersonal (within subject differences) processes due to the very nature of each subject representing a study within themselves.

A disadvantage of the individual (single-case) study methodology that has prevented it from becoming more prevalent is the lack of generally accepted rules for drawing causation and generalisation inferences from the data (e.g., Kennedy, 1979; Edgar & Billingsley, 1974).

These issues with generalisability do not apply to the current investigation due to the current study being exclusively interested in observing relationships “within” subjects; as opposed to a study that investigates relationships “between” subjects.

According to Edgar et al. (1974), having no internal controls is considered to be a common problem against  $N = 1$  designs. As the current investigation measures within-subject variation, there is no need for a control group. The intrapersonal design of the current study negates the need for interpersonal comparisons.

Inferential statistics are not appropriate with case studies (Edgar et al., 1974). The current investigation observes relationships rather than causation. Due to the complexity of the (performance) variables in this study, cause and effect are beyond the scope of this initial investigation of self-perceived teaching competence.

Case studies, according to Thomas et al. (1985), have the danger of relying too heavily on memory. This weakness was addressed in the current investigation by the immediate self-report procedure and collated with the follow-up interview and coding schedule.

Studies of individual cases allow the evaluator (or investigator) to learn the intricate details of how a treatment (or a method of exploration in this case) is working, rather than averaging the effect across a number of cases (Kennedy, 1979). The process of investigation in

this study may assist future researchers in creating a methodology for examining psychological relationships with multiple intrapersonal variables.

The current investigation applied the rules developed from the Metamotivational State Interview and Coding Schedule Instruction Manual (O'Connell et al., 1991) as the method for evaluating an individual's perceived overall teaching competence. These rules (*provided later in this chapter*) follow the coding procedures of adjectives and comments (see Methods section: Coding Schedule: Post-interview Coding for adjective coding).

The current investigation is also an example of an aggregated (or combined) study. Kennedy (1979) stated that it is conceivable that an evaluator may study more than one case. But the cases need to be studied individually, rather than averaging or in other ways pooling data across cases. The disaggregated study of multiple cases, according to Kennedy, is rarely considered as a sampling alternative, yet it may prove to be a relatively strong approach to evaluation.

According to Edgar et al. (1974), it is the logic that underlies the experimental design that most clearly differentiates case studies from group research. They stated that case studies and/or single-subject studies could be valid sources of behavioural data if appropriate analysis procedures are used.

*Independent examples.*

Data in the current investigation was collected from ten teaching sessions of ten adult educators over a period of three months, or one term. An individual's situational state balance can be directly assessed by obtaining self-reports from the individual over time through experience sampling (or aggregating reports from state measures actually completed in real

time). The current investigation of self-report is a direct example of the technique of experience sampling. There is no statistical test of state bimodality, at this time.

### *Interviewing*

#### *Phenomenological interviewing.*

“Phenomenological interviewing” is a specific type of in-depth interviewing because it is grounded in the theoretical tradition of phenomenology. Glaser (1998) discussed that research in grounded theory involves interviews that are essentially similar to a conversation or discussion about one’s subjective perceptions (i.e., phenomenological interviewing). In essence, this is a method of discovering an individual’s experiences and the ways in which one puts memories together to develop a worldview (Marshall & Rossman, 1995).

The current investigation applied phenomenological interviewing as a crucial component of the investigation’s procedure. Investigating the adult educator’s teaching experiences through the exploration of reversal theory connected the motivational process of state shifts to the perceived performances of teaching competence. Phenomenology carries an assumption that there is a “structure and essence” to shared experiences that can be determined (Patton, 1990, p. 70).

Reversal theorists, Males et al. (1996) provided an example of phenomenological interviewing. A competitive athlete (a canoeist) was interviewed concerning his perceived performances in a race. Interpretation was given based on an adaptation of the Metamotivational State Interview Coding Schedule (O’Connell et al., 1991) (see Appendix F), in which an example of a portion of the interview focussing on telic and paratelic metamotivational states is given below in the following coding unit:

Interview Transcript: *Did you have a goal for this race?*

I DIDN'T REALLY NO, I DIDN'T KNOW I WAS RACING UNTIL THIS MORNING, BIT OF CONFUSION IN THE ENTRIES AND WHAT WAS GOING ON SO IT WAS A BIT OF A RUSHED JOB THIS MORNING, I DIDN'T PREPARE REAL WELL.

*Now let's talk about what happened just before your first run. Can you give me three words to describe how you were feeling just before your first run?*

PRETTY RELAXED, PRETTY HAPPY, UH, ANOTHER WORD, UH, SORT OF WE WERE JOKING AROUND A LOT -- I DON'T KNOW IF YOU'LL PUT THAT DOWN OR NOT (LAUGHS).

Reversal Theory Interpretation: Canoeist (C) did not organise his entry to this event until the day of the race, a sign of a lack of planning and strategic goals and a generally paratelic approach to this race (Kerr, 1997a, p. 82).

A similar interview interpretation was done in the current investigation to determine telic/paratelic situational state balance and perceived performances of teaching competence. The direct transcript of interviews and the subsequent coding units of the participants are a significant part of the current investigation.

#### *Narrative analysis.*

Individuals (e.g., adult educators) can analyse their own narratives (or interviews) to become "...scholars of their own consciousness..." (Dewey, 1938b, p. 123). What appears to be an episode in narrative analysis actually represents a repetition of a set of typified experiences that are then distilled into a single account or memory (Neisser, 1982). Neisser interpreted this account as "repisodic memory".

Memory for events shared in narrative (and phenomenological interviewing) is not exact but is shaped through schemata, which are themselves influenced by repeated experiences, concepts of the self and notions of typicality (Riessman, 1993). Self-schemata come to control

attention and memory, because personal events are recalled in a manner consistent with the narrator's (e.g., adult educator) self-concept (Brewer, 1986; Barclay, 1986). Brewer stated that self-schemata are non-imaginal, unlike specific and general personal memories.

In the current investigation, adult educators recall memories that have made an impact on their perceived performances. This process emphasised their internalisation of teaching experiences. Through recollection, reversal theory provided a way of exploring the adult educator's perceptions of their teaching competence.

Riessman (1993) stated that Brewer's (1986) categorisation would be particularly applicable to narratives of personal experience.

*Personal memories* in narrative are recalled as a partial reliving of an episode of the teller's past, typically using strong visual imagery. This would describe a narrative of a unique event. *Autobiographical facts* might be mentioned in the setting of such a narrative. *General personal memories* in narrative typically have generic images of a series of experiences, possibly recalled as a repisode. Brewer indicates that narrators of both personal and general memories may believe strongly that the recalled episodes were experienced (Riessman, 1993, p. 81). (See Table 3.)

Table 3

*Framework for Autobiographic Memory*

|   | <b>Adult Educator's<br/>Imaginal Memory</b> | <b>Adult Educator's<br/>Non-Imaginal Memory</b> |
|---|---|---|
| <b>Single<br/>Instance in<br/>Teaching<br/>Mode</b>   | Personal<br>Memories                        | Autobiographical Fact                           |
| <b>Repeated<br/>Instance in<br/>Teaching<br/>Mode</b> | General Personal<br>Memory                  | Self-schema                                     |

*(Source: Riessman, 1993)*

Adult educators in their narrative recalled incidents according to their self-perceptions in a process of episodic memory. Such a memory is in actuality a set of experiences that is being recalled rather than one specific incident. Even though adult educators were observed for ten classes, their memories of competent and less competent teaching sessions are influenced by other moments outside of those specific recollections (see Limitations of the Study at the end of Chapter 1).

*Collection of information.*

The interview of each adult educator was audio taped for verification purposes. A positive aspect of tape recording is the focussed environment created by having the information “taken down” for the interviewer. Taping provides a permanent verbatim recording of the account that enabled the researcher to focus completely on the verbal and nonverbal behaviour of the interviewee (Brown & Sime, 1981).

The danger of only tape-recording is that the interviewer may cease to listen carefully to the informant's talk (Brenner, 1985). Brenner suggested that some note taking, besides audiotaping is essential. Lofland (1971) was supportive of taking notes and to keep account of what has already been talked about and what remains to be talked about. This approach combined with note taking has the advantage of tape recording and results in note taking in its best sense. (A self-devised set of criteria for note taking can be found in Appendix G.)

A degree of systematisation in questioning may be necessary in a multisite case study or when many participants are interviewed (Marshall et al., 1995). A general procedure for the interviews was followed. At the commencement of the interview, the investigator explained the definition of a state; and explained telic and paratelic characteristics (Apter, 1997b). Only after these explanations of terms was the subject then informed of their dominant state of being (i.e., telic vs. paratelic dominance, or an internal bias toward a particular state) in accordance to their responses of the Apter Motivational Style Profile and the Paratelic Dominance Scale.

Each subject then described four scenarios about their class, discussing characteristics in relation to their experience. They were asked to provide the interviewer with feedback about perceptions of their teaching experiences in (1) their ideal state (preferred way of being), (2) their actual state (actual way of being), (3) their perceived competence, and (4) their perception of less competence. These items were not necessarily covered in the same sequence with each subject, and questions were paraphrased based on the subjects' comprehension of the questions being asked.

## *Reversal Theory Instruments*

### *Quantitative Instruments*

#### *Metamotivational Dominance Measurements*

The two psychometric reversal theory instruments used in this investigation to measure metamotivational dominance were (1) the Apter Motivational Style Profile (AMSP) (Apter International, 1999a) (see Appendix A), and (2) the Paratelic Dominance Scale (Cook et al., 1993) (see Appendix B). These were used to measure the various forms of metamotivational predisposition, as the adult educators were determined to be either telic dominant or paratelic dominant, meaning the person has a tendency (or preference) to spend more time in one or the other metamotivational pair of states.

A third metamotivational measurement, the Telic State Measure (TSM) (Svebak et al., 1985) (see Appendix C) rated how telic or paratelic an individual is in any particular moment in time and was used in this study to measure the adult educators' states while teaching.

#### *Apter Motivational Style Profile*

The Motivational Style Profile (MSP) (Apter et al., 1995, Apter et al., 1998) is the original version of measuring dominance and state balance (amount of time spent in a state rather than its opposite state), and it consists of a 70-item comprehensive set of personality and motivational features derived from reversal theory. Apter and his colleagues explained that the MSP measures the dominance of all four pairs of metamotivational states identified in reversal theory, which are (1) telic-paratelic (means-ends), (2) conformist-negativistic (rules), (3) mastery-sympathy (transactions), and (4) autic-alloic (relationships) in conjunction with tendencies towards arousability, effortfulness, and optimism/pessimism. The MSP also

measures the overall salience (i.e., how important and dominant a domain, such as the means-ends domain is) of each pair of states within the individual's conscious experience over time.

The Apter Motivational Style Profile (AMSP) (Apter International, 1999a) (see Appendix A) is a shortened version of the MSP and consists of a 40-item measure. Apter (2001) stated that the instrument is non-ipsative (i.e., not utilising the individual's own characteristic behaviour as standard, Chaplin, 1985) because each subscale is independent of each other subscale. This presents certain psychometric advantages as three kinds of overall profile are produced for each respondent. These include details on telic and paratelic tendencies in the forms of (1) a subscale profile, (2) a dominance profile, and (3) a salience profile (how important and dominant a domain is over time). "The alpha coefficients for the subscales in the final instrument and the factor structure are satisfactory..." (Apter, 2001, pp. 69-70).

The Apter Motivational Style Profile measures the four dominances as set out in reversal theory. The AMSP was used in the current investigation instead of the MSP because of its efficiency, having 30 fewer items. This investigation focussed only on telic-paratelic dominance, which is well identified in the AMSP. According to Apter and Desselles (2001), as part of Gerkovich's (1998) research on sexual risk-taking, high significant correlations were found between seriousness dominance and the three different Paratelic Dominance Scale (PDS: see below) subscales and PDS total scores as measured by the MSP.

#### *Apter Motivational Style Profile: Scoring, Reliability and Validity*

The AMSP (Apter International, 1999a) (see Appendix A) measures an individual's metamotivational preferences and dominance. The current study applied two subscales for the measurement of telic and paratelic dominance (or preferences). These

are (1) the AMSP telic subscale is the sum of the scores on the five telic items that indicates the absolute frequency of the telic state, and (2) the AMSP paratelic subscale is the sum of the scores on the five paratelic items that indicates the absolute frequency of the paratelic state.

*Scoring of the AMSP.*

The investigator noted the two scores that measure telic and paratelic preferences. These are (1) the AMSP telic dominance is the relative importance of the telic and paratelic states, estimated by the frequency of the telic versus the paratelic state (measured by subtracting the paratelic from the telic subscale score), and (2) the AMSP telic/paratelic salience score tells the importance of the telic/paratelic dimension taken as a whole that is measured by adding the telic and the paratelic subscale scores (Apter, 2001). The cut off point for the scoring of the telic and paratelic states is at the 50th percentile, with 0 as no dominance and ‘plus’ or ‘minus’ determining dominance.

The AMSP telic subscale is the sum of the scores on the five telic items of the questionnaire. This score indicates the absolute frequency of the telic state. The telic subscale produces scores between “6” (least telic) and “30” (most telic).

The AMSP paratelic subscale is the sum of the scores on the five paratelic items of the questionnaire. This score indicates the absolute frequency of the paratelic state. The paratelic subscale produces scores between “6” (least paratelic) and “30” (most paratelic).

The AMSP telic dominance score is the relative importance of the telic and paratelic states, estimated by the frequency of the means-ends domain. This score is measured by subtracting the paratelic from the telic subscale score. The smaller score represents a tendency for the individual to spend time more equally in both states as opposed to a larger score indicating that the individual spends much more time in one metamotivational state than the other.

The AMSP telic/paratelic salience score tells the importance of the telic/paratelic dimension taken as a whole, which is measured by adding the telic and the paratelic subscale scores. The lowest possible score is “12” and highest possible score is “60”. (See Appendix A to review the AMSP.)

*Reliability and validity of the MSP/AMSP.*

As the AMSP is designed to measure overall dominance (i.e., the metamotivational state an individual most frequently tends to be in) and salience, high reliability is desirable. Research was conducted on the test-retest reliability of the Motivational Style Profile (Apter et al., 1998), and all the correlations were found to be substantial ( $p < 0.001$ ).

The concurrent validity of the full testing of the criterion-related and construct of the MSP (Apter et al., 1998) requires ongoing research. Apter et al., stated that in the next few years, the aim of the research will be to observe individual subjects' behaviour, experience, and emotions in the course of everyday life, applying experience sampling methods (e.g., documented telic and paratelic states by Apter et al., 1993).

The correlations between the Eysenck Personality Questionnaire (EPQ) (Eysenck & Eysenck, 1975) and the MSP have shown a significant relationship between aspects of the telic/paratelic dimension and extraversion. The EPQ measure of neuroticism correlated significantly with a number of MSP subscales. The finding of a relationship with the paratelic subscale was consistent with one previous study (Fontana, 1981b), but otherwise no relationship has been found in previous studies involving the telic/paratelic dimension (Murgatroyd, 1985). Apter et al. (1998) confirmed that:

A number of MSP subscales, and derived measures, did not correlate with any of Eysenck's subscales, implying that the MSP is more comprehensive than the EPQ, measuring personality dimensions which are not reflected in the latter (p. 15).

In relation to the Myers Briggs Type Indicator (Myers, 1962), a similar set of relationships was found to those documented in relation to the extraversion subscale of the EPQ. This was particularly implicated in the telic/paratelic dimension.

#### *Paratelic Dominance Scale*

The Paratelic Dominance Scale (PDS) (Cook et al., 1993) (see Appendix B) measures one's telic/paratelic metamotivational dominance. According to Cook and Gerkovich (1993) the PDS was constructed meticulously through a number of stages. The resulting instrument consists of 30 items, each of which is a simple statement that the respondent is asked to judge as true or false as a self-description.

Most items have an explicit temporal component. The scale is reported to have satisfactory psychometric properties (Apter, 2001, pp. 67-68). (See Appendix B to view the questions for the PDS).

#### *Paratelic Dominance Scale: Scoring, Reliability and Validity*

##### *PDS scoring.*

The Paratelic Dominance Scale consists of three scores. They are (1) playfulness (PLAY4), which consists of four questions (# 2, 5, 21 & 26) pertaining to playfulness, and the score represents the number of questions in which playfulness was positive, (2) spontaneity (SPON5), which consists of five questions (# 3, 12, 16, 22 & 30) pertaining to spontaneity, and the score represents the number of questions in which spontaneity was positive, and (3) arousal seeking (ARSK6), which consists of six questions (# 6, 8, 11, 13, 17 & 24) pertaining to

arousal seeking, and the score represents the number of questions in which arousal seeking was positive. (See Appendix B to review PDS.)

In the current investigation, the PDS subscale scores were attained by a majority score. This means that PLAY4 required a minimum of 3 total answers as reporting the same state (i.e., either telic or paratelic); and SPON5 required 3 total answers as reporting the same state; and, ARSK6 required 4 total answers as reporting the same state. If the scores were identical (i.e., 50/50), it would result in a telic/paratelic result for that particular subscale.

#### *Reliability and validity of the PDS.*

The PDS is reported to have satisfactory psychometric properties, and the alpha coefficients are good (Apter, 2001). Cook and Gerkovich (1993) reported that the factor structures of the PDS are consistent with reversal theory. Young (1998) obtained alpha values greater than 0.9 for all three of the PDS subscales in a study on flow in tennis performance.

#### *Repeated Measures Questionnaires*

Shifts in metamotivational states were measured via the TSM scores. Unfortunately scores cannot be taken during the actual “performance” of teaching, as it would be too disruptive. However, shifts in states were reported and observed immediately before and immediately after the class session via the TSM questionnaire.

Two questionnaires, the Telic State Measure (TSM) and the adapted State Self-Esteem (performance subscale) Scale (SSE-PS) were filled out both before and after each teaching session.

#### *Telic State Measure (TSM)*

The 5-item Telic State Measure (TSM) (Svebak et al., 1985) (see Appendix C) takes approximately one minute to complete. It consists of self-rating one’s perceptions of

experiencing the telic and paratelic states. The TSM has been used in the study to rate how telic an individual, in this case an adult educator, was in any particular moment in time. It is the earliest and most frequently used of reversal theory's self-report scales (Svebak, Stornfjell, & Dalen, 1982; Svebak et al., 1985; Svebak, 1985a) (Apter, 2001).

The TSM consists of five rating scales on which respondents are asked to assess themselves in terms of how they feel either at the time of responding or at some specified recent time (e.g., at a particular moment in a performance in which they have just been engaged). Each of the items has a 6-point rating scale with defining adjectives at each end. The items are (1) serious-playful, (2) ideal planned-ideal spontaneous, (3) low felt arousal-high felt arousal, (4) ideal low arousal-ideal high arousal, and (5) low effort-high effort (Kerr, 1997a; Apter, 2001). (Felt arousal is the degree of emotional intensity and involvement.) The first three of the scales are used to measure three facets of the telic-paratelic dimension. They consist of (1) seriousness versus playfulness, (2) planning versus spontaneity, and (3) low-ideal arousal versus high-ideal arousal. The fourth scale is used to determine the experienced level of arousal at the time in question, and the fifth scale measures the degree of effortfulness.

A sixth scale, arousal discrepancy, is computed by subtracting the score for items (1) and (2); low scores (1-3) are taken to indicate the telic state and high scores (4-6) the paratelic state (Kerr, 1997a). The arousal discrepancy (or tension scale) is the discrepancy between the actual experienced level of arousal (score derived from question 3) and the ideal level of arousal (score derived from question 4). It can be seen that, in a sense, the scale provides six single-item subscales (Apter, 2001).

Kerr (1997a) continued by explaining the meaning of various terms in the TSM questionnaire. *Serious* is the feeling you are pursuing (or at least thinking about) some essential

goal. *Playful* is the feeling that you are doing what you are doing for its own sake. In this case your activity is felt to be enjoyable in itself and not to require any further justification. Any goal there might be is really an excuse for the behaviour. *Planning ahead* is trying to organise your behaviour in such a way that it leads effectively to some goal in the (perhaps distant) future consequences of your present actions. *Spontaneous* is that your actions are undertaken on impulse, with little regard for future consequences. *Arousal* is how “worked up” you feel.

“The TSM represents a measure between ideal and felt (or actual) levels of arousal. This difference constitutes a measure of “tension” (Apter, 2001, p. 99). It has been frequently used and supported in performance studies (Svebak et al., 1985; Svebak et al., 1982).

### *Other State Measure Instruments*

#### *Perceived Performance Questionnaires*

##### *State Self-Esteem (performance subscale) Scale (SSE-PS).*

The State Self-Esteem Scale (Heatherton & Polivy, 1991) has a performance state self-esteem subscale that was used as a state test of performance self-esteem in the current investigation of perceived competence. The questionnaire is referred to in this study as the State Self-Esteem (performance) Scale (SSE-PS) (see Appendix D), and it consists of responding to the seven performance-related questions, which takes approximately two minutes to complete.

This scale is a cognitive measure utilised to identify the adult educator's perceived teaching competence. It was selected for the current study because of the wide range of performance areas covered within a limited number of questions, and being a state (i.e., in the moment) scale, it was deemed to correspond well with the investigation.

The State Self-Esteem Scale (SSES) (Heatherton et al., 1991) is designed to measure an individual's current thoughts of self-esteem in terms of self-image and self-worth (Heatherton, Striepe, & Wittenberg, 1998). The three subscales consist of performance, social, and appearance. The seven questions pertaining to the performance subscale cover a broad range of self-esteem parameters. The first question and sixth question specifically pertain to the performer's current self-efficacy (of their teaching ability). The fifth question, and again, the first question refer to the performer's perception of their self-confidence. The sixth question also refers to self-perceptions in comparison to others. The second question refers to their perceptions of current cognitions (i.e., frustration) and somatic (i.e., feeling rattled) experiences. The third and fourth questions refer to current perceptions of their intelligence. The seventh question refers to the performer's overall impression of how they feel they are doing.

The SSES has been found to demonstrate excellent internal consistency (coefficient  $\alpha = .92$ ), and to be effective in measuring state changes in self-evaluation (Crocker, Cornwell, & Major, 1993; Ruggiero & Taylor, 1997). Psychometric studies have demonstrated the SSES to be separable from mood (Bagozzi & Heatherton, 1994), despite the second question pertaining to feelings of frustration.

*Self-Perceived Teaching Competence (SPTC) Questionnaire.*

The Self-Perceived Teaching Competence (SPTC) questionnaire (an adapted Likert-type scale devised by the author) was used immediately after each teaching session only (see Appendix E). The survey related to the adult educator's self-response to their perceived teaching competence of the teaching session that had just been completed on a scale from 1 (the lowest self-rating score for perceived teaching competence) to 5 (the highest self-rating score for perceived teaching competence). Shifts in perceived teaching competence, derived from the SPTC scores, were observed to compare one teaching session with another.

## *Qualitative Instruments*

### *Interviewing Instruments*

#### *Metamotivational State Interview Coding Schedule (MSICS)*

The Metamotivational State Interview Coding Schedule (MSICS) is a widely used method, for example, in a series of studies on smoking cessation (Cook, Gerkovich, O'Connell, & Potocky, 1995), sport performance research (Males, 1999; Males et al., 1996; Males et al., 1998), and on the effect of the Chernobyl accident on children's patterns of violence (Khomyk, 1998; Khomyk & Burmaka, 1999). The interview in the current investigation was based on the MSICS, and it was appropriately adjusted to meet the goals of the current investigation.

#### *Validity and reliability of MSICS.*

The MSICS is based on an interview and involves raters assessing the answers to the interview as to whether they are in a telic or paratelic state. The original work of the MSICS (O'Connell, Cook, Gerkovich, Potocky, & Swan, 1990) presented intercoder reliabilities, 87%-96% (all significant by Cohen's kappa statistic). According to O'Connell and her colleagues, the hypotheses in their research were supported with the application of the MSICS, thus comprising evidence for the validity of the measure. The same can be said of another research study by Cook et al. (1995) using the MSICS instrument, where inter-rater reliabilities attained 88% and the hypotheses were supported.

#### *Validity and Reliability of Qualitative Measures and State Measures*

“Test-retest reliability in its traditional psychometric sense is obviously not appropriate for state measures, because these are supposed to track the way in which people change over time” (Apter, 2001, p. 62). Some techniques used in reversal theory to assess the validity of metamotivational state measures consist of experimental manipulation (Svebak & Apter, 1987),

testing in real-life situations (e.g., Cook, Gerkovich, Potocky, & O'Connell, 1993; Wendel, 1999; Tacon et al., 1999; Kerr & Tacon, 1999), and imagined situations (e.g., Cahoun, 1995; O'Connell et al., 1997; Tacon et al., 1999).

Although reversal theory suggests that pleasant and unpleasant emotions share only pleasant and unpleasant hedonic tone, rather than draw on an underlying stable trait, the internal reliability of the composite scores from the Males et al. (1996) study has been calculated. "Coefficient alpha scores of .88 were found for total pleasant emotion and .75 for total unpleasant emotion (see Cronbach, 1951)" (Kerr, 1997a, p. 213).

Validity is an essential requirement. Apter emphasised four ways of assessing the validity of metamotivational states as (1) consensus of judges, (2) imagined or remembered situations, (3) testing in real-life situations, and (4) experimental manipulation. The current investigation employed the first three ways.

The consensus of the judges as set out in the Metamotivational State Interview Coding Schedule (MSICS) (O'Connell et al., 1991) was used for coding in this study. Two reversal theorists (i.e., the researcher and a reversal theorist) compared, discussed, and agreed on the coding outcomes of the interviews, as specified by the MSICS, for each of the ten adult educators.

Most of those researchers who have developed reversal theory scales have checked items at an initial stage with a panel of judges familiar with the theory. This provides at least face validity for the items concerned (Apter, 2001, p. 63).

With the remembered/imagined situations (e.g., Calhoun, 1995; Tacon & Kerr, 1999), Apter (2001) stated, "...respondents rate how they would feel in certain defined situations, so-

called ‘scenarios,’ that they are asked to remember or to imagine, and which one would expect to be associated with a given state” (p. 63). In the current investigation, adult educators recalled situations about perceived competent and less competent teaching experiences. These two experiences, namely referred to as units, were metamotivationally coded.

Testing in real-life situations (e.g., Cook, Gerkovich, Potocky, & O’Connell, 1993; Wendel, 1999; Tacon et al., 1999; Kerr et al., 1999) is the most “ecologically sound” approach, according to Apter (2001) and “...it involves testing people in strong real-life situations in which it is reasonable to assume that they will be experiencing particular metamotivational states” (p. 63). The current investigation investigated adult educators in real-life teaching situations (e.g., classroom environments), analysing the self-reported metamotivational shifts and individual patterns of change, which are related to changes in perceived teaching competence.

#### *Preferred Situational State Balance and Self-Perceived Teaching Competence*

An interview interpretation and the methodology of coding units using adjectives were applied in the current investigation in order to determine a preferred telic/paratelic situational state balance (in a teaching mode) and performance state self-esteem. The information was gathered through an adult educator’s perceptions of their perceived competent teaching session(s) versus their perceived less competent teaching session(s). Movement toward situational state balance was also assessed through the calculation of shifts in their metamotivational states, as reported in their completed questionnaires.

### *Subjects*

The subjects in this study initially consisted of 12 adult educators. Ten participants successfully completed the study. This pool of these ten participants consisted of three males and seven females between the ages of 34 and 61 with teaching/teaching experience between five and 40 years. The two adult educators that did not complete the study were due to (1) a sudden death of an immediate family member, and (2) an absence of entered (written) data.

### *Criteria*

#### *Adult educators.*

Each subject was an experienced adult educator, having a minimum of five years' teaching experience and appropriate qualifications in psychology, workplace teaching, and/or adult education (see Table 4).

Table 4

#### *Adult Educators' Demographics*

| <b>Adult Educator</b> | <b>Gender</b> | <b>Age</b> | <b>Years Teaching</b> | <b>Highest Degree</b> |
|-----------------------|---------------|------------|-----------------------|-----------------------|
| 1                     | Female        | 44         | 22                    | B.A.                  |
| 2                     | Male          | 61         | 40                    | Ph.D.                 |
| 3                     | Female        | 39         | 5                     | B.A.                  |
| 4                     | Female        | 34         | 8                     | M.A.                  |
| 5                     | Female        | 41         | 15                    | M.Ed.                 |
| 6                     | Female        | 48         | 13                    | M.A.                  |
| 7                     | Male          | 45         | 15                    | M.A.                  |
| 8                     | Female        | 33         | 6                     | B.Sc., Gr.Dip.        |
| 9                     | Female        | 54         | 5                     | B.A., Gr.Dip.         |

10                      Male                      34                      11                      B.Sc.

*Design and Statistical Analysis*

*Apter Motivational Style Profile and the Paratelic Dominance Scale*

Adult educators self-administered questionnaires throughout the current investigation. At the onset, the adult educators completed the 40-item Apter Motivational Style Profile (AMSP) (Apter International, 1999a) (see Appendix A) lasting approximately 20 minutes. The AMSP is a salience profile and measure of dominance, and it was administered only once. The adult educators also completed the 30-item Paratelic Dominance Scale (PDS) (Cook et al., 1993) (see Appendix B) lasting approximately 15 minutes. The PDS is an up-to-date profile of one's telic/paratelic metamotivational dominance. It was administered at the beginning of the study and not readministered.

These two, one-time, administered tests were used to determine the adult educator's key state (dominant state) and telic/paratelic state balance. The dominant state was then compared to the adult educator's telic/paratelic situational state balance (i.e., amount of time spent in a state versus its opposite state while teaching over time). The comparison of these scores provided information about the adult educator's possible shifts while teaching.

*Performance Variables*

*Dependent variables.*

The Self-Perceived Teaching Competence (see Appendix E) questionnaire is the self-rating score of teaching competence for each teaching session on a scale of "5", "1" being the lowest and "5" the highest.

*Independent variables.*

The Telic State Measure Arousal Discrepancy (TSM-Arousal Discrepancy) score is the measure of perceived arousal discrepancy (i.e., ideal vs. actual/felt arousal) taken from raw scores ranked by low and high arousal on a scale of “1” to “6”. Hedonic tone is also reflected in this score. A high level of arousal discrepancy demonstrates low hedonic tone.

The Telic State Measure Telic/Paratelic Serious-Playful Continuum (T/P Serious-Playful) score represents the state measure on a rating scale of “1” to “6”. A score of “1” represents a score of total seriousness and a score of “6” represents complete playfulness.

The Telic State Measure Telic/Paratelic Planned-Spontaneous Continuum (T/P Planned-Spontaneous) score represents the state measure on a rating scale. A score of “1” to “6” with “1” represents planning and a score of “6” represents spontaneity.

The Telic State Measure-Effort (TSM-Effort) score represents the perceived effort on a scale from “1” to “6”. A score of “1” represents low effort and a score of “6” represents high effort.

The State Self-Esteem (performance) Scale (SSE-Performance Scale) is the measure of the seven performance items. A score of “7” represents the lowest score, and a score of “35” represents the highest score.

Adult educators were observed utilising one dependent variable x 10 independent variables with repeated measures over 10 classes. The dependent variable was the adult educator’s Self-Perceived Teaching Competence (SPTC) rating.

The dependent variable, the SPTC, was conducted immediately following the teaching session and measured the adult educator’s self-perceived teaching competence. The independent variables were the adult educator’s *before* teaching and the adult educator’s *after* teaching scores on (1) the SSE-Performance Scale (2) the TSM-Arousal Discrepancy, (3) the

T/P Serious-Playful (4) the T/P Planned-Spontaneous, and (5) the TSM-Effort. The TSM and SSE-Performance Scale represented the self-reported perceptions within the pre/post-performance conditions of arousal and state self-esteem. It is important to note that despite the TSM measuring the arousal perceptions, the current investigation focused on the relationship of one's arousal discrepancy score to shifts in perceived competence.

For each teaching session, ten pre/post-perceived performances were taken from the TSM and SSE-Performance Scale scores. These independent variable scores determined the adult educators' current metamotivational state for each session. These independent variables would then be compared to the adult educator's ten SPTC ratings.

#### *Statistical Analysis*

Spearman's Rank Correlation (Ferguson, 1971) was computed for the Telic State Measure (TSM) scores and the State Self-Esteem (performance) Scale (SSE-PS) scores only. Over the past 30 years, the correlation has been frequently applied for demonstrating relationships, and it has been shown to be valid and reliable.

Spearman's Rank Correlation (Ferguson, 1971) was performed for each adult educator on each of the independent variables for each teaching session in order to determine the relationship between the adult educator's SPTC and their (1) telic/paratelic situational state balance, which consisted of the perceived arousal discrepancy (TSM-Arousal Discrepancy), effort (TSM-E), seriousness-playfulness score (T/P-Serious-Playful) and planned versus spontaneous score (T/P-Planned-Spontaneous), and (2) SSE-Performance Scale. It is important to note that according to reversal theory (Apter, 2001), the emphasis is on a shift and the number of shifts, rather than the amount of shift. Apter stated that the theory emphasises lability, which is how easily and readily an individual reverses between states. One point (e.g.,

marking a rating of “3” one time and “4” the next time) may be slight for one performer but immense for another; therefore, the emphasis is on whether a shift did or did not take place.

### *Qualitative Design*

Within 14 days of an adult educator's final class, the participant met with the investigator for an extensive interview lasting approximately 35 to 40 minutes. At the onset, the researcher took three to four minutes gathering demographic data such as age, years of teaching experience, and educational background.

As recommended by Apter (2001), the researcher spent time (e.g., 4 to 5 minutes) with each participant providing the definitions of telic and paratelic states, what these states represent, and an explanation of their key states (i.e., motivational states dominance/preferences) according to the AMSP and the PDS, making certain that each adult educator understood the definitions of the terms used in the TSM.

Questioning was then conducted to further analyse interpretations of the quantitative data (i.e., arousal levels, arousal discrepancies, hedonic tone, performance state self-esteem, and perceived performances) and how shifts in the telic and paratelic states influenced their situational state balance and self-perceptions of teaching competence. (See Appendix G for interview questions.)

The interview was based on a grounded theory approach (Glaser, 1998), which emphasises open-ended questions and a conversational approach. Therefore, there were no limits on the topic-at-hand, with the exception of staying within the performance realm. To take into consideration possible performance issues, the note taking form allowed for comments of various topics taken from the performance literature.

The main goal for the interviewer was to (1) assess the needs of the performer by obtaining their goal(s), and (2) have two coding units on experiences of the adult educator's (a) perceived competent teaching session, and (b) perceived less competent teaching session. Each

coding unit of approximately four minutes or less (i.e., a segment of the interview on only one topical issue; O'Connell et al., 1991), was metamotivationally coded by two reversal theorists. The investigator audiotaped and wrote notes throughout the length of the interview often including quotes from the subject, and a summary was written immediately following the interview.

### *Procedures and Tasks*

At the onset of this investigation, participants had their key means-end state (i.e., dominant state) identified. In order to achieve this, the subjects completed the AMSP and the PDS.

Within a time span of three months, each subject conducted ten teaching sessions (as the aim was to have a consistent group throughout a typical 12-week term). Each adult educator conducted teaching sessions in a subject matter they had previously taught. No adult educator taught in what they considered to be a new or foreign subject.

No more than 10 minutes prior to each teaching session, the adult educator completed two questionnaires, consisting of (1) the 7-item SSE-PS, and (2) the 5-item TSM. As soon as possible and no later than ten minutes after the conclusion of the class, the adult educator completed the SSE-PS and the TSM. Finally, they reported their perceived competence of their performance of the teaching session by choosing only one of the following levels from a self-rating scale: 1= extremely incompetent; 2= incompetent; 3= average; 4= competent; 5= extremely competent.

The investigator compared the adult educator's self-recorded perceptions against each teaching session in relation to discrepancies existing between their actual and ideal arousal levels, hedonic tone, telic/paratelic shifts (and the lability within these shifts), perceived effort as measured by the TSM, and performance state self-esteem scores, as measured by the SSES. At the conclusion of the tenth teaching session (within a maximum of 14 days) a 35-40 minute interview was undertaken.

The telic/paratelic situational state balance (in a teaching mode) was then identified by assessing the frequency of the telic and/or paratelic state as experienced by the adult educator while

teaching, noting the lability between each of the teaching sessions. Analysis of the TSM and the Metamotivational State Interview Coding Schedule (see next section) indicated the metamotivational states experienced in relation to the adult educator's self-perceived teaching competence. (See Fig. 2 to examine the Procedure flow chart.)

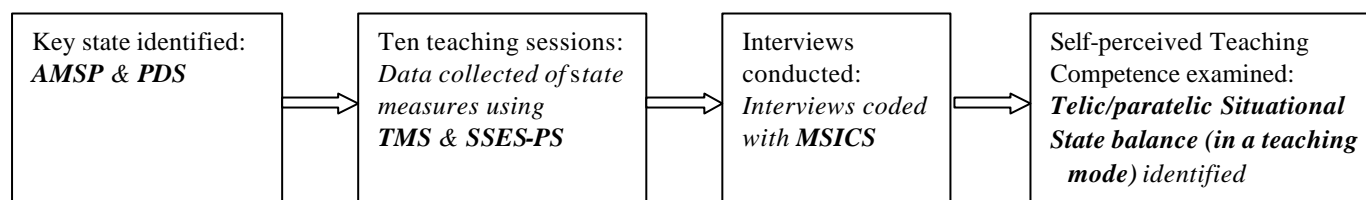


Figure 2. Procedure flow chart.

#### *Coding Schedule: Post-interview Coding*

The Metamotivational State Interview Coding Schedule (MSICS) (see Appendix F) (O'Connell et al., 1991) was applied in the current study to interpret an adult educator's (i.e., instructor/tutor/trainer) telic/paratelic metamotivational state balance during episodes of teaching.

The interview transcripts (see Appendix H) are coded into two coding units that emphasise self-perceived teaching competence, consisting of (1) competent teaching session, and (2) less competent teaching session. All adult educators spoke about both these experiences of perceived teaching competence. The competent teaching session represented their preferred teaching state.

Coding units, according to O'Connell et al. (1991) are identified by their temporal relationships to each other. A coding unit is therefore characterised by a single goal, a single set of somatic states, and a single environment. The interview was transcribed, having the episode (i.e., teaching session) divided into coding units. The discrete part of the interview was of primary importance for coding purposes, consisting of the two coding units.

In the current investigation, the interview investigated issues concerning the coding units and/or the metamotivational analysis. The MSICS was applied for determining the telic and/or paratelic states while in a teaching mode. For coding reliability, the interview was transcribed by the interviewer and coded by the interviewer and a reversal theorist/registered psychologist. In the telic/paratelic dimension, the interviewer needs to determine whether there is a goal, and if so, what the goal is. “A goal is an aim or an endpoint.... A goal organises one’s behaviour, and achieving it typically results in a reward from oneself or from others” (O’Connell et al., 1991, p. 15). The goal was determined for accurate coding and was supported by a list of adjectives.

The following adjective definitions were applied for coding purposes of assessing telic and paratelic states (O’Connell et al., 1991):

*Serious-minded*: having or showing earnestness of purpose; not frivolous or jocular.

*Playful*: attention is directed toward on-going activity, or toward the accomplishment of some non-essential goal which has been freely chosen; includes being oriented to play or fun, feeling frisky, frolicsome, or frivolous.

*Spontaneous*: oriented toward the present, and towards continuing current behaviours and sensations.

*Goal oriented*: attention is directed toward the accomplishment of a goal which is seen as important; often the goal is seen as ‘imposed’ either by the environment, society, or the individual’s specific physiological, social, or personal needs.

*Planning ahead*: future oriented; activity ‘points beyond itself’; anticipating the accomplishment of an essential goal.

*Sensation oriented*: the sensations being experienced are the focus of attention, and there is a desire to continue these sensations.

*Action has important consequences*: the individual perceives that the action in which he/she is engaged or is considering engaging in is important for the future.

*Activity enjoyable in itself*: the subject is engaged in the activity merely because it is enjoyable in itself, and not for the purpose of achieving something important.

*Trying to accomplish something*: the subject is engaged in the activity for the purpose of accomplishing something that is important to him/her (pp. 16-17). (Italics added.)

These adjectives did not need to be used in the coding unit, but rather the definitions had to be indicated and implied. When scoring the arousal level, the investigator and judge rated the coding unit at low, medium, or high in arousal, according to the adjectives used by the interviewee (see below). When evaluating the hedonic tone, the investigator and judge rated whether the subject felt the experience was pleasant, unpleasant, or neutral in the coding unit. The option of “can’t code” was available if sufficient information was not provided (O’Connell et. al., 1991). (See Appendix F for the Metamotivational State Interview Coding Schedule.)

The arousal adjectives were then subjected to a rating by the investigator and judge. If the phenomenological characteristic described was not present, a “1” would be entered. If the characteristic was present, a “2” would be entered. If both were present and strong, a “3” would be entered. If there were no information in the interview about the characteristic, it would be noted (O’Connell et. al., 1991).

Adjectives in the arousal dimension were as follows (O’Connell et al.,

1991):

*Bored*: the felt level of arousal is low, and the individual experiences it as unpleasant.

*Excited*: the felt level of arousal is high, and the individual experiences it as pleasant.

*Calm*: the felt level of arousal is low, and the individual experiences it as pleasant.

*Anxious*: the felt level of arousal is high, and the individual experiences it as unpleasant (p. 17). (Italics added.)

Last on the coding schedule, the tension stress is given a rating by the investigator and judge. The coding of the individual's tension stress for the telic/paratelic dimension involved the rating of (1) indicating no stress and the subject is at the ideal level of arousal, (2) indicating a little tension stress and the subject is not at the ideal level of arousal, but the discrepancy between ideal and actual is not large, and (3) indicating a great deal of tension stress and the subject experiences a large discrepancy between ideal and actual arousal. "The coder should try to take into account all the information and come to a qualitative decision based on what seemed most salient to the subject at the time" (O'Connell et al., 1991, p. 18). It is possible that this dimension cannot be coded based on the some subjects providing no information or ambiguous information about the arousal dimension. (See Results chapter for examples of interview transcripts of coding units and the telic/paratelic adjective ratings.)

#### *Hedonic tone.*

In the interview process, hedonic tone was self-assessed by the adult educator through their description of pleasantness experienced in both perceived competent and less competent

teaching sessions. The researcher could review the interview via the tape recorder to confirm the hedonic tone rating. The conclusive remarks of an adult educator's hedonic tone relied on specific descriptors referring to degree of pleasure experienced in the teaching sessions.

### *Significance of the Methodology*

#### *Relationships of performance variables to SPTC.*

Individuals perceive competence differently. Findings that reveal an individual to have only one significant variable related to a perceived shift in competence, instead of having two or three variables identified, does not limit or weaken the process of the study for that particular individual. It may be that one variable in isolation is enough to significantly create a shift in the individual's perceived teaching competence. The emphasis on the intrapersonal differences allowed the researcher to focus on any amount of perceived change within the adult educator's experience.

#### *Pilot study.*

Information on adult educators' self-reported teaching competence is absent from the literature. Therefore, it was decided by the researcher prior to the onset of the pilot study to emphasise intrapersonal differences rather than adult educators as a group.

The pilot study attempted to achieve the following objectives of (1) preliminary feedback from two adult educators regarding the methodology (2) the efficiency of the approach to gather information (3) trial runs at assessing the interviews, and (4) the viability of assessing adult educators over ten teaching sessions.

All appropriate tests for the current investigation were applied in the pilot study, including the Telic Dominance Scale (TDS) (Murgatroyd, Rushton, Apter, & Ray, 1978). As the scale measures serious-mindedness, planning orientation, and arousal avoidance, it was

deemed a significant test to include in the investigation. Despite Hyland, Sherry and Thacker (1988) giving a psychometric critique of the TDS, suggesting improvements (as well as alternative strategies for measuring telic dominance), it explored the precise components being researched. The use of the TDS was seriously considered and deemed unacceptable for the final study due to its “limited effectiveness” (Gotts, Kerr, & Wangeman, 2000).

Gotts et al. (2000) stated that “...in an attempt to address its shortcomings, a new scale measuring telic-paratelic dominance, the Paratelic Dominance Scale (PDS), was developed” (p. 217). The Paratelic Dominance Scale has a 3-factor structure; the factors identified as playfulness, spontaneity, and arousal seeking. It was devised using samples from different countries, the United Kingdom and the United States.

According to Gotts et al., the cross-validation of the TDS and the PDS using different diverse international samples, was the strength of an internationally relevant measure of telic-paratelic dominance. Several factor analyses were performed on TDS and PDS data from a combined Australian, Netherlands, and North American (USA) sample. In further comparison of the TDS and the PDS, items of the TDS have been proven to be of limited value in that a large number of factors have accounted for little variance. Analyses of PDS items were more fruitful, and yielded readily interpretable factor structures, according to Gotts et al. The strength of the Paratelic Dominance Scale (PDS) (Cook & Gerkovich, 1993) and the additional time needed to monitor the TDS, including its limited effectiveness was a solid confirmation to the current researcher in omitting the TDS from the actual study.

The pilot study examined reversal theory and the adult educators’ perceived performances of teaching competence in relation to their key state and telic/paratelic situational state balance. Adult educators analysed their perceived competent versus less competent

teaching sessions, in which possible inducing/change agents (i.e., shifts in metamotivational states through frustration, satiation and/or a contingency) were identified. Many responses in the adult educators' interviews discussed shifts in metamotivational states. Relationships of performance variables were connected to shifts in the adult educator's perceived teaching competence.

The Motivational Style Profile (MSP) (Apter, Mallows, & Williams, 1995; Apter et al., 1998) was developed to assess an individual's state dominance. It was replaced by the shortened version, namely the Apter Motivational Style Profile (AMSP) (Apter, 1999a) for more a more efficient process (see previous section on Motivational Style Profile and the Apter Motivational Style Profile).

Teaching sessions were videotaped in the pilot study. However, it was identified that videotaping created an unnatural environment, and it was eliminated in the actual study.

In the interviews, it was realised in the pilot study that on occasion an adult educator might discuss a specific event not occurring in the actual timeframe of the study (i.e., repisodic memory). Therefore, the coding would be more appropriate for specific experiences within the time of the study which described *more competent* and *less competent* sessions as the two coding units to be metamotivationally coded. This identification actually validated the necessity for collating qualitative and quantitative data. The Telic State Measure (Svebak et al., 1985) was statistically analysed, and the two coding units of perceived competence were metamotivationally coded.

The pilot study assisted the process of eliminating irrelevant information, increasing the efficiency and validity of the full study. It provided an exploration of the process of identifying the intrapersonal criteria applied in the investigation.

*University Ethics and Subject Procedures*

The Human Ethics application approved by the University of Sydney's Human Ethics Committee and permission to use the AMSP are located in Appendix I. Samples of the Subject Information Sheet and the Consent Form are located in Appendix J.

## CHAPTER III

### Results

#### *Metamotivational Dominance and Situational State Balance*

Of the seven female and three male subjects, there were six telic dominant, three paratelic dominant, and one adult educator was rated both telic and paratelic dominant depending on the questionnaire used. Raw data demonstrated how each subject quantitatively rated their teaching competence and teaching experiences (see Appendix L). Interview transcripts of coding units provided (1) descriptions of the adult educator's telic and paratelic language through adjective usage, (2) metamotivational state coding information of perceived competent and less competent teaching sessions, and (3) information of inducing/change agents and telic/paratelic situational state balance (see Appendix H).

#### *Telic/Paratelic situational state balance (teaching mode).*

Adult educators 1, 4, and 9 shifted out of their overall dominant bistable mode (as determined by the AMSP and the PDS) into their dominant teaching mode (i.e., telic/paratelic situational state balance), as determined by the TSM and the MSICS. In other words, these three adult educators had a tendency to shift states (e.g., into a teaching mode) when they took on the role of adult educator; whereas, the remaining seven adult educators did not tend to shift in this way.

#### *Self-Reported Scores: Correlations and Interviews*

The data collected from the TSM (see Appendix C), the SSE-PS (see Appendix D) and the Self-Perceived Teaching Competence score (SPTC) (see Appendix E) represents each adult educator independently as “within subject” rather than “between-subjects”. See Appendix L for presentation of the quantitative raw data, including the AMSP and the PDS.

(See Appendix L to review the qualitative outcomes of the subject's inducing/change agent and situational state balance while teaching.)

See Table 5, below, for the relationships of performance variables to self-perceived teaching competence. Table 5 presents the overall status of each subject's key state, telic/paratelic situational state balance, and the statistically significant and insignificant correlations of each performance variable (performance state self-esteem, arousal discrepancy (i.e., difference between ideal and actual felt arousal), perceived effort, and metamotivational state shifts in the means-ends domain) in relation to self-perceived teaching competence. See tables 6-35 (at the end of this chapter) for Spearman's Rank Correlation matrix of the adult educator's performance variables and the Metamotivational State Interview Coding Schedule with examples for both the perceived competent and the perceived less competent coding units.

Table 5

*Overview of Performance Variables and Relationships Predicting Self-Perceived Teaching Competence*

| Adult Educator | Telic(T) / Paratelic (P) Key State | Telic/Paratelic Situational State balance in a Teaching Mode | Performance State Self-Esteem | Arousal Discrepancy | Perceived Effort | Telic vs Paratelic* (Means-Ends Domain) Serious vs Playful Planned vs Spontaneous | Self-Perceived Teaching Competence <b><u>SUMMARY</u></b> | Perceived Teaching Competence | Perceived <i>less</i> Teaching Competence |
|----------------|------------------------------------|--|-------------------------------|---------------------|------------------|---|--|-------------------------------|---|
| 1              | T                                  | P  | Insignificant                 | Insignificant       | Insignificant    | Insignificant   | Insignificant Findings                                   | P                             | T   |
| 2              | T                                  | T  | Insignificant                 | Insignificant       | Significant      | Insignificant   | Perceived Effort   | T                             | T   |
| 3              | T                                  | T  | Significant                   | Insignificant       | Insignificant    | Serious vs Playful<br>Planned vs Spontaneous                                      | Performance State Self-Esteem<br>Telic vs Paratelic      | T                             | T   |
| 4              | P                                  | T  | Insignificant                 | Insignificant       | Insignificant    | Serious vs Playful  | Telic vs Paratelic                                       | T                             | T   |
| 5              | P                                  | P  | Significant                   | Insignificant       | Insignificant    | Serious vs Playful  | Performance State Self-Esteem<br>Telic vs Paratelic      | P                             | T   |
| 6              | T                                  | T  | Insignificant                 | Insignificant       | Insignificant    | Insignificant   | Insignificant Findings                                   | T                             | T   |
| 7              | T                                  | T  | Significant                   | Insignificant       | Insignificant    | Serious vs Playful  | Performance State Self-Esteem                            | T                             | T   |

|    |     |   |               |               |               |                    |                               |                    |   |  |
|----|-----|---|---------------|---------------|---------------|--------------------|-------------------------------|--------------------|---|--|
|    |     |   |               |               |               |                    |                               | Telic vs Paratelic |   |  |
| 8  | P   | P | Significant   | Significant   | Insignificant | Insignificant      | Performance State Self-Esteem | P                  | T |  |
|    |     |   |               |               |               |                    | Arousal Discrepancy           |                    |   |  |
| 9  | T/P | P | Insignificant | Insignificant | Insignificant | Insignificant      | Insignificant Findings        | P                  | T |  |
| 10 | T   | T | Insignificant | Insignificant | Insignificant | Serious vs Playful | Telic vs Paratelic            | T                  | T |  |

Note: Significant = perceived performance variable significantly influencing Self-Perceived Teaching Competence

Insignificant = perceived performance variable not significantly influencing Self-Perceived Teaching Competence

\* Telic (T) versus Paratelic (P) is divided into two variables:

1) serious versus playful; and 2) planned versus spontaneous

#### *Explanation of Table 5*

For adult educators 3, 5, 7, and 8 there was an identified relationship between self-perceptions of performance state self-esteem while teaching and self-perceived teaching competence. There was also an identified relationship for adult educator 8 between self-perceptions of arousal discrepancy/hedonic tone while teaching and self-perceived teaching competence.

There was an identified relationship for adult educator 2 between self-perceptions of effort while teaching and self-perceived teaching competence.

There was an identified relationship for adult educators 3, 4, 5, 7, and 10 between self-perceptions of telic and paratelic metamotivational states while teaching and self-perceived teaching competence.

There was an identified relationship for adult educators 1, 4, and 9 between telic/paratelic situational state balance (in a teaching mode) and self-perceived teaching competence.

#### *Identification of performance variables.*

This study identified psychological relationships between self-perceived teaching competence and performance state self-esteem, arousal discrepancy, effort and

metamotivational states and/or determined their ideal/preferred situational state balance in a teaching mode. Three adult educators (1, 6, and 9) had no correlations between the repeated-measures variables including self-perception of performance state self-esteem, arousal discrepancy, effort, metamotivational states, and their self-perceived teaching competence. However, these adult educators identified their telic/paratelic situational state balance (while teaching), and two of them (1 and 9) shifted to the opposite bistable mode (telic vs. paratelic) while teaching.

Three adult educators (2, 4 and 10) identified one performance variable that significantly predicted their perceptions between a competent and less competent teaching session. Three adult educators (5, 7 and 8) identified two performance variables that significantly predicted their perceptions between a competent and less competent teaching session. Lastly, one adult educator (3) identified three performance variables that significantly predicted her teaching perceptions between a competent and a less competent teaching session.

*No Significant Correlations with Self-Perceived Teaching Competence (SPTC)*

Three adult educators (1, 6, and 9) failed to identify any correlations between the repeated-measures variables including self-perceived performance state self-esteem, arousal discrepancy, effort, metamotivational states and their self-perceived teaching competence. Interestingly, these three adult educators demonstrated the least amount of lability in their teaching experience of the ten adult educators.

### *Significant Correlations with Self-Perceived Teaching Competence (SPTC)*

#### *Adult Educators with One Performance Variable Correlation*

Three adult educators (2, 4 and 10) each identified one variable predicting their teaching perceptions between a competent and a less competent teaching session.

#### *Perceived Effort*

Adult educator 2 determined a significant relationship with perceived effort through the correlation analysis of the SPTC. Adult educator 2 stated: “(Y)ou have to create a structure where the needs of the moment emerge which are going to meet the goals.” He described confronting difficulties in the teaching session by stating: “I will think about it real carefully, and um, um, but I try to learn. So, I, I, I think I work harder. I have quite caught a professional (a learning edge)...it is, that if you are a professional, you have been through everything.” He accepted effort as part of a positive process toward a more competent teaching experience. The extent to which a demand on a person is stressful (i.e., causing strain) depends on whether the individual perceives the situation as stressful (Kerr, 1997a). Adult educator 2 did not perceive a contingent event or frustration as causing undue strain, but rather sufficient tension-stress to create a metamotivational shift to which he responded with effort.

#### *Corroboration of raw scores.*

Adult educator 2 had a slight degree of lability, showing minute shifts, in his scores. When he gave himself a lower effort score both *before* and *after* a class, he rated himself as having less teaching competence. Even though the score did not reflect a significant change, each time a higher arousal discrepancy score created a lower effort score. For this adult educator, increased effort complimented an ideal arousal level. When the arousal was not ideal,

tension-stress increased and the ideal telic/paratelic situational state balance was not experienced.

### *Seriousness versus Playfulness*

Two adult educators (4 and 10) reported *after* the teaching session that reversals or shifts between seriousness (telic) and playfulness (paratelic) identified the difference in their teaching experience between a competent and a less competent teaching session. These adult educators rated their teaching competence in relation to their ideal versus actual/felt arousal level. Teaching in the serious mode (i.e., telic state) versus the playful mode (i.e., paratelic state) created a shift in telic/paratelic situational state balance, which for these adult educators affected their self-perceived teaching competence.

### *Adult Educator 10*

Adult educator 10, telic dominant, described the following about his teaching experience: "I'm constantly fine-tuning what I do...like an overactive thermostat." However, he also stated that "...generally I like to be relaxed and laid back about it...", which is a description of pleasant, low arousal in the telic state. He has the desire to shift appropriately, but he might not always have that ability. As adult educator 10 explained, if it is not going perfectly right he is often ruminating about the experience, trying to leave it behind him. In order to cope, he tried to self-justify any perceived mistakes, but the process usually created a distraction. This is an example of getting stuck in the telic state.

Adult educator 10 described an attempt to consistently balance the teaching session. He aimed to create an atmosphere in which the students could freely discuss (paratelic), yet one in which he could contribute to the class learning (telic). Presumably, he gets stuck in his

ruminating (e.g., seriousness) and only flows with the class discussion (e.g., playful) when he is in the moment.

The serious-playful score reported, *after* the teaching session, was the most obvious score correlating significantly with shifts in adult educator 10's perceived teaching competence score. It revealed, in retrospect, that his perceived arousal level while teaching possibly affected his ideal telic/paratelic situational state balance, and might have predicted a difference in his self-perceived teaching competence.

*Corroboration of raw scores.*

For adult educator 10, the teaching sessions in which he rated himself with the highest teaching competence score were the sessions in which he rated himself with the highest possible 'playful' score after the class. To clarify, his highest ratings of competence occurred when he commenced the teaching session high in playfulness and then continued to increase in playfulness. For this adult educator, playfulness related to his teaching competence and he experienced a shift out of the serious mode/telic state into the playful mode/paratelic state. As previously mentioned, when he does not ruminate on past errors, he can achieve an appropriate shift, creating a perception of increased teaching competence.

*Adult Educator 4*

Adult educator 4 rated her teaching competence from an external perspective. She commented that she was unaware of how well the teaching session was until after receiving some feedback from the students. She was unable to make a critique of her competence without the external messages and opinions of others.

The serious-playful score *after* a teaching session significantly correlated with adult educator 4's shifts in perceived teaching competence. This score was determined as a result of the students' reactions, and it influenced her perceived teaching competence.

#### *Corroboration of raw scores.*

Adult educator 4's raw scores revealed that for every teaching session in which she rated herself the highest score in teaching competence, she shifted from 'serious' *before* teaching session to 'playful' *after* class. Each teaching session in which she stayed 'serious' or stayed in the middle between 'serious' and 'playful' and did not shift toward 'playful', she rated herself with less teaching competence. Adult educator 4 demonstrated that by becoming playful while teaching, she achieved a telic/paratelic situational state balance and increased perceived teaching competence.

#### *Self-Awareness versus Self-Forgetting*

Adult educators 4 and 10, in particular, described perceived changes in their teaching performance when they shifted between focusing on self and focusing away from self and onto the students. Adult educator 10 was representative of having a preoccupation on self-awareness while teaching and demonstrated how it might cause deterioration in his teaching competence. Such an intensity of self-focus could potentially detract from a performer's attention to relevant task cues.

#### *Two Performance Variable Correlations*

Three adult educators (5, 7 and 8) each identified two variables predicting their teaching perceptions between a competent and a less competent teaching session.

*Performance State Self-Esteem and Seriousness versus Playfulness*

Two adult educators (5 and 7) experienced differences between seriousness (telic) and playfulness (paratelic) in relation to being in their ideal state *before* a class. For these adult educators *before* class, their actual arousal level in conjunction with their performance state self-esteem affected their ideal telic/paratelic situational state balance and self-perceived teaching competence *after* class. Their individual differences were exemplified through their opposing bistable state preferences (i.e., telic/paratelic).

*Adult Educator 5*

Adult educator 5, paratelic dominant, spoke about her self-awareness prior to a teaching session and the importance of feeling as ideal as possible. Adult educator 5 explained she does "...anything that's required at that moment and that depends on what's happening in my body too. Because sometimes I could be overly aroused, and...that's as unhelpful as being under-aroused, I think." She then prepares her "being" (or her self) to be at her optimal performance level physically as well as mentally, in order to have the ability to be in the moment and connect with the teaching session as cohesively as possible. When this particular adult educator perceived a less competent teaching session, it was due to feelings of being disconnected within herself and her thoughts and disengaged from others (i.e., students). In these teaching sessions, she was not within her telic/paratelic situational state balance for teaching.

*Corroboration of raw scores.*

Adult educator 5 correspondingly rated herself with less teaching competence when she rated herself lower in performance state self-esteem. She reported being more serious *before* and *after* class and she perceived herself as having less teaching competence as a result (as

supported in her interview). For this paratelic-dominant adult educator, a lower performance state self-esteem combined with being more telic (i.e., serious) and the less playful state created less perceived teaching competence.

#### *Adult Educator 7*

Adult educator 7, telic dominant, spoke about anxiety while teaching and explained that in "...teaching events, the more unknowns the more, I think, worried and aroused I am...(having) negative arousal." When the unknowns were eliminated at the commencement of a class, his performance state self-esteem was secure, reflecting a higher self-efficacy. He talked about how his preparation does this: "I've done considerable design work and office work beforehand to make sure I was right, so I feel better."

#### *Corroboration of raw scores.*

Adult educator 7's raw scores do not reveal an obvious, immediate relationship between performance state self-esteem and SPTC. However, if he had a combination of lower performance state self-esteem (i.e., score of 27 or less) *before* a teaching session commenced, combined with a more telic tendency (high seriousness score), he rated himself with less teaching competence. One contradiction of this pattern was recorded *before* class when he rated himself as having only slightly more playfulness (raw score of 4) than seriousness. However, on that particular teaching session, he rated himself with his lowest performance state self-esteem score, which could have conceivably contributed to his score of less teaching competence.

#### *Adult Educator 8*

#### *Arousal Discrepancy and Performance State Self-Esteem*

Adult educator 8 experienced differences in arousal discrepancy and performance state self-esteem, as reported *after* class, which positively corresponded with her self-perceived

teaching competence. Adult educator 8 was paratelic dominant. When she described the serious/planning mode while teaching, she explained: “It (the telic state) is probably just less ideal. I could do it competently, but I know I just don’t enjoy it as much.” She also reported that differences in her arousal levels influenced her perceived teaching competence. She consistently rated her performance state self-esteem lower *after* a teaching session when she was out of her ideal arousal level. In these particular sessions, she was taken out of her telic/paratelic situational state balance while teaching.

*Corroboration of raw scores.*

Adult educator 8 exemplified the combination of arousal discrepancy and performance state self-esteem affecting perceived teaching competence. This particular adult educator demonstrated the need for further research on the relationship between arousal discrepancy and performance state self-esteem. Nevertheless, the data in the current investigation revealed that when performance state self-esteem was lower in conjunction with an arousal discrepancy, whether *before* or *after* a class, perceived teaching competence was lower.

*Adult Educators with Three Significant Performance Variable Correlations*

One adult educator (3) identified three variables in her teaching perceptions that differed between a competent and a less competent teaching session.

*Performance State Self-Esteem, Seriousness versus Playfulness, and Planned versus Spontaneous*

Adult educator 3 reported differences in: (1) planned (telic) versus spontaneous (paratelic) modes *before* the class; (2) serious (telic) versus playful (paratelic) modes *after* a class; and, (3) performance state self-esteem *after* a class, all of which contributed to her telic/paratelic situational state balance and related to her perceived teaching competence.

Adult educator 3, telic dominant, was arousal avoidant. Even though she described the process of “becoming exhilarated”, she failed to report a significant increase in arousal. Rather, she relied on the students’ feedback to influence her perceived teaching competence.

*Corroboration of raw scores.*

Regarding adult educator 3’s raw scores of performance state self-esteem, data revealed that if one score was exceptionally low on the scale (or if neither the *before* and *after* class scores exceeded a score of 31), the adult educator perceived less teaching competence. When this adult educator was too serious, emphasising ‘planning’ on at least three of the four raw scores, she perceived less teaching competence. Increased performance state self-esteem scores and more emphasis on ‘playfulness’ and ‘spontaneity’ was related to an increased perceived teaching competence for this particular adult educator. The correlation matrices and the metamotivational interview coding units for each of the 10 adult educators follows (Tables 6-35).

Table 6

*Adult Educator 1: Correlation Matrix*

|                     | <b>SPTC</b> | <b>TSM<br/>AD:B</b> | <b>TSM<br/>AD:A</b> | <b>TPSP<br/>B</b> | <b>TPSP<br/>A</b> | <b>TPPS<br/>B</b> | <b>TPPS<br/>A</b> | <b>TSM<br/>E:B</b> | <b>TSM<br/>E:A</b> | <b>PSSE<br/>B</b> | <b>PSSE<br/>A</b> |
|---------------------|-------------|---------------------|---------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|
| <b>SPTC</b>         | -           | .345                | .271                | -.039             | .039              | .365              | -.452             | -.569              | -.588              | .047              | .387              |
| <b>TSM<br/>AD:B</b> | .345        | -                   | .000                | .572              | -.142             | -.088             | .000              | .147               | .199               | .745*             | -.249             |
| <b>TSM<br/>AD:A</b> | .271        | .000                | -                   | .305              | .443              | -.369             | -.094             | -.264              | -.353              | .064              | .792**            |
| <b>TPSP<br/>B</b>   | -.039       | .572                | .305                | -                 | .476              | -.403             | .402              | .283               | .383               | .256              | -.114             |
| <b>TPSP<br/>A</b>   | .039        | -.142               | .443                | .476              | -                 | -.157             | .428              | -.060              | .155               | -.309             | .557              |
| <b>TPPS</b>         | .365        | -.088               | -.369               | -.403             | -.157             | -                 | .189              | -.505              | -.364              | .040              | -.117             |

|             |       |       |        |       |       |       |       |        |        |       |       |
|-------------|-------|-------|--------|-------|-------|-------|-------|--------|--------|-------|-------|
| <b>B</b>    |       |       |        |       |       |       |       |        |        |       |       |
| <b>TPPS</b> | -.452 | .000  | -.094  | .402  | .428  | .189  | -     | .063   | .223   | .266  | -.148 |
| <b>A</b>    |       |       |        |       |       |       |       |        |        |       |       |
| <b>TSME</b> | -.569 | .147  | -.264  | .283  | -.060 | -.505 | .063  | -      | .877** | .104  | -.393 |
| <b>B</b>    |       |       |        |       |       |       |       |        |        |       |       |
| <b>TSME</b> | -.588 | .199  | -.353  | .383  | .155  | -.364 | .223  | .877** | -      | .046  | -.414 |
| <b>A</b>    |       |       |        |       |       |       |       |        |        |       |       |
| <b>PSSE</b> | .047  | .745* | .064   | .256  | -.309 | .040  | .266  | .104   | .046   | -     | -.135 |
| <b>B</b>    |       |       |        |       |       |       |       |        |        |       |       |
| <b>PSSE</b> | .387  | -.249 | .792** | -.114 | .557  | -.117 | -.148 | -.393  | -.414  | -.135 | -     |
| <b>A</b>    |       |       |        |       |       |       |       |        |        |       |       |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 7

*Adult Educator 1: MSICS (with examples) of perceived teaching competence \*\*\**

---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Connect with teaching session members through passion

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

2 Serious-minded\*

3 Goal oriented\*

2 Planning ahead\*

3 Action has important consequences\*

3 Trying to accomplish something\*

Example: “I am really organised in my teaching, so what I have got for every single subject that I teach is a file, and I’ve got that file for a subsequential sets of activities that I can dip into and out of depending on the needs of the group. And so while I teach in a very loose manner, it’s very well planned, but not at the time, it’s ahead of time. So I am working within a structure.”

2 Playful\*\*

2 Spontaneous\*\*

3 Sensation oriented\*\*

3 Activity enjoyable in itself\*\*

Example: “And it gives me the utmost creativity and room to respond to the needs of the people. So I can go into a teaching session and I don’t really prepare it because I

am thoroughly prepared. Because I have been doing it for so long, I've got the best resources. And I am very careful with my notes, and I've always got, um, handouts on file, so that I don't even have to go and prepare ahead, because, uh, I prepared at the end of the previous class, and I always make sure that I have enough handouts so that I can move which ever way I want to go."

Note:

\*Telic \*\*Paratelic

\*\*\* (See Appendix G for sample of the Metamotivational State Interview Coding

Schedule and to view the adjective checklist.)

Table 8

*Adult Educator 1: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: to connect more

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

1 Planning ahead

2 Action has important consequences

3 Trying to accomplish something

Example: "I do my best to get the devil's advocate to work with me."

1 Playful

2 Spontaneous

1 Sensation oriented

2 Activity enjoyable in itself

Example: "When I am teaching [subject] or young men, and, uh, I, I um, and if they, they, they just don't want to be there, or when is this finishing, I just don't want to do this, uh, you know, or just when they tune out and they just don't want to listen, that's when I can't ...can't connect with them."

"Because I, I'm taking people outside their squares quite often, not always, sometimes

(I) take people outside their squares."

Table 9

*Adult Educator 2: Correlation Matrix*

|                     | SPTC  | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|-------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -     | .102        | .559        | .408      | .612      | .000      | .000      | .697*      | .538       | -.167     | -.167     |
| <b>TSM<br/>AD:B</b> | .102  | -           | -.456       | .667*     | .583      | .000      | .000      | .407       | -.615      | -.272     | -.272     |
| <b>TSM<br/>AD:A</b> | .559  | -.456       | -           | .000      | .000      | .000      | .000      | .401       | .818**     | .000      | .000      |
| <b>TPSP<br/>B</b>   | .408  | .667*       | .000        | -         | .667*     | .000      | .000      | .610       | -.176      | .272      | .272      |
| <b>TPSP<br/>A</b>   | .612  | .583        | .000        | .667*     | -         | .000      | .000      | .773**     | .132       | -.272     | -.272     |
| <b>TPPS<br/>B</b>   | .000  | .000        | .000        | .000      | .000      | -         | .000      | .000       | .000       | .000      | .000      |
| <b>TPPS<br/>A</b>   | .000  | .000        | .000        | .000      | .000      | .000      | -         | .000       | .000       | .000      | .000      |
| <b>TSME<br/>B</b>   | .697* | .407        | .401        | .610      | .773**    | .000      | .000      | -          | .394       | -.133     | -.133     |
| <b>TSME<br/>A</b>   | .538  | -.615       | .818**      | -.176     | .132      | .000      | .000      | .394       | -          | .072      | .072      |
| <b>PSSE<br/>B</b>   | -.167 | -.272       | .000        | .272      | -.272     | .000      | .000      | -.133      | .072       | -         | 1.00**    |
| <b>PSSE<br/>A</b>   | -.167 | -.272       | .000        | .272      | -.272     | .000      | .000      | -.133      | .072       | 1.00**    | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
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TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 10

*Adult Educator 2: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Try and create the right conditions

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “And so, so I think that you are going to be a really good adult educator or a good counsellor, you going to have to break it down. You need to know precisely what you are doing and why you are doing it. And then you, the process that you had developed, you’re going to develop a process to meet those goals.”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “...it’s a question of what the needs of the teaching session are as well.

Because you can very easily go off on tangents...uh, it’s very easy to get caught up in

that sort of thing. Uh, the needs of the moment have to be determined to a certain extent to what you, you are trying to do.”

Table 11

*Adult Educator 2: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Reflect on difficult student

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “And, um, I find it irritating because he gets in the way of the group, and it’s, he’s got...in other words he has his own neurotic needs and whatever they happen to be. And I find people like that can be frustrating because they get in the way of a lot of people’s learning, and my learning, but they also take up a lot of time in the group because you’ve got to deal with them, and so tonight I know that there will be an issue with him at some stage, and so I am thinking this... I really don’t need this in my life. Know what I mean? Umm...uh, so I find that frustrating, but I think that those people can be very difficult.”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “You have classes that the students are enthusiastic, and where they are not enthusiastic. There are classes where you are tired, and you just happen to go through the structure, maybe you’re tired, and other days when they are.”

Table 12

*Adult Educator 3: Correlation Matrix*

|                     | SPTC   | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|--------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -      | .423        | .597        | .297      | .737*     | .639*     | .622      | .411       | .335       | .627      | .79**     |
| <b>TSM<br/>AD:B</b> | .423   | -           | .389        | .87**     | .427      | .639*     | .356      | .221       | .367       | .766**    | .581      |
| <b>TSM<br/>AD:A</b> | .597   | .389        | -           | .149      | .874**    | .561      | .406      | .734*      | -.242      | .203      | .499      |
| <b>TPSP<br/>B</b>   | .297   | .871**      | .149        | -         | .323      | .452      | .209      | .042       | .555       | .712*     | .521      |
| <b>TPSP<br/>A</b>   | .737*  | .427        | .874**      | .323      | -         | .456      | .571      | .717*      | .033       | .356      | .79**     |
| <b>TPPS<br/>B</b>   | .639*  | .639*       | .561        | .452      | .456      | -         | .548      | .289       | .050       | .542      | .351      |
| <b>TPPS<br/>A</b>   | .622   | .356        | .406        | .209      | .571      | .548      | -         | .081       | -.075      | .331      | .707*     |
| <b>TSME<br/>B</b>   | .411   | .221        | .734*       | .042      | .717*     | .289      | .081      | -          | .012       | .198      | .325      |
| <b>TSME<br/>A</b>   | .335   | .367        | -.242       | .555      | .033      | .050      | -.075     | .012       | -          | .796**    | .378      |
| <b>PSSE<br/>B</b>   | .627   | .766**      | .203        | .712*     | .356      | .542      | .331      | .198       | .796**     | -         | .632*     |
| <b>PSSE<br/>A</b>   | .792** | .581        | .499        | .521      | .789**    | .351      | .707*     | .325       | .378       | .632*     | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 13

*Adult Educator 3: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: To “know” her students

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

2 Serious-minded

2 Goal oriented

1 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I guess that’s a combination of feeling good about the delivery of what I’ve done and getting positive feedback from the students that it’s valuable.”

1 Playful

1 Spontaneous

1 Sensation oriented

2 Activity enjoyable in itself

Example: “I just get to that stage where it feels like a good performance.”

Table 14

*Adult Educator 3: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Try to get students to understand material

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “But I think sometimes it also makes it twice as good...We’ll focus more on, um, the goal of what the learning outcomes are, initially. You know, we begin the session with... and we make sure we complete it at the end. We’ll go back and refind those...”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “I used to feel that way when I was challenged by students that wanted to be confrontational, but that doesn’t affect me anymore.”

Table 15

*Adult Educator 4: Correlation Matrix*

|                     | SPTC  | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|-------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -     | .441        | .539        | -.283     | .639*     | .000      | -.046     | -.398      | .050       | .044      | .107      |
| <b>TSM<br/>AD:B</b> | .441  | -           | .192        | .156      | .483      | .097      | .271      | -.070      | -.356      | .076      | .596      |
| <b>TSM<br/>AD:A</b> | .539  | .192        | -           | -.749*    | .705*     | .382      | .083      | -.78**     | .559       | -.244     | -.042     |
| <b>TPSP<br/>B</b>   | -.283 | .156        | -.749*      | -         | -.262     | -.473     | -.091     | .354       | -.783**    | .662*     | .405      |
| <b>TPSP<br/>A</b>   | .639* | .483        | .705*       | -.262     | -         | -.104     | .330      | -.676*     | .044       | -.029     | .047      |
| <b>TPPS<br/>B</b>   | .000  | .097        | .382        | -.473     | -.104     | -         | .399      | -.318      | .161       | -.438     | .405      |
| <b>TPPS<br/>A</b>   | -.046 | .271        | .083        | -.091     | .330      | .399      | -         | -.209      | -.345      | -.507     | .198      |
| <b>TSME<br/>B</b>   | -.398 | -.070       | -.77**      | .354      | -.676*    | -.318     | -.209     | -          | -.313      | -.059     | -.128     |
| <b>TSME<br/>A</b>   | .050  | -.356       | .559        | -.783**   | .044      | .161      | -.345     | -.313      | -          | -.408     | -.512     |
| <b>PSSE<br/>B</b>   | .044  | .076        | -.244       | .662*     | -.029     | -.438     | -.507     | .059       | -.408      | -         | .458      |
| <b>PSSE<br/>A</b>   | .107  | .596        | -.042       | .405      | .047      | .405      | .198      | -.128      | -.512      | .458      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 16

*Adult Educator 4: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Process information and get feedback from students

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: " One where people have learned, have learned something practical like

discovering something about themselves, felt safe and secure in the environment and they

have fun....That would be a successful evening for me and for them..."

1 Playful

1 Spontaneous

1 Sensation oriented

2 Activity enjoyable in itself

Example: "But even sometimes when a teaching session is going well, it's not just me.

It's...even though I like to take credit for it, it's just a good fit, a good group of people,

and it's what they need that got them there, so it's, it's external patterns as well, yeah,

but I like to take credit for it."



Table 17

*Adult Educator 4: MSICS (with examples) of less perceived teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Find another focus and challenge

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I guess trying to find another focus to get me stimulated, and helped. And because I actually...I really didn’t look forward to coming to, in fact I dreaded some mornings having to face these people...that became a challenge in itself. So I’ve got to just create a challenge for myself to get stimulated into the work.”

1 Playful

2 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “Everybody is looking really bored and really overwhelmed by the material and really exhausted by the end of the evening, and everyone, their energy is really flat.”

“I think about being the best possible, in the best possible state, then I need some sort of a, a challenge for myself for that particular time.”

Table 18

*Adult Educator 5: Correlation Matrix*

|                     | SPTC  | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|-------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -     | .352        | .257        | .671*     | .569      | .257      | -.048     | .269       | .126       | .645*     | .645*     |
| <b>TSM<br/>AD:B</b> | .352  | -           | -.072       | .380      | .711*     | .574      | .377      | .172       | .282       | .422      | .855**    |
| <b>TSM<br/>AD:A</b> | .257  | -.072       | -           | .072      | .243      | -.111     | -.167     | .333       | -.218      | .580      | -.166     |
| <b>TPSP<br/>B</b>   | .671* | .380        | .072        | -         | .247      | .072      | -.377     | .172       | .141       | .577      | .577      |
| <b>TPSP<br/>A</b>   | .569  | .711*       | .243        | .247      | -         | .243      | .365      | .402       | .199       | .612      | .612      |
| <b>TPPS<br/>B</b>   | .257  | .574        | -.111       | .072      | .243      | -         | .667*     | -.333      | .509       | -.166     | .580      |
| <b>TPPS<br/>A</b>   | -.048 | .377        | -.167       | -.377     | .365      | .667*     | -         | -.500      | .218       | -.248     | .311      |
| <b>TSME<br/>B</b>   | .269  | .172        | .333        | .172      | .402      | -.333     | -.500     | -          | .218       | .497      | .050      |
| <b>TSME<br/>A</b>   | .126  | .282        | -.218       | .141      | .199      | .509      | .281      | .218       | -          | -.325     | .163      |
| <b>PSSE<br/>B</b>   | .645* | .422        | .580        | .577      | .612      | -.166     | -.248     | .497       | -.325      | -         | .500      |
| <b>PSSE<br/>A</b>   | .645* | .855**      | -.166       | .577      | .612      | .580      | .311      | .050       | .163       | .500      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 19

*Adult Educator 5: MSICS (with examples) of perceived teaching competence*


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 Coding Unit: Teaching competently; Description: Work-teaching
 

---

I. Determine the goal: In tune with the students

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

1 Serious-minded

1 Goal oriented

1 Planning ahead

1 Action has important consequences

3 Trying to accomplish something

Example: "...then I am happy to toss the lesson plan and to run with that. Because I think that that's where the engagement is, so I respond to that very strongly.... And that means, the things that I actually covered, in terms of...I'll go back to that and make sure that we cover it at the beginning of the next week..."

2 Playful

3 Spontaneous

3 Sensation oriented

3 Activity enjoyable in itself

Example: "...and operating very highly from essentially an intuitive awareness of what's going on, watching a lot of the non-verbal cueing and things like that, and being able to

respond to that and pull whatever is happening in the room into some theoretical framework.”

Table 20

*Adult Educator 5: MSICS (with examples) of perceived less teaching competence*


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Coding Unit: Less teaching competence; Description: Work-teaching

---

Description: Work-teaching

I. Determine the goal: Analyse what is not working from the group's perspective

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

1 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: "...and then I determine what's not working here, and try and analyse it from a group work perspective. 'So what activity do I need to do now to get this happening', or I might take it back to the group and say 'I'm just really aware that, that a lot is happening'."

1 Playful

2 Spontaneous

2 Sensation oriented

1 Activity enjoyable in itself

Example: "What I notice in my own self, is that I am not able to connect in that room or connect the group together. There's something about, you know that nebulous concept

of cohesion...That's what I feel is not, not in the room. That's how I notice that I am not as connected..."

Table 21

*Adult Educator 6: Correlation Matrix*

|                     | SPTC  | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|-------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -     | .054        | -.107       | .421      | .559      | .000      | .000      | .094       | .142       | .274      | .269      |
| <b>TSM<br/>AD:B</b> | .054  | -           | .673*       | -.547     | .048      | -.172     | -.559     | .382       | .492       | .672*     | .417      |
| <b>TSM<br/>AD:A</b> | -.107 | .673*       | -           | -.184     | .239      | -.129     | -.129     | .138       | .146       | .258      | .100      |
| <b>TPSP<br/>B</b>   | .421  | -.547       | -.184       | -         | .474      | -.187     | .337      | -.113      | -.223      | -.352     | -.114     |
| <b>TPSP<br/>A</b>   | .559  | .048        | .239        | .474      | -         | -.224     | -.224     | .451       | .465       | .415      | .361      |
| <b>TPPS<br/>B</b>   | .000  | -.172       | -.129       | -.187     | -.224     | -         | .600      | -.643*     | -.491      | -.475     | -.718*    |
| <b>TPPS<br/>A</b>   | .000  | -.559       | -.129       | .337      | -.244     | .600      | -         | -.945**    | -.945**    | -.913**   | -.90**    |
| <b>TSME<br/>B</b>   | .094  | .382        | .138        | -.113     | .451      | -.643*    | -.945**   | -          | .964**     | .880**    | .916**    |
| <b>TSME<br/>A</b>   | .142  | .492        | .146        | -.223     | .465      | -.491     | -.945**   | .964**     | -          | .932**    | .849**    |
| <b>PSSE<br/>B</b>   | .274  | .672*       | .258        | -.352     | .415      | -.475     | -.913**   | .880**     | .932**     | -         | .885**    |
| <b>PSSE<br/>A</b>   | .269  | .417        | .100        | -.114     | .361      | -.718*    | -.898**   | .916**     | .849**     | .885**    | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 22

*Adult Educator 6: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Try and create the right conditions

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I like to bring to the session planning and organisation. I like to know my material [and] environment. I like to have it set up really well. And that provides a blueprint for me to work from.”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “If I don’t have the blueprint, then I can’t be spontaneous.”

Table 23

*Adult Educator 6: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Sort the problem out within the group

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I am pretty good these days at blocking out everything else in the world, it could impact, to have an undercurrent, like if I am not on top of things...”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “I’ve got (the) material, but it is not necessarily what they need or want...I would lose a lot of confidence.”

Table 24

*Adult Educator 7: Correlation Matrix*

|                     | SPTC   | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|--------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -      | .073        | -.152       | .769**    | .493      | -.303     | .386      | .102       | .356       | .715*     | .536      |
| <b>TSM<br/>AD:B</b> | .073   | -           | .379        | .203      | .617      | .300      | .187      | .045       | -.627      | .252      | .409      |
| <b>TSM<br/>AD:A</b> | -.152  | .379        | -           | -.047     | -.291     | -.369     | -.455     | .248       | -.759*     | -.030     | -.226     |
| <b>TPSP<br/>B</b>   | .769** | .203        | -.047       | -         | .483      | .035      | .178      | .659*      | .370       | .462      | .310      |
| <b>TPSP<br/>A</b>   | .493   | .617        | -.291       | .483      | -         | .386      | .656*     | .000       | .041       | .478      | .764*     |
| <b>TPPS<br/>B</b>   | -.303  | .300        | -.369       | .035      | .386      | -         | .253      | .232       | .162       | -.153     | .315      |
| <b>TPPS<br/>A</b>   | .386   | .187        | -.455       | .178      | .656*     | .253      | -         | -.283      | .082       | .185      | .493      |
| <b>TSME<br/>B</b>   | .102   | .045        | .248        | .659*     | .000      | .232      | -.283     | -          | .218       | -.044     | -.219     |
| <b>TSME<br/>A</b>   | .356   | -.627       | -.759*      | .370      | .041      | .162      | .082      | .218       | -          | .076      | .115      |
| <b>PSSE<br/>B</b>   | .715*  | .652        | -.030       | .646      | .478      | -.153     | .185      | -.044      | .076       | -         | .531      |
| <b>PSSE<br/>A</b>   | .536   | .409        | -.226       | .310      | .764*     | .315      | .493      | -.219      | .115       | .531      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 25

*Adult Educator 7: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: To be flexible

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: "I've had to work a bit more on being active and fun activities with the group.

And I realise that a checkpoint for me is, 'Are they getting something out of the group, and is it making a difference?' That's a measure at the end of the day for me."

2 Playful

1 Spontaneous

2 Sensation oriented

1 Activity enjoyable in itself

Example: "Two things I think...Laughing, having fun, um, and being very active in the process of learning."

Table 26

*Adult Educator 7: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Be more flexible by putting things back onto the students

Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

- 3 Serious-minded
- 3 Goal oriented
- 2 Planning ahead
- 3 Action has important consequences
- 3 Trying to accomplish something

Example: “I think early in my teaching experiences when I wasn’t flexible, that’s when I had the most difficulty.”

“But still before the first couple of courses, I was sort of I think a bit aroused, anxious, and ‘Are we really hitting the mark?’ ‘Is there too much in the day?’ ...A whole lot of questions like that.”

- 1 Playful
- 2 Spontaneous
- 1 Sensation oriented
- 1 Activity enjoyable in itself

Example: “I’ve had to work at, one, being flexible, and two, being better organised. I think they are very much learned behaviours apart from teaching.”



Table 27

*Adult Educator 8: Correlation Matrix*

|                     | SPTC    | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|---------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -       | -.414       | -.775**     | .475      | .300      | .363      | .398      | -.217      | -.354      | .518      | .643*     |
| <b>TSM<br/>AD:B</b> | -.414   | -           | .000        | -.165     | -.186     | -.710*    | -.313     | .572       | -.252      | -.728*    | -.444     |
| <b>TSM<br/>AD:A</b> | -.775** | .000        | -           | -.354     | -.111     | -.328     | -.327     | .140       | .661*      | -.103     | -.553     |
| <b>TPSP<br/>B</b>   | .475    | -.165       | -.354       | -         | .774**    | .298      | .911**    | -.446      | -.636*     | .407      | .774**    |
| <b>TPSP<br/>A</b>   | .300    | -.186       | -.111       | .774**    | -         | .311      | .743*     | -.465      | -.607      | .521      | .706*     |
| <b>TPPS<br/>B</b>   | .363    | -.710*      | -.328       | .298      | .311      | -         | .479      | -.689*     | -.336      | .477      | .622      |
| <b>TPPS<br/>A</b>   | .398    | -.313       | -.327       | .911**    | .743*     | .497      | -         | -.441      | -.587      | .313      | .836**    |
| <b>TSME<br/>B</b>   | -.217   | .572        | .140        | -.446     | -.465     | -.689*    | -.441     | -          | .288       | -.745*    | -.650*    |
| <b>TSME<br/>A</b>   | -.354   | -.252       | .661*       | -.636*    | -.607     | -.336     | -.587     | .288       | -          | -.051     | -.607     |
| <b>PSSE<br/>B</b>   | .518    | -.728*      | -.103       | .407      | .521      | .477      | .313      | -.745*     | -.051      | -         | .521      |
| <b>PSSE<br/>A</b>   | .643*   | -.444       | -.553       | -.774**   | .706*     | .622      | .836**    | -.650*     | -.607      | .521      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 28

*Adult Educator 8: MSICS (with examples) of perceived teaching competence*


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Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: To facilitate the learning

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

1 Serious-minded

2 Goal oriented

1 Planning ahead

2 Action has important consequences

1 Trying to accomplish something

Example: “I didn’t, I really didn’t do much preparation because I knew I knew that topic.”

“I could go in there with nothing, but I couldn’t go in there with nothing to [name of class] because I would perceive that there’s lot of content I need to remember, and I am just trying to prevent all that.”

2 Playful

3 Spontaneous

3 Sensation oriented

3 Activity enjoyable in itself

Example: “...the sessions that I perceived as when I was the best were those ones I hadn’t really done a lot of planning, but because I know the content anyway and I

know I can go with the flow, and they are the ones that I think went the best or some amazing thing happened or you know, someone had a revelation...”

Table 29

*Adult Educator 8: MSICS (with examples) of perceived less teaching competence*


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Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Talk myself through it

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I think that’s what it is...like they are all in that thing where I feel they are relying on me for their learning, and then it’s got to come out of my head and into theirs. But where I haven’t been able to create an environment where I can get them in groups or I can give them a simulation or I could give them something where they’ll get their own learning...where I have just facilitated that....That kind of feels like a pressure that I have to give them something.”

1 Playful

1 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “There are groups where if they come in a bit flat, like the Monday morning group...I have to work harder because [cough] it’s Monday morning, they are kind of a bit flat and tired, I kind of feel like I am more, you know, ‘on show’ where I’ve got to get them, uh, glad as well”.

Table 30

*Adult Educator 9: Correlation Matrix*

|                     | SPTC  | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|-------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -     | -.509       | .000        | -.218     | .345      | .488      | .509      | -.089      | -.123      | .580      | .592      |
| <b>TSM<br/>AD:B</b> | -.509 | -           | .000        | -.167     | -.527     | .000      | .111      | .272       | .063       | -.355     | -.422     |
| <b>TSM<br/>AD:A</b> | .000  | .000        | -           | .000      | .000      | .000      | .000      | .000       | .000       | .000      | .000      |
| <b>TPSP<br/>B</b>   | -.218 | -.167       | .000        | -         | .395      | .000      | -.667*    | -.102      | -.282      | -.044     | -.090     |
| <b>TPSP<br/>A</b>   | .345  | -.527       | .000        | .395      | -         | .354      | .000      | .000       | .238       | .449      | .257      |
| <b>TPPS<br/>B</b>   | .488  | .000        | .000        | .000      | .354      | -         | .745*     | -.456      | -.337      | .436      | .243      |
| <b>TPPS<br/>A</b>   | .509  | .111        | .000        | -.67*     | .000      | .745*     | -         | -.272      | -.063      | .355      | .241      |
| <b>TSME<br/>B</b>   | -.089 | .272        | .000        | -.102     | .000      | -.456     | -.272     | -          | .461       | -.072     | -.074     |
| <b>TSME<br/>A</b>   | -.123 | .063        | .000        | -.282     | .238      | -.337     | -.063     | .461       | -          | -.140     | -.456     |
| <b>PSSE<br/>B</b>   | .580  | -.355       | .000        | -.044     | .449      | .436      | -.355     | -.072      | -.140      | -         | .170      |
| <b>PSSE<br/>A</b>   | .592  | -.422       | .000        | -.090     | .257      | .243      | .241      | -.074      | -.456      | .170      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 31

*Adult Educator 9: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Facilitating students' discovery

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

2 Serious-minded

2 Goal oriented

1 Planning ahead

3 Action has important consequences

2 Trying to accomplish something

Example: "...I recognise just how much I have to offer them myself in terms of my understanding of human nature and the dynamics between human beings, and it's always the proviso of what I know you could write on the head of a pin. But I am very strong in that area, and I am getting stronger and stronger as I grow older."

3 Playful

3 Spontaneous

3 Sensation oriented

3 Activity enjoyable in itself

Example: "...what I love is the significant personal shifts that I'm a part of. So I like seeing the light come on for people. People say 'That was amazing. That was the best thing that ever happened to me.' The feedback is absolutely enormous."



Table 32

*Adult Educator 9: MSICS (with examples) of perceived less teaching competence*


---

Coding Unit: Less teaching competence; Description: Work-teaching

---

I. Determine the goal: Look for positive strokes

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

1 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “I need to find the recognition of the job I’ve done within myself. But those were also the times of when I’d been thinking, um, I need to extend my repertoire here...I need to pull out some other stuff, uh, to deal with them.”

1 Playful

2 Spontaneous

2 Sensation oriented

2 Activity enjoyable in itself

Example: “I think the ones where it wasn’t a 5, were the Monday night ones, with my introverted group, where I was not getting my usually strokes...because they don’t show anything on their faces, you see, so you can’t tell...the self-valuing has to be higher in that teaching session than elsewhere.”



Table 33

*Adult Educator 10: Correlation Matrix*

|                     | SPTC   | TSM<br>AD:B | TSM<br>AD:A | TPSP<br>B | TPSP<br>A | TPPS<br>B | TPPS<br>A | TSM<br>E:B | TSM<br>E:A | PSSE<br>B | PSSE<br>A |
|---------------------|--------|-------------|-------------|-----------|-----------|-----------|-----------|------------|------------|-----------|-----------|
| <b>SPTC</b>         | -      | -.201       | .049        | .076      | .834**    | -.114     | .173      | -.325      | .076       | .199      | .597      |
| <b>TSM<br/>AD:B</b> | -.201  | -           | -.220       | -.549     | -.113     | -.770**   | -.110     | -.724*     | .290       | -.295     | -.070     |
| <b>TSM<br/>AD:A</b> | .049   | -.220       | -           | .259      | .103      | .096      | -.329     | .233       | .108       | .526      | .494      |
| <b>TPSP<br/>B</b>   | .076   | -.549       | .259        | -         | .051      | .676*     | -.041     | .125       | -.533      | .629      | .052      |
| <b>TPSP<br/>A</b>   | .834** | -.113       | .103        | .051      | -         | -.170     | .492      | -.219      | -.092      | .041      | .722*     |
| <b>TPPS<br/>B</b>   | -.114  | -.770**     | .096        | .676*     | -.170     | -         | .178      | .615       | -.645*     | .346      | -.061     |
| <b>TPPS<br/>A</b>   | .173   | -.110       | -.329       | -.041     | .492      | .178      | -         | .081       | -.456      | -.584     | .300      |
| <b>TSME<br/>B</b>   | -.325  | -.724*      | .233        | .125      | -.219     | .615      | .081      | -          | -.292      | .029      | -.172     |
| <b>TSME<br/>A</b>   | .076   | .290        | .108        | -.533     | -.092     | -.645*    | -.456     | -.292      | -          | -.061     | -.021     |
| <b>PSSE<br/>B</b>   | .199   | -.295       | .526        | .629      | .041      | .346      | -.584     | .029       | -.061      | -         | .133      |
| <b>PSSE<br/>A</b>   | .597   | -.070       | .494        | .052      | .722*     | -.061     | .300      | -.172      | -.012      | .133      | -         |

Note:

\*\* Correlation is significant at the .01 level (2-tailed)

\* Correlation is significant at the .05 level (2-tailed)

SPTC (Self-Perceived Teaching Competence)

In order as presented, the following acronyms are as follows with either

- B (Before teaching session) or
- A (After teaching session):

TSMAD (Telic State Measure-Arousal Discrepancy)

TPSP (Telic/Paratelic-Serious-Playful)

TPPS (Telic/Paratelic-Planned-Spontaneous)

TSME (Telic State Measure-Effort)

PSSE (Performance State Self-Esteem)

Table 34

*Adult Educator 10: MSICS (with examples) of perceived teaching competence*


---

Coding Unit: Teaching competently; Description: Work-teaching

---

I. Determine the goal: Immerse myself into the content

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

3 Planning ahead

3 Action has important consequences

3 Trying to accomplish something

Example: “It all needs to be done before...all the stuff needs to be done in my head.

(Pause) 90 percent is at the pre-stage. I have it in my head...where I can be comfortable and I have the structure to keep me focussed.”

1 Playful

1 Spontaneous

2 Sensation oriented

2 Activity enjoyable in itself

Example: “I like when the students participate and take part in the creation of the class.

I don't like to have it planned to the last minute. But...there's an element of being connected to people in the room.”

Table 35

*Adult Educator 10: MSICS (with examples) of perceived less teaching competence*


---

 Coding Unit: Less teaching competence; Description: Work-teaching
 

---

I. Determine the goal: To re-focus

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

3 Serious-minded

3 Goal oriented

2 Planning ahead

2 Action has important consequences

3 Trying to accomplish something

Example: “Going off on tangents....and...if I wasn’t sufficiently prepared to deal with questions, and it felt flat, or...and it felt all one-way...all coming from me, um, not stirring, creating interaction and interest. [Not being able to answer a question]... would unsettle me. I’d be ruminating...uh, it distracts me....I would make a conscious effort to put it aside.”

1 Playful

2 Spontaneous

1 Sensation oriented

1 Activity enjoyable in itself

Example: “But I don’t like appearing less than competent. I’m hard on myself and feel lousy if it didn’t go well. I like to know people are perceiving me as competent and they are getting something out of me.”

## CHAPTER IV

### Discussion

#### *Connection of Current Study to the Literature*

The current study applied a methodology of identifying the performance variable(s) that are associated with an adult educator's perceptions of their teaching competence. In seven of the ten adult educators, shifts in telic and paratelic states were linked to self-recorded changes in their perceived teaching competence. In addition, the inducing/change agents of frustration, satiation, and contingent events were present in the follow-up interviews.

Movement toward a preferred telic/paratelic situational state balance (in a teaching mode) was demonstrated with seven adult educators demonstrating the most lability. These seven adult educators perceived more teaching competence when they shifted into their preferred teaching state. Performance state self-esteem was identified as a variable that may, in some instances, be linked with self-perceived teaching competence. This was demonstrated in four adult educators (see Table 5).

Some researchers (e.g., Apter, 2001; Fontana, 1983) have encouraged the development of reversal theory research by challenging current psychological methods. More recently, research has expanded to include different areas of life experiences, and more specifically, taking the means-ends domain (telic and paratelic) and applying it to different applications.

The current study, utilises reversal theory to challenge the conventional performance psychology literature through investigating the intrapersonal realm of 10 adult educator's self-reported perceptions of their teaching competence. The current study also applied an approach or methodology to promote the process of identifying shifts in each adult educator's experience.

Roberts (1992) suggested that motivational theories need to address the direction of behaviour, explaining why behaviour is energised. Reversal theorists, Wilson et al. (1995) compared performers' combinations of metamotivational states prior to, during, and after performances, and found that actual success may be determined by one performing in one's preferred metamotivational states.

The current study suggests that perceived competence could be predicted by one's metamotivational state balance. Also, this study proposes that the direction of behaviour in a teaching mode is uniquely linked (i.e., intrapersonal) to each adult educator's perceived teaching competence. The Metamotivational State Interview Coding Schedule (O'Connell et al., 1991) was utilised to observe each educator's directions of behaviour by noting the performer's goals and assessing the relationship of metamotivational shifts and other performance variables (via inducing/change agents) to their perceived competence.

Horn et al. (1987) suggested finding criteria to evaluate perceived competence. They stated these criteria would highly contribute to the development of any performance evaluation. They believed that self-perceived competence is the best predictor of performance evaluation, stating that a performer's subjective interpretation within the actual performance setting may be the most significant mediator of determining a successful outcome.

To reiterate, findings that reveal an individual to have only one significant variable related to a perceived shift in competence, instead of two or three variables, does not limit or weaken the recommendations for that particular individual. The current study utilised a phenomenological method of exploring the adult educator's self-report in an actual teaching environment. This investigation promotes a more contemporary and intrapersonal direction toward perceived competence assessment and evaluation.

## *Research Questions*

### *Research Question 1*

Do the performance variables of (1) performance state self-esteem, (2) arousal discrepancy (i.e., ideal versus actual); (3) hedonic tone (i.e., pleasure within the teaching process); and/or (4) perceived effort, relate to an adult educator's self-perceived teaching competence?

The current study would suggest that each of the abovementioned factors could be related to the individual's self-perceived teaching competence. Performance state self-esteem and shifts in the telic and paratelic metamotivational states were found to be more strongly related to self-perceived teaching competence than any of the other variables.

Increased hedonic tone implies an increase in pleasure or a decrease in arousal discrepancy and vice versa (i.e., an increased arousal discrepancy implies a decrease in hedonic tone). Hedonic tone is experienced as a result of the combination of the state one is in and the level of arousal (i.e., felt significance) one is experiencing. According to reversal theory, hedonic tone may be a contributing factor to self-perceived teaching competence because it is connected to low and/or high arousal preference (Apter, 2001).

#### *Performance state self-esteem.*

Fazey et al. (1988) developed the butterfly catastrophe model that included a dimension of self-confidence, a performance predictor. Self-confidence was included in the model (as a butterfly factor) because it was believed to be a predictor of performance.

In the current investigation, four adult educators demonstrated that performance state self-esteem increased or decreased in accordance to their perceived teaching competence. As the perceived competence increased for adult educators 3, 5, 7 and 8, their performance state self-

esteem increased significantly, but for most of these adult educators, the awareness to shifts in their performance state self-esteem were more evident in the *after class* scores than the *before class* scores. This indicates that the performance state self-esteem may shift significantly during the performance and create a memorable impact on the final perceptions of the performance. Given the correlational design of the current investigation, these results might reflect that high levels of competence relate to an increase in self-esteem. ( See Appendix K for further information on self-esteem.)

*Arousal discrepancy and hedonic tone.*

An arousal discrepancy score (i.e., the discrepancy between one's actual experienced level of arousal and one's ideal level of arousal) was derived by calculating the difference between ideal arousal (question 3) and actual arousal (question 4) of the Telic State Measure (Kerr, 1997a). As Apter (2001) described: "Movement toward the ideal level of a motivational variable will be accompanied by increasingly pleasant emotions or feelings, and increasingly positive hedonic tone, these reaching their optimal levels as the ideal level itself" (p. 39).

Arousal discrepancy did not significantly correlate with differences in perceived teaching competence for most of the adult educators. However, arousal discrepancy, for example, was significantly related to adult educator 8's perceived teaching competence and hedonic tone. Adult educator 8 (paratelic dominant and paratelic situational state balance) described an increase in enjoyment with increased perceived teaching competence and minimal arousal discrepancy. With high perceived teaching competence and low arousal discrepancy, she described her hedonic tone as: "...the best (teaching sessions) were those ones I hadn't really done a lot of planning, but because...I know I can go with the flow, and they are the ones that I

think went the best.” Her pleasure was emphasised by describing her flow and having a “best” (better) experience.

On a perceived less competent teaching session with high arousal discrepancy, the same adult educator described her hedonic tone as: “There are groups where if they come in a bit flat...I have to work harder because...they are kind of a bit flat and tired, I kind of feel like I am more, you know, ‘on show’.” Her displeasure was described as working harder and having the added pressure of being “on show”.

Adult educator 3 (overall telic dominant) described a good teaching session as one in which she experienced arriving at a high point: “(I) feel exhilarated. I just get to that stage where it feels like a good performance.” She described a “gradual shift” throughout the teaching session (resulting in a telic response) of “...a combination of feeling good about the delivery of what I’ve done and getting positive feedback from the students that it’s valuable.”

According to reversal theory, individuals who prefer a telic state are arousal avoidant (Apter, 2001) as demonstrated by adult educator 7. When having a high negative arousal level (i.e., anxiety), he was uncomfortable within himself and with others. Adult educator 7 also demonstrated cognitive anxiety as increased negativity or an inability to be positive. His telic/paratelic situational state balance in a teaching mode might have been affected by: (1) his negative concern (of worry) and increased arousal; or (2) his inability to be positive, creating a low state self-esteem; or, (3) more likely, a combination of both. This demonstrates that he had difficulty, at times, in maintaining his ideal state while teaching.

It appears that self-confidence tends to be more vulnerable to situational changes than cognitive anxiety (Martens et al., 1990); however, in this case, adult educator 7 exhibited both vulnerabilities in connection to his self-perceived teaching competence. He stated: “But still

before the first couple of courses, I was sort of I think a bit aroused, anxious, and ‘Are we really hitting the mark?’ ‘Is there too much in the day?’ ...A whole lot of questions like that.” Martens and his colleagues also stated that performance expectations are antecedents of both cognitive anxiety and self-confidence, and that they are self-evaluative in nature (e.g., adult educator 7).

Both adult educators 5 and 7 exemplified antecedents to behaviour (i.e., precursors to anxiety) (Jones et al., 1997) through their experiences of emotions and/or cognitions that might have previously occurred in a teaching session. The recollection of these thoughts and feelings might be a contributing factor in one’s situational state balance. Both performance expectations and perceptions of ability can be antecedents of cognitive anxiety and self-confidence (Martens et al., 1990). These antecedents are self-evaluative in nature, and therefore, they tend to be noticed by individuals with a keen sense of self-awareness, as demonstrated by experienced adult educators 5 and 7).

For example, adult educator 5 stated that she is: “...very much in the moment, responding to what’s in the room. And, I am very clear when I go into a room, what do I want to cover, um...If something comes up in the room that is more critical...then I am happy to toss the lesson plan and to run with that. Because I think that that’s where the engagement is, so I respond to that very strongly.”

### *Effort.*

Researchers Martin et al. (1987) found differences in arousal and perceived stress between the telic and paratelic states. The current investigation supported this early study. However, perceived effort was not significantly correlated with perceived teaching competence for most of the adult educators. Nevertheless, the concept of strain assisted in explaining why individuals experience stressors differently. Strain is the response to an individual’s negative

cognitive appraisal of one's adaptation to the demands of a particular environment (Jones et al., 1997).

A relationship between perceived competence and perceived control as supported by Harter (1981a), demonstrated a direct link between perceived competence and performance of a skill. Adult educator 2 (overall telic dominant) demonstrated control and competence, seeming not to be strained by external factors (i.e., frustrating student). For example, he stated, "I find people like that can be frustrating because they get in the way of a lot of people's learning, and my learning, but they also take up a lot of time in the group because you've got to deal with them."

Other individuals, as Cherry (1978) and Jick et al. (1980) explained might potentially have had a stressful response to the same stressor. Lazarus (1966) stated that some individuals would respond to a stressor with avoidance (e.g., call on another student), while others respond to the same stressor with an approach motivation (e.g., question the student). Adult educator 2, despite perceiving to put forth extra effort, is an example of an individual who did not exhibit symptoms of strain while teaching. He stated that he perceived effort as part of the learning experience and subsequently, he viewed it as a positive action toward teaching competence.

According to reversal theory, effort-stress, as adult educator 2 demonstrated, occurs as a response to tension-stress and is a result of the individual's attempt to cope with some threat or challenge (Apter et al., 1990). In this case, because the adult educator positively viewed the situation, and referred to the situation "as a challenge", he decided to approach the stressor (a challenge or paratelic response) rather than avoid it (an anxiety avoidance or telic response). Despite being a telic-dominant individual, adult educator 2 handled effort-stress in the form of effortful attempts at coping with the stressor (Apter et al., 1989), demonstrating a shift to the

paratelic state (e.g., "...dealing with them..."). Reversal theorists, Martin et al. (1988) suggested that differences between the good (eustress) and bad (distress) reside not so much in the nature of the actual events but rather in the metamotivational state of the individual who is experiencing the stressors (e.g., adult educator 2).

### *Research Question 2*

How do the inducing/change agents of frustration, satiation, and contingent events relate to psychological lability and shifts in an adult educator's perceived teaching competence?

The dynamics of teaching in an adult education environment require frequent transitions (reversals) between metamotivational states. An essential characteristic for adult educators is to be labile (see Operational Definitions), and as described in reversal theory, it implies having the ability to appropriately shift metamotivational states (Apter, 2001) in order to meet student needs.

Both the telic and paratelic metamotivational states of the means-ends domain are relevant and present in adult educators while teaching. For half (i.e., 5) of the adult educators, shifting between *seriousness* and *playfulness* (according to reversal theory; Apter, 2001) was a significant predictor of self-perceived teaching competence. Adult educator 2 summarised: “(O)ne of the problems of teaching, and what adult educators debate, is to ‘emphasise the experience of the teaching and that the students have a really good experience’, but there’s no point in the students having a good, a really good experience, unless it’s for a purpose.” This perceptive comment represents the fine balance in the goal orientation of most adult educator’s teaching experience.

Adult educator 3 (overall telic dominant) reported shifts between *planning* (telic) and *spontaneity* (paratelic) as a significant predictor of self-perceived teaching competence. In the interview, she stated that “...the (teaching) competency is based on the students giving feedback of what we have covered is valuable.” Along with this telic experience of a planned teaching session, her description of exhilaration (“I just get to that stage where it feels like a good performance”) reveals shifts between seriousness and playfulness or fun.

The reported awareness of a fluctuating performance state self-esteem curbed spontaneity and playfulness for adult educator 3.

In the interviews adult educators frequently expressed a need for spontaneity and/or flexibility in their teaching. For example, adult educator 4 (paratelic dominant, telic situational state balance) aimed for a session in which "...people have learned something practical like discovering something about themselves...and they have fun." A perceived competent teaching session was one in which "...the students left and I left feeling like we all got something out of the evening". The need to feel that an individual is worthwhile to oneself and to others (Glasser, 1965) was represented by this example. However, for students to have telic and paratelic experiences in class, this particular adult educator detached herself (Apter, 1992) because, as she expressed, teaching is "...about that lack of control..." when the quality of the session is determined by the students, especially if the teaching session is going poorly.

Adult educator 4 explained that she praised herself for a competent teaching session and externally blamed the students for a less competent teaching session. The paratelic (playful) and the telic (serious) metamotivational states created opposing perceptions (Apter, 2001) of which students were viewed as "...just a good fit, a good group of people" (paratelic) versus one in which "...their energy is really flat" (telic).

Adult educator 4 rated her teaching competence externally, commenting that she was unaware of how well the teaching session was until after receiving some feedback. Only then could she make a critique of her competence. According to reversal theory, adult educator 4 (paratelic dominant) was in a protective frame, which occurs only in the paratelic state (Apter, 1992; 2001). She experienced all three protective frames (i.e., the confidence frame, the safety

frame and the detachment frame. The detachment frame, according to Apter, is an externalisation process when one becomes a mere observer of the process.

### *Equilibrium*

#### *Motivated reasoning and social desirability of others.*

Adult educators spoke about gaining and maintaining equilibrium in their teaching experience. Several adult educators reported a teaching goal that required some degree of flexibility on their part (see Goals in Metamotivational State Interview Coding Schedule in Appendix F). For example, adult educator 10 (overall telic dominant) described "...an attempt to consistently balance the teaching session". He aimed to "...have the atmosphere in which the students could freely discuss" therefore being spontaneous through no structure, enjoying the conversation and discussion as it may fall (paratelic). Yet he wanted a teaching experience in which he "...could contribute to the class learning", keeping the lesson serious by focussing on the 'end-result' of a specific plan (telic).

However, adult educator 7 (overall telic dominant) specifically stated, "being flexible" and "to be more flexible" were his teaching goals, even though, he was telic dominant in every way. In essence, he was describing a paratelic state as his aim even though he did not actually operate in the paratelic.

Adult educator 7 was not spontaneous, as being in the paratelic state suggests. Rather, the contingent event of *planning* to be spontaneous actually created a telic metamotivational state. Reversal theory defines 'planning' as a descriptor of being telic (Apter, 1994; Wilson et al, 1996; 1997).

Possible motivated reasoning was demonstrated by these two adult educators (i.e., 7 and 10), as Kunda (2000) described. Kunda suggested that people gather conclusions they

want, and they often rely on a biased set of cognitive processes to re-create their strategies used for accessing, constructing, and evaluating beliefs. This phenomenon can be referred to one acquiring the social desirability of others, which is : (a) the need of an individual to respond in a culturally appropriate and acceptable manner to gain social approval or avoid negative evaluation, (b) the tendency to deny socially undesirable traits while claiming socially desirable ones, and (c) the tendency to protect one's self-esteem from ego threat (Weinberger et al., 1979).

*Proactive and reactive.*

The current researcher's concept of being proactively telic was demonstrated when adult educators set the teaching structure and enforced the boundaries of the learning goals and lesson plan. For example, adult educator 2 (overall telic dominant) was conscious of his plan to overcome incidents of confrontation by the so-called "devil's advocate" student in class. Adult educator 2 demonstrates a proactive approach to coping with his frustration (i.e., an inducing/change agent), and maintaining his control of the lesson plan. Adult educator 2 was putting in an increased amount of effort in handling these students, which Apter (2001) suggests could become a source of effort-stress (see Operational Definitions).

Adult educator 2 proactively dealt with the frustrating students to save time and to get back to the lesson plan for the group. As previously mentioned, it helped him to cope when he perceived these situations as necessary challenges for better learning.

The current researcher's concept of being reactively telic was demonstrated when adult educators' reacted to the students' responses to the structure. This reactivity was frequently perceived by adult educators as being spontaneous because it was perceived as going with the flow, and staying in the moment.

For example, adult educator 7 (overall telic dominant) stated: “(I’ve) planned and organised and (am) heading towards those objectives. Uh, I think in that case, what I, I get a feeling that their time’s out, I’ll put it back to the adults in the group basically, ‘This is where we are at, this is where we spent our time...what’s the best use of your time. Here are three options, for example, A, B and C. We only have time for two. You tell me.’ I’ll bounce it back again and get them to decide.”

This example demonstrated why it is difficult to be proactively paratelic, because essentially it is being telic (and not paratelic). This adult educator perceived that he was being spontaneous and flexible, but according to his description, he planned it out step-by-step and maintained control through the students’ decision-making process.

Paratelic dominant adult educators were willing “...to toss the lesson plan...” as adult educator 5 (paratelic dominant and paratelic situational state balance) described. The four adult educators who had shifts into a paratelic situational state balance utilised self-forgetting (Fontana, 1988). Adult educators in the paratelic state revealed in their interviews a sense of flow in their experience of “being student-centred”. Flow is essentially a characteristic of peak performance (Csikszentmihalyi, 1975).

Each adult educator, as they self-reported, frequently coped with their inducing/change agent and promptly returned to their “place of familiarity” (or, their preferred metamotivational state; Apter, 2001). Returning to one’s telic/paratelic situational state balance represents equilibrium within the teaching process. A sense of balance results in better coping and therefore, more effective teaching.

Evidence from each of the ten adult educators revealed in their own words and terms that both telic and paratelic states are appropriate for self-perceived teaching competence.

Adult educators in the paratelic state indicated their ability to focus on the students' needs at the moment. However, few adult educators could maintain playfulness (paratelic) as inducing/change agents created seriousness (telic). As reported in interviews, effort increased with the serious mode of the telic state.

### *Research Question 3*

Does movement toward: (1) a preferred telic/paratelic situational state balance (in a teaching mode), and (2) performance state self-esteem relate to an increase in self-perceived teaching competence?

For each adult educator, their telic/paratelic situational state balance (or ideal state) in a teaching mode matched up with their *more* competent teaching session. Kerr (1997a) stated that from his metamotivational research on performers, successful performers tend to be more able than less successful performers to achieve and maintain their ideal state when performing. The current investigation found that those who perceived their performance to be successful, having rated themselves high in perceived competence, tended to reach their ideal telic/paratelic situational state balance and maintain that level of perceived performance. This means that their lability, or their metamotivational range, appeared to be more evident throughout their teaching experiences.

Also, each adult educator (either quantitatively and/or qualitatively) identified inducing/change agents, as described in reversal theory by Apter (2001) in their teaching sessions. Explanations in interviews mostly described a metamotivational shift from the paratelic to the telic state. The most prevalent concerns of the adult educators shifting states and experiencing less competent teaching sessions came from: (1) general comments of decreased

hedonic tone through frustration; and, (2) contingent events created by issues with a student (e.g., student playing devil's advocate) in the teaching session.

In the interviews, adult educators, revealing an awareness of perceived less competence, described one of the three inducing/change agents (i.e., frustration, satiation or a contingent event) as initiating a metamotivational state shift from the paratelic state to the telic state. In turn, these state shifts reflected their perceived teaching competence. More specifically, shifting from *playful to serious* were the most frequently self-reported metamotivational shifts (as opposed to *spontaneous to planned*). When confronted with inducing/change agents while teaching, the adult educators shifted to the telic state in times of distress and lowered hedonic tone, despite the adult educator's overall dominant state or telic/paratelic situational state balance.

Adult educator 10 (telic dominant with a telic situational state balance) had a preference for low arousal. While teaching, he aimed to maintain a flow by focussing on the students and the atmosphere of the moment. However, he expressed his concern of "going off on tangents" and described a less competent teaching session as: "...it felt flat, or...it felt all one-way...all coming from me, um, not stirring, creating interaction and interest." As he ruminated about "just-made" mistakes, he would self-justify, hoping to avoid stress. The "uncontrollable rumination", as he explained in his interview, actually increased his stress. He stated that it caused him to lose contact with the class, because the inappropriate focus leading to increased stress would keep him too serious while teaching. As he reported, this type of situation of not having some flexibility and being in the moment with the students decreased his perceived teaching competence.

Adult educators discussed their stressors, frequently describing an automatic shift into seriousness, intensity and the like, which were all descriptors of the telic state (Apter, 2001).

Some often believed in their ability to cope by consciously self-creating a shift to a more appropriate (or successful) state. A high self-efficacy or belief in one's ability to perform, as described by Bandura (1982), might be a contributing factor to creating one's own contingency.

For example, adult educator 4 (paratelic dominant with a telic situational state balance) expressed the process of creating a contingent event and implementing a shift to a more appropriate teaching state. She explained: "I guess (it's) trying to find another focus to get me stimulated. ...I really didn't look forward to coming to, in fact I dreaded some mornings having to face these people. ...That became a challenge in itself. So I've got to...to get stimulated into the work." She continued: "Otherwise...I can't really have an optimal performance. I can get through it, but I can't (always) find the best possible way. So if I think about being...in the best possible state, then I need some sort of a, a challenge for myself for that particular time..." (a descriptor of the telic state).

*Telic/Paratelic situational state balance in a teaching mode.*

In the interviews, adult educators emphasised frequently used descriptors of the paratelic state (i.e., spontaneous, flexible, and in the moment) to be their ideal teaching mode or state. Paratelic dominant adult educators, however, did not necessarily have a higher perceived teaching competence. Adult educators who were paratelic dominant (in their situational state balance) shifted more frequently between the telic and paratelic states than those who were telic dominant (in their situational state balance).

Each adult educator consistently connected his or her telic/paratelic situational state balance with self-perceptions of increased perceived teaching competence. Determining one's situational state balance in a teaching mode and observing how each adult educator had their

individual telic and paratelic shifts demonstrated the need for recognising intrapersonal differences.

Two adult educators (1 and 4) specifically had a telic/paratelic situational state balance opposite to their overall dominant metamotivational state. Both adult educators had increased perceived teaching competence when in their ideal telic/paratelic situational state balance. Both adult educators indicated a decrease in perceived teaching competence when they were not in their ideal telic/paratelic situational state balance.

Each adult educator had specific issues contributing to shifts in their perceived teaching competence. These indicators consisted of: (1) a shift from their overall dominant state to their telic/paratelic situational state balance in a teaching mode; and/or, (2) shifts in the telic and paratelic state in the teaching session caused by inducing/change agents.

Most of the adult educators reported an awareness of differences between competent and less competent teaching sessions. Adult educators 1, 6, and 9 self-reported (in questionnaires) little awareness of changes in their perceived teaching competence. In a study by Kerr (1997a), when the psychological characteristics of successful performers were examined, it was found that the pattern was one of stability and little change. Despite the current study not examining actual performance, but rather perceived competence, the lack of awareness in conjunction with minimal lability might possibly reflect actual performance success. It therefore cannot be inferred that a lack of awareness is unproductive or negative. For example, adult educator 6 stated: "I am pretty good these days at blocking out everything else in the world...like if I am not on top of things..." Adult educator 9 stated: "...I recognise just how much I have to offer them myself in terms of my understanding of human nature and the dynamics between human beings... But I am very strong in that area."

Nevertheless, these “stable” adult educators (1, 6, and 9) identified their telic/paratelic situational state balance (through the TSM and the MSICS) by revealing their most frequented state while in the teaching mode. In the metamotivational state coding of the teaching sessions of adult educators 1, 5, 8, and 9, a shift occurred in the perceived less competent teaching sessions out of the paratelic situational state balance into the telic state. For example, adult educator 1 stated: “...and if they, they, they just don’t want to be there, or ‘when is this finishing?’ ‘I just don’t want to do this!’ uh, you know, or just when they tune out and they just don’t want to listen, that’s when I can’t ...can’t connect with them.” Adult educator 8 stated: “...I feel they are relying on me for their learning, and then it’s got to come out of my head and into theirs. But where I haven’t been able to create an environment where I can get them in groups or I can give them a simulation or I could give them something where they’ll get their own learning...where I have just facilitated that....That kind of feels like a pressure that I have to give them something.”

A major predictor of self-confidence is perceived readiness prior to performance, with the external environment contributing significantly (Parfitt, 1988). According to Parfitt, self-confidence and cognitive anxiety could be at times dissociated (for some performers). Determining one’s ideal metamotivational state of an adult educator at the onset of a teaching session might assist those adult educators most in control of their teaching environment. For example, adult educator 8 stated: “There are groups where if they come in a bit flat...I have to work harder because...they are kind of a bit flat and tired.”

#### *Research Question 4*

Does the method of applying qualitative, quantitative, and self-report (based on a grounded theory approach of observation and comparison) assist in the identification of intrapersonal shifts within an adult educator's self-perceived teaching competence?

#### *Methodology*

The method based on a grounded theory approach in conjunction with repeated measures and interviews to gather self-reported information demonstrated its value. The process of identifying an adult educator's perceptual shifts in teaching competence referred to specific experiences within the time of the study (i.e., *more competent* and *less competent* sessions). These experiences comprised the two coding units.

Adult educators, nevertheless, might reflect on important teaching experiences outside of the ten repeated measures. The value of the qualitative interview reveals the level of self-disclosure of affective states, which yields more precise information about the subject's motivation. The quantitative measures yield a self-pattern of change. This identification points out the potential for collating qualitative and quantitative data. The combined methodology provided reinforcement and increased insight for subjects.

Hackfort et al. (1989) believed that behavioural indicators of anxiety present distinctive problems in performance-related studies. They stated that because it can be quite difficult to distinguish between anxious behaviour and coping behaviour, observation methods become useful only in conjunction with self-statements and self-reports. This implies an intrapersonal data collection process.

As performers perceive anxiety differently, anxiety needs to be measured both qualitatively and quantitatively (Jones et al., 1997). The current study supports the observations of both Hackfort et al. (1989) and Jones et al. (1997).

*Reversal theory.*

The current investigation utilised both quantitative and qualitative methods to intrapersonally and metamotivationally analyse perceived performance. Reversal theory, being about the structure of experience, focused on a phenomenological approach. The theory emphasises the way in which motivation is fundamental to and pervasive in experience. Data was gathered through a continual internal context. Each adult educator's perceptions, thoughts, and actions were highlighted within the vast realm of experience sampling. Personality in the current study was viewed through 10 examples of intrapersonal change rather than interpersonal differences.

*Intrapersonal differences.*

The multi-dimensional approach proved to be important in the current investigation, due to the intrapersonal differences an adult educator experiences while teaching. Quantitatively, perceived teaching competence levels and possible metamotivational shifts were consistently reported in the adult educators' state measures. Qualitatively, the coded metamotivational episodes of perceived competent and less competent teaching sessions provided some possible explanations (e.g., goals and inducing/change agents) for these perceived differences.

The interview in the current study assisted the understanding of an adult educator's (achievement) behaviour. As Maehr et al. (1980) explained, success and failure are psychological states based upon the interpretation of the effectiveness of one's intrapersonal achievement striving. They stated that performance outcome is interpreted as successful when

the achievement striving is seen to reflect desirable qualities of the self, and the outcome is viewed as a failure when it is seen to reflect undesirable attributes of the self. Successful and unsuccessful processes of performance were revealed with each adult educator.

To simply average mood states across subjects (i.e., inter-group comparisons), according to Prapavessis et al. (1992), fails to control for individual reactions to a given level of mood or pattern of mood change. He pointed out that moods need to be examined in relation to intra-subject variations. The current investigation is supportive of Prapavessis et al. (1992).

### *Self-Report*

Self-reported moods, as reported by Barret (1996), represented a reliable method of observing conscious, subjective emotional experience. Self-report measures, as Barret emphasised, are the only way to access aspects of emotional experience occurring outside the laboratory in the context of people's daily lives (e.g., Feldman, 1995a; Larsen, 1987; Oatly & Duncan, 1994; Penner, Shiffman, Paty, & Fritzsche, 1994). The current study supports the work of Barret (1996) and all the aforementioned studies.

Regarding more specific issues of the self-reporting process, personal competence is made up of self-awareness and self-management (Goleman, 2002). Of these, Goleman stated that self-awareness is having the capability to self-assess, and that accurate self-assessment is "...knowing one's strengths and limits" (p. 39). He also stated that self-confidence is a sound sense of one's capabilities, as demonstrated in the quotes by adult educators 1 and 9, but not demonstrated by adult educator 6 (see examples below).

### *Affinity-seeking constructs.*

In addition, self-involvement (oppositional to self-forgetting) has been identified as being related to various situational contingencies through affinity-seeking constructs (Bell, et al., 1984).

Self-involvement is a form of self-generated focus. According to Gratch (2001), this happens when an individual attempts to regulate his or her own self-esteem. Adult educators 1 and 9 (both with a paratelic situational state balance) did not experience flow that comes out of self-forgetting and a tendency to be unaware of self, as described in reversal theory by Fontana (1988), but rather put forth a picture of self-involvement described by Gratch (i.e., self-generated focus).

Adult educator 1 (telic dominant and paratelic situational state balance) stated: "I can go into a teaching session and I don't really prepare it because I am thoroughly prepared. Because I have been doing it for so long, I've got the best resources."

Adult educator 9 (telic/paratelic dominant and paratelic situational state balance) stated: "I recognise just how much I have to offer them myself in terms of my understanding of human nature and the dynamics between human beings, and it's always the proviso of what I know you could write on the head of a pin. But I am very strong in that area, and I am getting stronger and stronger as I grow older. ...I experience myself of making myself available in ways that it has become the truth of the person. So it's not the empty vessel thing. ...It's that I am skilled in allowing my students to discover. And then it's filling in the pieces that they are not able to articulate about their discovery. ...I actually thought that most of my classes were 5's."

Adult educator 6 (overall telic dominant) had a different circumstance in that she was unaware of subtle changes within her experience. She demonstrated a lack of awareness at the onset of the interview stating that "... (t)en sessions was just too many, because after about the fifth or sixth session, I found that I was just writing the same thing every time anyway." (This comment was noted at the outset of the interview as a response to the initial query regarding the subject's general overall experience of participation in the study.) Adult educator 6's results

showed only a slight lability as described in reversal theory by Apter (2001) (i.e., how easily and readily people reverse between states). This was overgeneralised in her perception of reporting little change in her teaching experience. Telic/paratelic situational state balance and overall state dominance appeared to be constant for this adult educator.

*Teaching experience.*

Adult educator 8 (paratelic dominant and paratelic situational state balance) had considerably fewer years of teaching experience (in comparison to adult educators 5 and 7). This may have influenced the degree of awareness of her telic/paratelic situational state balance. Adult educators 5 and 7 noted arousal differences *before* class while adult educator 8 only reported differences of arousal levels and teaching competence *after* class. The awareness of arousal levels became evident through the self-report questionnaires, but not within the interview process.

### *Culminating Observations*

#### *Concluding Findings*

##### *Limitations.*

In this study, some adult educators denied any teaching experience of lesser competence. For the majority, however, self-awareness was demonstrated in the form of objectively viewing oneself with responsibility and ownership of one's strengths and weaknesses (Goleman, 2002).

As this study separately measured perceptions of competent and less competent teaching sessions, self-awareness as described by Goleman (2002) was essential for the adult educators' demonstration of accurate self-ratings. Seven out of the 10 adult educators showed significant correlations of psychological variables with self-perceived teaching competence.

There are several possible explanations for three of the adult educators not demonstrating any significant shifts in the telic and paratelic states (i.e., the means-ends domain) and/or differences in their teaching competence. Reversal theory discusses two issues that affect one's perceptions: (1) lability and (2) salience.

Lability, or being labile, is about how easily and readily people reverse states (e.g., telic to paratelic to telic) (Apter, 2001). When the psychological characteristics of successful performers were examined in Kerr's (1997a) study, as previously mentioned, it was found that the pattern was one of stability and little change, which could be the case with any of the adult educators in this study. However, as the current study looked at self-perceived competence, and not actual performance success, it is vital to investigate other possibilities.

For example, adult educator 6 commented at the outset of the interview that half way through the teaching term (and consequently the 10 episodes of state questionnaires), she

realised each question was being answered with virtually the same response. This particular adult educator expressed confusion about the repetition of answering the state measure forms. The lability of this particular adult educator at least in the 10 measured sessions appears to be minimal.

In the current investigation, three adult educators demonstrated that telic and paratelic metamotivational shifts were infrequently focal in their teaching experience. Saliency, as discussed in reversal theory (Apter, 2001), implies that the means-ends domain may not be crucial in every adult educator's awareness (or focal point). It appears from this study that most adult educators emphasise the telic and paratelic states. The means-ends domain has been found to be the most salient domain of the four domains for the most people, as reviewed by Apter (2001).

Adult educators 1, 6, and 9's saliency, or focal point, appears to be about the relationship domain and possibly self-esteem issues. This possibility is presumed due to these three adult educator's demonstrated social desirability (Carstensen et al., 1983) and possible vulnerability to others (Crowley, 1999). They have a high self-evaluation combined with a high vulnerability to others, (not unlike Crowley's second quadrant). Crowley stated that a high vulnerability to others could be seen as detrimental to one's self-esteem, while a low vulnerability to others may be conducive to a higher self-esteem.

For example, adult educator 9, in her perceived less competent session, stated that "...the self-valuing has to be higher in that teaching session than elsewhere." As she explained, in that instance she is aware of her "self-soothing tendencies". Also, adult educator 9 when commenting on a perceived competent teaching session stated, "...as I hear myself I recognise just how much I have to offer them. .... People say 'That was amazing. That was the best

thing that ever happened to me.’ The feedback is absolutely enormous. And it’s not flattery. You can see that it was.” For this particular adult educator, this is her perception of what the students are perceiving. Her self-reported emotions are primarily determined by her social desirability concerns (Carstensen et al., 1983) and her vulnerability to others (Crowley, 1999).

Paradoxically, these three adult educators demonstrated a consistently high performance state self-esteem. Positive motives drive people with high self-esteem. “In individuals with low self-esteem, the desire to promote a positive self-image conflicts with the need to protect a negative self-view from change” (Brown, 1993, p. 117). Brown maintained that:

...motivational ambivalence might underlie the conservatism of people with low self-esteem. (They are) caught between an affectively based desire to enhance feelings of self-worth and a cognitively based need to maintain their existing self-conceptions (p.126).

#### *Hawthorne effect and Halo effect.*

The Hawthorne effect occurs when people work harder due to their participation in something new and special (Chaplin, 1985). The Hawthorne effect was evident in this study when adult educators reported their spontaneity. They reported that being spontaneous was representative of a highly skilled and competent adult educator. However, evidence (i.e., interview comments and statistical correlations) suggested that on many occasions they were not spontaneous or in the moment.

For example, adult educator 6 (overall telic dominant) claimed her spontaneity while teaching, but she did not demonstrate it. Her priority, as self-reported, was to focus on her plan. She said: “If I don’t have the blueprint, then I can’t be spontaneous.” Having her plan for

the teaching session reflected her telic dominance. In addition, as was reported in her interview, she “lost confidence” when her knowledge did not meet the demands of the students.

Adult educator 7 (overall telic dominant) reported that spontaneity was an ability that he has had to learn. His learned skill to “check in with the group” was his way to “make myself flexible.” For this telic dominant adult educator, this kind of flexibility was his way of experiencing the moment, being spontaneous, and student-centred.

With the Halo effect, it is the tendency for the investigator to rate individuals either too high or too low on the basis of one outstanding trait (Chaplin, 1985). The researcher avoided the Halo effect due to the qualitative design of this study. Coding the interviews with a co-rater assisted in this process.

Adult educators were informed of their (overall) dominant state. They were not made aware of any specific indicators within the evaluation process. The approach of the interview relied on open-ended questions, and adult educators were encouraged to speak freely in a conversational format.

Throughout the process of the current investigation, a connection between teaching experiences in relation to teaching competence was recorded. Despite being provided with the goal-orientation terms of telic and paratelic, adult educators were not informed of specific narrations and/or experience descriptions that would formulate a particular conclusion or rating.

#### *Insignificant variables.*

The current investigation identified the performance variables that are significantly related to adult educator’s perception of their teaching competence. Insignificant variables are identified for each adult educator, but the investigator does not include the reason(s) those variables are not related to teaching competence. The present study emphasises the question of “What?” as

opposed to answering the “Why?” The identification of significant performance variables was made according to quantitative observations and qualitative, metamotivationally coded comments, in order to reveal the adult educators’ perceptions of *what* influenced their teaching competence. The intended goals in conjunction with inducing/change agents, as described in reversal theory (Apter, 2001) were identified as primary influences (or effects) as they assisted in identifying any shift in one’s metamotivational state and/or self-perceived teaching competence.

### *Performance Issues within Self-Perceived Teaching Competence*

#### *Self-awareness and self-evaluation.*

Self-aware individuals tend to account for their own behaviour very much like outside observers do, by locating causality in themselves instead of in the environment (Forgas, 1992). Such a level of objective self-awareness is beneficial, as the individual is more likely to consider the possibility of change and adaptation in their personal skill and development.

In order to be in a telic state, it would require the individual to manifest a persistent tendency toward a “consciousness of self”. The telic-dominant individual does this with such consciousness constituting not only their current phenomenological state, but also potentially influencing the core constructs through which self-definition is obtained (i.e., “I am doing well” or “I am doing badly”) (Fontana, 1988).

In the paratelic state, the opposite is true (Fontana, 1988). An inference from the paratelic state is that the performer has an increased spatial awareness that allows for a more spontaneous response without interference from one’s cognitive awareness. Fontana stated that these individuals’ self-awareness is of a peripheral or retrospective kind, and it is a characteristic of the paratelic state that the individual shows a tendency towards self-forgetting.

The individual who has the ability to shift attention as the situation demands has a better opportunity to meet performance task demands (Nideffer, 1998). Elite performers are characterised by having more highly developed attentional control strategies (Mahoney et al., 1977; Mahoney et al., 1987). Adult educator 5 (paratelic dominant and paratelic situational state balance) is an example of someone utilising arousal management and coping techniques to shift attention prior to a teaching session and to focus on the students in the moment.

According to Morgan et al. (1988) and Sommers (1984), positive moods are more desirable than negative moods. An individual may select certain words to describe their experience because they are similar in desirability rather than because they are similar in hedonic tone (Fisher et al., 1985). For example, adult educator 3 described her preferred state while teaching to be “exhilarating.” She did not like when she felt “anxiety” while teaching. Being considerably distant moods, this choice of words was questioned, and it was revealed that this adult educator maintained a focus on achieving exhilaration, because it helped her validate her experience.

This study revealed that recently discovered information about an adult educator’s teaching style and perceived teaching competence can become readily available to the adult educator when the collected information has been accurately presented. However, a limitation of the methodology not previously considered was the possibility of subjects having a “blind spot” when self-critiquing. The notion of being unaware of self-competence and performance issues in teaching has not been considered. This is an area for future research.

In terms of evaluating oneself, social comparison, according to Wayment et al. (1995) states that self-esteem may contribute to one’s self-evaluation approach. They revealed that

individuals having low self-esteem use more social-comparison information and those with higher self-esteem tend to use more personal standards of information.

*Self-disclosure and social desirability.*

DeVito (1998) demonstrated how individuals who have a high self-esteem most often self-disclose more than those who are lower in self-esteem. As McCroskey, et al. (1976) explained, the tendency for this difference is that those higher in self-confidence take more risks with self-disclosure. Rosenfeld (1979) pointed out that a major reason for not self-disclosing is the fear of projecting an unfavourable image. Perhaps for those individuals who self-disclose for the sake of having social desirability, there is a tendency to self-disclose what would be deemed acceptable.

For example, adult educator 5 went into lengthy descriptions of what pre-performance routine she undertakes if she is not feeling in balance physically, mentally, or emotionally prior to teaching. On the other hand, adult educator 8 stayed within the question-answer framework, despite the open-ended questions asked by the interviewer. In these interviews, the adult educator provided answers to questions, but did not extend herself. Interestingly, adult educator 8 stated in her interview: "I prefer that I facilitate the learning, but I don't want to give them the answers." This response may reflect her preference for limited self-disclosure.

The current investigation reveals that the means-ends domain is not salient for each adult educator's teaching experience. Despite the emphasis of the telic-paratelic states in this study, adult educators 1, 6, and 9 indicated in their interview that another pair of states, the autic-alloic mode (or the relationship to self vs. other), has a high salience for them, as was supported in their "Apter Motivational Style Profile".

Goal orientation appears not to be the main focus while teaching for adult educators 1, 6 and 9, in particular. Perceived competence appears to be linked with their social desirability, which was not part of the performance variables measured in the correlation matrix or part of the coded interviewing. This could partially explain a lack of significant relationships in the Spearman's Correlation, because the study did not focus on the autic-alloic or social desirability concerns. Despite not investigating social desirability per se in the interview, it surfaces in the language of these three adult educators. (See Appendix H for interview transcripts on adult educators 1, 6, and 9.)

As pointed out by Carstensen et al., (1983), Weinberger et al., (1979), Hochschild, (1979), and Kemper (1978), in the social desirability research there is the potential of creating a circular feedback loop between adult educator needs and student needs. This circularity links educator and student to a series of needful responses to boost each individual's self-esteem. The interactive and experiential process of adult learning lends itself to potential social desirability needs connected to one's perceived competence.

*Protective frames.*

Some adult educators protected themselves against self-evaluated weaknesses either through their lack of awareness to their teaching competence or their inability to self-critique. Protective frames, according to reversal theory, make it possible for the high arousal associated with risk behaviour to be experienced in the paratelic state as pleasant excitement rather than anxiety (Apter, 1992).

Two protective frames that reversal theory discusses (Apter, 1992, 2001) explain what some adult educators might be experiencing in the paratelic state. Firstly, the "confidence frame" provides feelings of safety in the face of risk through confidence in one's skills. Adult

educators are risk-takers and make themselves visible through their teaching (e.g., displaying knowledge and leading a group).

Two adult educators (1 and 9), both telic dominant, were paratelic in their situational state balance in a teaching mode. They displayed a consistently high performance state self-esteem and had no indication of a shift in self-perceived teaching competence. The only indication of perceived *less* teaching competence was that they shifted into the telic state, a seriousness that was described in their interview. Once out of the paratelic state, they were no longer in the confidence frame. Any drop in confidence in their teaching skills was not acknowledged by the educator.

Secondly, the detachment frame provides feelings of safety in that one becomes merely an observer (Apter, 1992). Adult educators, depending on their teaching approach, can step aside in the classroom, putting the emphasis on the students, even to the extent of abandoning self-responsibility for their learning (e.g., adult educators 4, 7, and 8).

### *Suggestions for Future Research*

The current investigation provided an awareness of reversal theory processes while teaching. Apter (2001) stated that there is a need "... to develop specific techniques that would allow people to come more into control of their own reversal processes" (p.306).

The current investigation also demonstrated instances when arousal discrepancy and performance state self-esteem affected perceived teaching competence. Further research on the relationship between performance state self-esteem and arousal discrepancy appears to be needed. In connection to this need, Iso-Ahola and Graefe (1989) noted "...to increase self-esteem, programs should be planned so that they facilitate the acquisition of new skills or advancement to a higher level of skill in a familiar activity" (p. 32).

The current investigation considered the notion that throughout the process of identifying one's telic/paratelic situational state balance, an awareness of preferences might be developed. In turn, a performer's increasing knowledge of their shifts or reversals will subsequently identify the specific role that metamotivational states contribute toward increased or decreased competence.

The self-report application in this study was an established method of identifying issues and influential indicators of an adult educator's teaching experience and self-perceived teaching competence. A recommendation to continue this process by identifying an adult educator's self-patterns, in which all of the metamotivational bipolar modes found in reversal theory are included, seems valuable.

Another suggestion by Barret (1996) would be to assess moods in conjunction with a performer's cognitions. This would reveal not only shifts in their states, but also contribute to what moods and/or cognitions influence perceptions of competence.

Other suggestions include research into self-forgetting skills. Fontana (1988) stated that self-forgetting might actually enhance performance. This is an area requiring further in-depth research, especially in teaching. Also, the current study indicated the notion of being *proactively* telic and/or paratelic, as well as the possibility of being *reactively* telic and/or paratelic. Additional research into these two extremes of style and performance also appears appropriate.

Observing the social desirability interaction of adult educators/teachers and students is another area that seems to hold promise. An investigation on self-disclosure between teachers and students could include metamotives (i.e., modes that organise and interpret motivation) within the classroom and/or outside the classroom. Finally, an investigation into the effects of

being in an autic or alloic mode on the teacher-student relationship and its possible influence on a student's perceived learning and/or a teacher's perceived competence surfaced as a possible research direction.

The current investigation identified several performance variables affecting 10 adult educator's perceived competence. Insignificant variables were identified for each adult educator. Future studies might investigate the "why" of performance variables and self-perceived teaching competence in addition to the "what".

Additional components in the performance psychology literature, such as confidence, self-efficacy, stress, anxiety, motivation, flow, and issues pertaining to the self were supportive influences in the current research study on self-perceived teaching competence. Examination of these performance variables from an intrapersonal perspective is lacking in the "teaching" literature.

### *Concluding Remarks*

Performance psychology has focused on the mean-ends domain more exclusively, because of the primary issues of arousal and goal setting. Interactive teaching, as observed in the current study involves a diversity of skills, such as communication and interaction with others and the intrapersonal nature of the psychology of performance. An important finding of this study is that individual variables and their effects on the performer need to be measured intrapersonally before making any generalisations about effect.

Apter (2001) stated that it is helpful to know in such an area as (school) teaching which particular skills and/or states contribute to a better performance. A method of defining intrapersonal differences between telic and paratelic states has been trialed in this investigation. Through the application of reversal theory, the current investigation identified influences of

metamotivational shifts in the means-ends domain and the telic/paratelic situational state balance toward self-perceived teaching competence. This particular type of study is potentially useful to the advancement of intrapersonal awareness/growth and performance psychology.

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## Appendix A

**APTER MOTIVATIONAL STYLE PROFILE**  
**(Copyright, Apter International, 1999a)**

---

**Name/ID#:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Teachings**

Decide for each of the following descriptive phrases how far it applies to you. To respond, take the answer sheet and indicate one choice for each phrase by ticking under the appropriate description. Please do this for the whole list of 40 phrases, making sure that you have responded to each one with a single choice. Note that you are asked to make judgment about *how often* you experience something.

Try not to allow your feelings at this moment to sway your judgment, but make an estimate based on how you experience things in general. There are, of course, no right or wrong answers. Please try to be as careful and accurate as possible.

---

- |   |  |
|---|--|
| <p>1. I like to break rules.</p> <p>2. I like to feel powerful.</p> <p>3. I help others to succeed.</p> <p>4. I have fun.</p> <p>5. I care what happens to others.</p> <p>6. I do things that I consider important.</p> <p>7. I show belief in someone else's abilities.</p> <p>8. I like to be attractive to others.</p> <p>9. I attempt to fit in with others.</p> <p>10. I act in a contrary fashion.</p> <p>11. I relish competing with others.</p> <p>12. I like to play by the rules.</p> <p>13. I like to be liked.</p> <p>14. I am a good friend.</p> <p>15. I take a long-term perspective.</p> <p>16. I help others to achieve things</p> <p>17. I enjoy myself.</p> <p>18. I give to those in need.</p> <p>19. I work for long-term goals.</p> <p>20. I enjoy defying authority.</p> | <p>21. I look for responsibility.</p> <p>22. I help others believe in themselves.</p> <p>23. I avoid annoying others.</p> <p>24. I aim to be kind to others.</p> <p>25. I act spontaneously.</p> <p>26. I worry about whether others like me.</p> <p>27. I plan ahead.</p> <p>28. I like to be in control of things.</p> <p>29. I want to do things that are prohibited.</p> <p>30. I encourage someone else to do better.</p> <p>31. I behave impulsively.</p> <p>32. I hate to feel unpopular.</p> <p>33. I try to avoid "making waves."</p> <p>34. I ask myself whether I am making progress.</p> <p>35. I try to act assertively.</p> <p>36. I do what I want to do at this moment</p> <p>37. I aim to be considerate of others.</p> <p>38. I enjoy giving presents.</p> <p>39. I feel rebellious.</p> <p>40. I welcome attention from others.</p> |
|---|--|

Answers: Never, Seldom, Sometimes, Often, Very Often, Always

*Appendix B***PARATELIC DOMINANCE SCALE****(Cook, M.R., & Gerkovich, M.M., 1993)**

Name/ID#: \_\_\_\_\_ Date: \_\_\_\_\_

Here are some statements that describe different characteristics of people. Please read each statement carefully and decide whether the statement is TRUE (T) or FALSE (F) as it applies to you. Then indicate your decision by putting a T or F in the space provided.

- \_\_\_ 1. I think we should let the future look after itself.
- \_\_\_ 2. I usually make a decision based on my long-term goals.
- \_\_\_ 3. I have long-term life ambitions.
- \_\_\_ 4. I regularly think of the future.
- \_\_\_ 5. If I have some extra time, I prefer to spend it accomplishing something important.
- \_\_\_ 6. I often take risks.
- \_\_\_ 7. I usually make decisions based on the way I feel at the time.
- \_\_\_ 8. I like being in unpredictable situations.
- \_\_\_ 9. I usually do things just for fun.
- \_\_\_ 10. I generally do not take anything too seriously.
- \_\_\_ 11. I am an adventurous sort of person.
- \_\_\_ 12. I usually enjoy thinking about my long-term goals.
- \_\_\_ 13. I almost never like to take chances.

-PLEASE CONTINUE ON NEXT PAGE-



-page 2-

- \_\_\_ 14. I usually like to have peace and quiet.
- \_\_\_ 15. I am serious-minded.
- \_\_\_ 16. Usually my leisure activities have no specific purpose.
- \_\_\_ 17. I often do things just for excitement.
- \_\_\_ 18. I like to take each day as it comes.
- \_\_\_ 19. I usually take life seriously.
- \_\_\_ 20. I think it is important to plan for the future.
- \_\_\_ 21. I prefer leisure activities that have a serious purpose.
- \_\_\_ 22. I seldom make long-term plans.
- \_\_\_ 23. I prefer my life to be predictable and orderly.
- \_\_\_ 24. I prefer a peaceful, quiet environment.
- \_\_\_ 25. I make decisions based on what I expect my future needs to be.
- \_\_\_ 26. In my free time, I prefer activities with no serious purpose.
- \_\_\_ 27. I would rather think about the present than the future.
- \_\_\_ 28. I prefer to go through life safely.
- \_\_\_ 29. I tend to be impulsive.
- \_\_\_ 30. I prefer to think in the long term.

## Appendix C

**TELIC STATE MEASURE (TSM)**

Name/ID#: \_\_\_\_\_

(Svebak, S. &amp; Murgatroyd, S., 1985)

Session # \_\_\_\_ Before

Please rate your feelings at this moment in terms of the following rating scales.  
Do this by circling a number.

-----  
----

1. Estimate here how playful or serious you feel.

Serious I-----I-----I-----I-----I Playful  
1 2 3 4 5 6

2. Estimate here how far you would prefer to plan ahead or to be spontaneous.

Ideal plan I-----I-----I-----I-----I Ideal  
1 2 3 4 5 6 spontaneous

3. Estimate how aroused (“worked up”) you actually feel.

Low arousal I-----I-----I-----I-----I High arousal  
(not at all “worked up”) 1 2 3 4 5 6 (extremely “worked  
up”)

4. Estimate here the level of arousal how “worked up” you would like to feel.

Ideal low I-----I-----I-----I-----I Ideal high  
1 2 3 4 5 6

5. Estimate here how much effort you invested in the task.

Low effort I-----I-----I-----I-----I High effort  
1 2 3 4 5 6

**TELIC STATE MEASURE (TSM)**

Name/ID#: \_\_\_\_\_

(Svebak, S. &amp; Murgatroyd, S., 1985)

Session # \_\_\_\_\_ After

Please rate your feelings at this moment in terms of the following rating scales.  
Do this by circling a number.

-----  
----

1. Estimate here how playful or serious you feel.

Serious I-----I-----I-----I-----I Playful  
1 2 3 4 5 6

2. Estimate here how far you would prefer to plan ahead or to be spontaneous.

Ideal plan I-----I-----I-----I-----I Ideal  
1 2 3 4 5 6 spontaneous

3. Estimate how aroused (“worked up”) you actually feel.

Low arousal I-----I-----I-----I-----I High arousal  
(not at all “worked up”) 1 2 3 4 5 6 (extremely “worked up”)

4. Estimate here the level of arousal how “worked up” you would like to feel.

Ideal low I-----I-----I-----I-----I Ideal high  
1 2 3 4 5 6

5. Estimate here how much effort you invested in the task.

Low effort I-----I-----I-----I-----I High effort  
1 2 3 4 5 6

## Appendix D

**State Self-Esteem (performance) Scale****THE STATE SELF-ESTEEM SCALE (SSES)**

ID# \_\_\_\_\_

**(Heatherton, T. & Polivy, J., 1991)**

Session # \_\_\_\_ Before

*Note: The following seven items have been taken from the SSES and refer to performance factors.*

**Directions:** Decide for the following statements the degree of application to you.  
Circle your answer on the scale below each statement.

- 1...not at all  
2...a little bit  
3...somewhat  
4...very much  
5...extremely
- 
- 

1. I feel confident about my abilities.

1      2      3      4      5

2. I feel frustrated or rattled about my performance.

1      2      3      4      5

3. I feel that I am having trouble understanding things that I read.

1      2      3      4      5

4. I feel as smart as others.

1      2      3      4      5

5. I feel confident that I understand things.

1      2      3      4      5

6. I feel that I have less scholastic ability right now than others.

1      2      3      4      5

7. I feel like I am not doing well.

1      2      3      4      5

**State Self-Esteem (performance) Scale**

**THE STATE SELF-ESTEEM SCALE (SSES)**

**ID#** \_\_\_\_\_

**(Heatherton, T. & Polivy, J., 1991)**

**Session #** \_\_\_\_ **After**

*Note: The following seven items have been taken from the SSES and refer to performance factors.*

**Directions:** Decide for the following statements the degree of application to you.  
Circle your answer on the scale below each statement.

- 1...not at all  
2...a little bit  
3...somewhat  
4...very much  
5...extremely

-----  
----

1. I feel confident about my abilities.

1      2      3      4      5

2. I feel frustrated or rattled about my performance.

1      2      3      4      5

3. I feel that I am having trouble understanding things that I read.

1      2      3      4      5

4. I feel as smart as others.

1      2      3      4      5

5. I feel confident that I understand things.

1      2      3      4      5

6. I feel that I have less scholastic ability right now than others.

1      2      3      4      5

7.      I feel like I am not doing well.

1      2      3      4      5

*Appendix E***Self-Perceived Teaching Competence**

ID#: \_\_\_\_\_

Session #: \_\_\_\_\_

Date: \_\_\_\_\_ \ \_\_\_\_\_ \ **2001**

**Directions:** Answer the following question immediately following your class.

Circle the number which most accurately describes your current response.

-----  
 ----

**Question:** How do you rate your competency/performance level for the teaching session you have just completed?

**Scale:**

- 1 = extremely incompetent  
 2 = incompetent  
 3 = average  
 4 = competent  
 5 = extremely competent

**Note:** Circle only ONE of the following numbers:

**Incompetent    1    2    3    4    5    Competent**

**Thank you!**



*Appendix F***METAMOTIVATIONAL STATE INTERVIEW CODING SCHEDULE****(O'Connell, Cook, Gerkovich, & Potocky, 1991)**

ID: \_\_\_\_\_ Coding Unit: \_\_\_\_\_ Description: \_\_\_\_\_

I. Determine the goal: \_\_\_\_\_

II. Score the Telic/Paratelic Adjectives:

(1= barely identifiable, 2= present, but not strong, 3= both present and strong)

\_\_\_\_\_ Serious-minded

\_\_\_\_\_ Goal oriented

\_\_\_\_\_ Planning ahead

\_\_\_\_\_ Action has important consequences

\_\_\_\_\_ Trying to accomplish something

\_\_\_\_\_ Playful

\_\_\_\_\_ Spontaneous

\_\_\_\_\_ Sensation oriented

\_\_\_\_\_ Activity enjoyable in itself

III. Arousal Dimension: (check one)

1. Arousal Level: \_\_\_ Low \_\_\_ Medium \_\_\_ High

2. Hedonic Tone: \_\_\_ Pleasant \_\_\_ Unpleasant \_\_\_ Neutral \_\_\_ Can't code (CC)

Rate on scale of 1-3 (as above): \_\_\_ Bored \_\_\_ Excited \_\_\_ Calm \_\_\_ Anxious

IV. Final Coding Decision: Telic Paratelic

V. Rate the tension stress:

1= no tension stress, 2= little tension stress, 3= a great deal of tension stress, CC \_\_\_\_\_

*Appendix G***Interview Procedure and Note taking Form**

At the commencement of the interview, the investigator explains the definition of a state; and describes the telic and paratelic characteristics (Apter, 1997).

Only after these explanations and descriptions of terms is the subject informed of their ideal state of being (telic versus paratelic) which was identified according to their responses of the Motivational Style Profile and the Paratelic Dominance Scale.

Each subject is asked to describe their teaching experience describing their competent teaching in teaching session and moments of lesser competent teaching in class. The interviewer asks to clarify when necessary about unclear and/or superficial explanations. Scenarios about their teaching session are recorded, noting specific characteristics in relation to their experience. They are asked to provide feedback about teaching in their ideal state, their “unideal” state, a competent class, and a lesser competent class. If the adult educator discusses detailed teaching-related experiences (i.e., specific student examples), these details are not provided in the coding unit. Specific teaching session names and teaching facilities are also not identified in order to protect the identity of the adult educator.

Note: As the study is completed in Australia, the term ‘trainer’ must be used within the actual interview process in place of ‘adult educator’, as this term is the familiar and most frequently used in the sample of subjects in this study.

-1-

Name: \_\_\_\_\_ ID#: \_\_\_\_\_ Gender: M F Age: \_\_\_\_\_  
 Years of teaching experience: \_\_\_\_\_ Qualifications: \_\_\_\_\_  
 Preference: T P Date of Interview: \_\_\_\_\_

---



---

**Interview Criteria**

**I. Have them describe four scenarios (*if applicable*) about their class:**

Discuss characteristics in relation to their experience of what they were thinking, feeling, and doing?

An example (if they experienced it) in:

**1. Your ideal state:**

---



---

**2. Your nonideal state:**

---



---

**3. A competent/higher competent class:**

---



---

**4. An incompetent/lesser competent class:**

---



---

-2-

**II. Behavioural Descriptors of Arousal levels:**

**Description of their arousal levels in teaching:** \_\_\_\_\_

\_\_\_\_\_

**III. Lability and the adult educator's ability to shift between 'states of being' while teaching:**

**Cause of shift:**

\_\_\_\_\_

\_\_\_\_\_

**Ability to adjust:**

\_\_\_\_\_

\_\_\_\_\_

**PDS**

**Playfulness:**

\_\_\_\_\_

\_\_\_\_\_

**Spontaneous:**

\_\_\_\_\_

\_\_\_\_\_

**Arousal Seeking:**

\_\_\_\_\_

\_\_\_\_\_

-3-

**IV. Inducing/change agents (Satiation; Frustration; Contingent event)**

*How does it affect you?*

**1. Excitement:**

---

---

**2. Anxiety:**

---

---

**3. Boredom:**

---

---

**4. Relaxation:**

---

---

-4-

**V. Hedonic Tone**

**Pleasant:** \_\_\_\_\_

\_\_\_\_\_

**Unpleasant:**

\_\_\_\_\_

\_\_\_\_\_

**VI. Perceived Effort and Perceived Stress**

**Perceived Effort:**

\_\_\_\_\_

\_\_\_\_\_

**Perceived Stress:**

\_\_\_\_\_

\_\_\_\_\_

**VII. Flow:**

\_\_\_\_\_

\_\_\_\_\_

*Does it take you toward or further away from your ideal state?*     **T F**

*Does it affect your perceived teaching competence?*     **Y N**

**VIII. Self-esteem:**

\_\_\_\_\_

\_\_\_\_\_

**ADDITIONAL NOTES:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Interview Procedure

---

Explain the definition of a state; explain telic and paratelic characteristics; describe negative selves and positive selves reading positive selves only; read definition of frustration, satiation, and contingent event; define effort-stress and tension-stress (Apter, 1997).

### **I. Have them describe four scenarios (if applicable) about their class:**

(I will emphasise to them to discuss characteristics in relation to their experience.)

An example (if they experienced it) in:

1. their ideal state with a poor performance
2. their ideal state with a good performance
3. their unideal state with a poor performance
4. their unideal state with a good performance

With each scenario, I will ask:

What were you thinking?  
 What were you feeling?  
 What were you doing?

...in relation to...

How did it affect your behaviour?  
 How did it affect your perceived teaching competence?  
 How did it affect your self-esteem?

### **II. Behavioural descriptors**

Arousal levels:

Are you excited/bored when you teach?  
 What do you find exciting in teaching?  
 What do you find boring in teaching?

Are you anxious/relaxed when you teach?  
 What causes you to be anxious when you teach?  
 What causes you to be relaxed when you teach?

### **III. Lability and their ability to shift between states of being when performing**

The interviewee can respond to the following with Often, Sometimes, or Never

Do you shift appropriately between states of being?  
What may cause that shift for you?

Do you get frustrated while teaching?

Do you get satiated (bored) while teaching?

What is a contingency that causes you to shift?

What do you find exciting while teaching?

What do you find causes you anxiety while teaching?

What do find boring while teaching?

What creates relaxation for you while teaching?

With the above group of questions I will ask with each topic:

How do you respond to that?

How does it perhaps affect you effort?

Does it affect your (perceived) competence?

Do you instigate a shift through any kind of routine or ritual? If so, does it work for you?

### **IV: Hedonic Tone**

Give me a pleasant example when teaching.

Give me an unpleasant example when teaching.

### **V. Perceived Effort and Perceived Stress**

Interviewee can respond to these questions as High, Medium, or Low

How would you describe your perceived effort?

How would you describe your perceived stress?

### **VI. Flow**

Have you ever experienced 'flow' in a teaching scenario? Describe. Let me know if and when and how you experienced flow in these ten teaching session for this study?

### **VIII. Self-rating**

How confident were you in your self-rating (between 1...poor and 5 excellent)?

*Appendix H***Interview Transcripts of Coding Units**

At the onset of each interview, the interviewer describes telic and paratelic metamotivational states and briefly explains the differences between the two. Feedback is provided to the interviewee regarding the subject's preferences according to their results of the AMSP and the PDS. A standard coding unit is not in accordance to the response of a specific question, but rather a description of a certain type of experience. The interviewer asks the same questions for each interviewee and will elaborate and/or reframe ask any of the questions if necessary for the interviewee's comprehension of what is being asked. Further questioning may take place if an interviewee's answer is too brief, superficial, general, and/or off the matter of the topic at hand. The coding units sought in the interview are: (1) competent teaching session and (2) perceived lesser competent teaching session.

(Notes: #1: Interviewer is in italics and interviewee is in standard print. #2: *Hmm* or *HmmHmm* as spoken by the interviewer corresponds with a nod of the head. #3 (*BREAK*) indicates that the interviewer is taking a brief moment to write down some notes.

*Adult Educator 1*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*Tell me about your teaching experience.*

I am really organised in my teaching, so what I have got for every single subject that I teach is a file, and I've got that file for a subsequential sets of activities that I can dip into and out of depending on the needs of the group. And so while I teach in a very loose manner, it's very well planned, but not at the time, it's ahead of time. So I am working within a structure. So I had terrible trouble filling in the telic ...um...scalings.... It's planned at the nth degree, and yet it is planned to *be* spontaneous, and to meet the needs in the present of the people. And so it's like, 'Am I planned or am I spontaneous?'. I'm both! But...and, god, you know, it was like eniee, meniee, minie, mow...It's such a guessing game sometimes, because of that dimension of the way I teach.

*That's interesting.*

Hm...That's because I have got Type A personality.

*What...you associate that with being telic?*

I don't know...probably in that I am very organised.

*O.K.*

Um...And yet...um...It is organised so that I can be free!

*Yes. O.K.*

So I don't know how accurate some of my fillings-in are of the different sessions because I am planned or I am not planned.

*So you have that freedom within the structure. The structure gives you the freedom.*

Yes. It does!

*That's interesting.*

And it gives me the utmost creativity and room to respond to the needs of the people. So I can go into a teaching session and I don't really prepare it because I am thoroughly prepared. Because I have been doing it for so long, I've got the best resources. And I am very careful with my notes, and I've always got, um, handouts on file, so that I don't even have to go and prepare ahead, because, uh, I prepared at the end of the previous class, and I always make sure that I have enough handouts so that I can move which ever way I want to go.

*(BREAK)*

*I'd like to have you describe and to give me an example of your teaching when you are in your ideal arousal state....the way you like to feel.*

O.K., all right. So, what do I like to feel? I like to go into a class, and I like to have all of my notes there and prepared, which they normally are. And I'll, I will go in there, and I'll just...'cause I am fairly intuitive, I will start which ever way, and the rest of the teaching session becomes [a] performance. It's the way I teach because I am so skilled and so passionate about what I teach. And I go in there and I share my passion with the group, and I get them motivated and switched on, and, and warm them to what I am doing.

*O.K.*

And so I am normally, I have a high arousal and performance style.

*How would do describe the high arousal?*

High arousal? Intent...

*Yup.*

Assured. Uh, er...probably even flippant....just loose flowing...um, very quick, but also because I'm so well prepared, there's a lot of subtlety, so I am really looking at getting the subtlety and

because I am so lucid with it, I can get a subtlety of meaning across, particularly when I am teaching things that I am passionate about, such as assertion technique, or even report writing, because I am passionate about writing and getting writing skills across.

*(BREAK)*

So that's my role as an adult educator. My, my whole hidden agenda, not so hidden agenda, as an adult educator is to build people's self-confidence and self-esteem, and to, to build their competence.

*Yes, and how does that make you feel?*

Fantastic. I have done my role, my purpose in life.

*Hmm.*

I get my rocks off.

*Get your rocks off?*

Get my rocks off.

Exciting or what?

It's exciting...building people's self-esteem.

*Yeah.*

Feeling like I've had an impact on people's lives, and not just in the workplace, in their whole lives.

*That you've made a difference?*

That I've made a difference.

*Yeah.*

So when I've had a good class, I know I've made a difference, because I know that these people could take whatever skill it is and make a difference in their life.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*So when the students are, what I hear, are playing 'devil's advocate'...*

Um, Yes, yes...sometimes.

*That's something that will make you shift and feel...?*

Out of my state.

*That you are not in your state?*

Yes, exactly. Sometimes devil's advocate can really...

*Hmm.*

Not just devil's advocate. Sometimes it's devil's advocate, but generally I've got a comeback for devil's advocate. And sometimes I can get devil's advocate to work with me.

*O.K.?*

However, it's not just devil's advocate, but sometimes it's devils, devil's advocate.

*Do you have a coping strategy or...?*

Yes, because, I, I, I do my best to get the devil's advocate to work with me.

*O.K.*

I can't, not always.

*Hmm.Hmm.*

But I can. It's when someone, "I just don't want to be here."

*Hmm.*

When it's that!

*Hmm.Hmm.*

And when I am teaching [subject] or young men, and, uh, I, I um, and if they, they, they just don't want to be there, or when is this finishing, I just don't want to do this, uh, you know, or just when they tune out and they just don't want to listen, that's when I can't.

*When you can't what?*

Can't...connect with them.

*O.K.*

I need to connect.

*In order for what to happen?*

For, for, for myself to flow.

*Oh, O.K. That's great.*

Yeah.

*That really...*

Yeah, got to connect.

*...really wraps up your...*

Yeah. That's why I work so well with [subject] students, because they're really interested.

They, they are good communicators.

*Hmm.*

And they are willing to go back one step further, and look at, and, and go outside their square.

*Hmm.*

Because I, I'm taking people outside their squares quite often, not always, sometimes take people outside their squares, and a lot of times people don't want to go outside their squares, or a lot of times people just are not interested in learning a new technique.

*Hmm.*

I, I, I am here because I have to be. And it's the younger boys that I have the most trouble with. And just accept it that it's psychological issues for me as well.

(End of Adult Educator 1)

*Adult Educator 2*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*I would like to hear about your teaching, teaching experience.*

Well, for me it's an issue, it's an issue of goals and processing time. I, I have a view that in teaching, um, there is a mistake which is commonly made by adult educators, and that is which is commonly made by counsellors, and that is, they think about the process as being confidently important, but they forget that the process is only part of something that is the bigger picture...your goal.

*O.K.*

And I think one of the, one of the problems of teaching, and what adult educators debate is... 'emphasise the experience of the teaching, and that the students have a really good experience', but there's no point in the students having a good, a really good experience unless it's for a purpose.

*Hmm.*

And so, so I think that you are going to be a really good adult educator or a good counsellor, you going to have to break it down. You need to know precisely what you are doing and why you are doing it. And then you, the process that you had developed, you're going to develop a process to meet those goals. If you emphasise, the paratelic, or the process, there is a danger that you can go to far in that and you forget why you even have a process.

*Hmm.Hmm.*

So I believe very strongly that there are goals in teaching, if not, I would not be doing the teaching...

*Hmm. Hmm.*

Then, having, having vaguely and clear in your mind, you then develop a process which meets those goals.

*(BREAK)*

I was taught as a counsellor...

*Hmm.*

...and the emphasis in my teaching is process, and I was taught in Rogerian counselling...

*Hmm.*

I am very interested in process.

*Hmm.*

Probably more interested in process than most people would be. I am constantly looking at process, but when you say paratelic and telic, I have a problem with that distinction because in fact, I am very process-oriented, but I am also very process-oriented in terms of goals. So I see the two of them...

*Hmm. Hmm.*

I think if you are goal-oriented and you're not thinking about the process, you probably know why...

*Hmm. Hmm.*

But I think if you're thinking about process and you are not thinking about goals, you also know why. And I think what you have to do...you have to integrate the two of them.

*Well, you are shifting appropriately though?*

Yeah, all the time...yeah, all the time.

*Yeah? Yeah?*

Constantly. But I am always feeling out what I am trying to do.

*Hmm. So to me the way you describe the process is that you're really 'in the moment'. It sounds like you are organised for the class...*

Yeah.

*But you are 'in the moment' for the needs of the class?*

Oh yes. I am in the moment for the needs of the class...

*Hmm.*

Um, but it's a question of what the needs of the teaching session are as well. Because you can very easily go off on tangents...uh, it's very easy to get caught up in that sort of thing. Uh, the needs of the moment have to be determined to a certain extent to what you are trying to do.

*Hmm.*

In other words, you have to create a structure where the needs of the moment emerge which are going to meet the goals.

*Hmm.*

But the needs of the moment, the needs of the moment are not always the most important.

*Hmm. So would you say a competent session for you is when you are reflecting?*

Uh, I'd be constantly reflecting.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*So are there times when you don't reflect?*

No.

*You've been doing it so long?!*

Yeah, the reflection happens all the time.

*It's natural?*

Yeah.

*(BREAK)*

*I am looking at competence in teaching, so would that be a lesser competent session where perhaps...*

[Shakes head]...incompetence in sessions. The only reason that I am teaching, teaching in universities, is that, um, you are constantly learning...

*Hmm.*

And so I, uh, in teaching session I feel that at the end of the teaching session I have learned as much as the student, but I might have learned different things, But I've learned a lot.

*Hmm.Hmm.*

And uh, when I was a counsellor, I used to always feel that counselling other people, was really counselling yourself because you are dealing with your own issues all the time...

*Hmm.*

...rather than just counselling them, but in teaching you are doing...

*Hmm.*

Uh...there are certain thoughts of students I sometimes find difficult.

[Gives lengthy specific example of troublesome student.] He creates a shadow side. In other words, he will deliberately, um, ask difficult questions, or he will raise issues which are not relevant.

*Hmm.Hmm.*

And, um, I find it irritating because he gets in the way of the group, and it's, he's got...in other words he has his own neurotic needs and whatever they happen to be. And I find people like that can be frustrating because they get in the way of a lot of people's learning, and my learning, but they also take up a lot of time in the group because you've got to deal with them, and so tonight I know that there will be an issue with him at some stage, and so I am thinking this... I really don't need this in my life. Know what I mean? Umm...uh, so I find that frustrating, but I think that those people can be very difficult.

*Hmm.*

[Gives another similar example of a student.]

*Does that frustration or that contingency that comes in, uh, does that throw you off, or how do you cope; how do you get back?*

Uh, well I process it at the time, you know, I am reflective at the time.

*Hmm.Hmm.*

Uh, I am not sure that I won't handle that if it keeps coming back. They are not crumbling me or anything like that.

*Hmm.Hmm.*

Um, eh, I, I have, I have learned from experience to accept that. I don't, I don't know what to do in a situation, but I will think about it real carefully, and um, um, but I try to learn. So, I, I, I think I work harder. I have quite caught a professional, a learning edge, is that if you are a

professional, you have been through everything...In other words, you've been through really good classes and classes that have not gone so well.

*Hmm.Hmm.*

You have classes that the students are enthusiastic, and where they are not enthusiastic. There are classes where you are tired, and you just happen to go through the structure, maybe you're tired, and other days when they are. Uh, you have [unclear] students at some times. But that's O.K., because I think that the good professional goes through the whole spectrum.

*Hmm.Hmm.*

Um, You might only, um, you might only have it on occasion or once in a lifetime a particular incident.

*Hmm.Hmm.*

But it's happened.

*Hmm.Hmm.*

And what, if you're, again if you're a good professional, you, you will allow on things happening...you're looking, you're looking and saying, 'What can I learn about that?'

(End of Adult Educator 2)

*Adult Educator 3*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*Can you tell me, uh, what you refer to as an ideal teaching session where you would rate yourself as competent in these sessions that you've been doing?*

I relate it to the arousal, um, question...

*Hmm. Hmm.*

Feeling stimulated.

*Hmm.Hmm.*

I guess that's a combination of feeling good about the delivery of what I've done and getting positive feedback from the students that it's valuable.

*Hmm. O.K.*

I think if I didn't get feedback from the students, I probably wouldn't really have such a positive response to it...the competency, but the competency is based on the students giving feedback of what we have covered is valuable.

*O.K.*

And helpful.

*O.K.*

Hmm. [Nods.]

*And do you describe, when you say arousal, how would you describe that in terms of your ideal state?*

Ummmmm. Satisfied.

*How do you feel when you are satisfied with your teaching?*

Um.

*Maybe looking at how you are feeling, but also what you are thinking, um, physically, how you might feeling, your behaviour, what's your experience like when you are...?*

Feels exhilarated. I just get to that stage where it feels like a good performance.

*Hmm. Is that, uh, when you finish the class, when you know, as you say, you have a sense of achievement?...*

Hmm. Hmm.

*...or is that also during?...*

Also during. Yeah.

*...when you are performing?*

When I am performing. Yeah.

*O.K. All right.*

**Coding Unit: Perceived less competence; Description: Work-teaching**

*And can you tell me, uh, what might change that for you...that feeling of exhilaration?*

What would change that for me?

*Yes. Yes.*

I guess if it felt whatever I was doing fell flat on its face. The students didn't really pick up what

I was trying to get across. Or someone has difficulty in...

*Hmm.*

... not understanding it.

*O.K.*

I used to feel that way when I was challenged by students that wanted to be confrontational, but that doesn't affect me anymore.

*Doesn't affect you anymore?*

No.

*What's changed?*

I think it must be experience.

*Hmm.*

Understand it. I suppose experience with those students that usually are challenging and come across that way usually end up, uh, coming around...

*O.K.*

...to me at the end of the teaching session or the module.

*So it would, uh, maybe take away that exhilarating feeling?*

Yeah. It could do that.

*Yeah. (BREAK)*

*And once they start not understanding, then what happens to you in terms of your competence?*

I think my competence would be challenged.

*Hmm.*

In situations like that.

*O.K.*

But I think sometimes it also makes it twice as good.

*What do you mean by that?*

We'll focus more on, um, the goal of what the learning outcomes are, initially. You know, we begin the session with... and we make sure we complete it at the end. We'll go back and refind those...

(End of Adult Educator 3)

*Adult Educator 4*

Interview

**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*In terms of your teaching...how you would describe a competent class, what would you say for you?*

One in which the students left and I left feeling like we all got something out of the evening.

*Hmm.*

Out of the session.

*Yes.*

One where people have learned, have learned something practical like discovering something about themselves, felt safe and secure in the environment and they have fun.

*Hmm. Have fun? And what was the one before that? Safe and...?*

Safe and secure.

*O.K. So it is basically getting that feedback from your students?*

That would be a successful evening for me and for them...

*For you?*

...and I wouldn't always know if that has been achieved for them. And sometimes I don't know until the very end when I get the feedback sheets.

*O.K.*

...until I get that feedback. Sometimes I can tell by what's happening in the room, and sometimes I really don't know.

*O.K....so by what's happening in the room, verbally or non-verbally?*

Yeah.

*(BREAK)*

*So if the teaching session is functioning well, then you are feeling a sense of satisfaction?*

I think it's about that lack of control...like if it's gone well, I feel I can take credit for it...

*Hmm.*

...If it's not going so well, I put it under external variables.

*Hmm.Hmm.*

Like I can blame off things.

*(BREAK)*

But even sometimes when a teaching session is going well, it's not just me. It's...even though I like to take credit for it, it's just a good fit, a good group of people, and it's what they need that got them there, so it's, it's external patterns as well, yeah, but I like to take credit for it (laughs).

Yes.

I guess it's a combination of things.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*Looking at the opposite of that...*

Hmm.Hmm.

*What would you say, uh, is an incompetent or say, a less competent session?*

One of two things for me.

*Hmm.Hmm?*

Either it has been really theoretical...

*Hmm.*

And everybody is looking really bored and really overwhelmed by the material and really exhausted by the end of the evening, and everyone, their energy is really flat. So either that extreme or the extreme where we have done emotional process stuff and it has been unresolved.

*Hmm.*

Or, or people, somebody has been left or there has been some type of a conflict that hasn't been addressed, uh...both of those events have been very unsuccessful experiences for me.

*O.K. And so it must have been, that you would feel that through the students, it seems like.*

Yeah.

*Um...*

And I guess it's a little bit of a particular feeling that I have at the end of the night, about how...how complete things are left, and how, how satisfied I feel like about what matters.

*(BREAK)*

I had an experience this time around, and that was one of the classes that I wrote about afterwards...

*Yeah?*

That was a really interested teaching session because there was all this amazing processing happening within the teaching session itself, like there was this dynamic in the room and it was really uncomfortable to work with. So that became a cycle. So every exercise I did I could just focus on that, so...and it was a [name of class]...

*O.K., because I noticed you a couple times you put down a rating of 4. Maybe that was one of those incidences?*

Yes, I think it was that Thursday morning class.

Yes, O.K. All right. (Pause).

So, I guess trying to find another focus to get me stimulated, and it helped. And because I actually...if it's the few classes that we've talked about, I really didn't look forward to coming to, in fact I dreaded some mornings having to face these people...that became a challenge in itself. So I've got to just create a challenge for myself to get stimulated into the work.

Otherwise it's, I can't [laughs] I can't really...have an optimal performance. I can get through it, but I can't...

*O.K.*

...find the best possible way? So if I think about being the best possible, in the best possible state, then I need some sort of a, a challenge for myself for that particular time.

*Hmm.Hmm.*

(End of Adult Educator 4)

*Adult Educator 5*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*Can you tell me about your ideal state...* [After explaining her AMSP & PDS results]

In terms of what you just said?

*Yes.*

Very much in the moment, responding to what's in the room. And I am very clear when I go into a room, what do I want to cover, um...If something comes up in the room that is more critical...

*Hmm.*

...then I am happy to toss the lesson plan and to run with that. Because I think that that's where the engagement is, so I respond to that very strongly.

*Happy to toss the lesson plan?*

Yeah. And that means, the things that I actually covered, in terms of...I'll go back to that and make sure that we cover it at the beginning of the next week...you know, when most of the time at the beginning of a session, people aren't as engaged as further down the track, but if we are at a forming part of a session, and they're wanting to go on a particular track, and I think it's still within the bounds of that module, um, then I'll go there, rather than go 'that's not in the lesson plan'.

*O.K. So that sounds to me like how you would describe a competent class.*

*Yeah.*

*You have the flexibility...*

*Hmm. Hmm [Yes], really well prepared.*

Yeah.

Know the readings, know exactly what I am doing, and then... having that plan so securely in place, I can then be responsive and flexible.

*Hmm. OK. Um, And how would you describe that experience in terms of your arousal, how you are feeling, what you are thinking, and how you are behaving, when you are having that competent session?*

Um, very in tune with people in the room...

*Hmm.*

...and operating very highly from essentially an intuitive awareness of what's going on, watching a lot of the non-verbal cueing and things like that, and being able to respond to that and pull whatever is happening in the room into some theoretical framework.

*O.K. And then in terms of how you are feeling?*

I'm feeling, um, in, in terms of arousal, a highly aroused in that, that state, but not in a tiring way.

*O.K.*

And whenever I come out of a session like that, I feel energised rather than drained.

*Coming out of a good session or a competent session?*

Yeah.

*(BREAK)*

O.K.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*Now, what if things are not going your way, you are not in that ideal arousal state, what is happening in an incompetent or a less competent session?*

Hm, um. What I notice in my own self, is that I am not able to connect in that room or connect the group together. There's something about, you know that nebulous concept of cohesion...?

*Yeah.*

That's what I feel is not, not in the room. That's how I notice that I am not as connected, and...and I think it goes from high arousal to a lower level of anxiety, so I become aware of a shift, a body shift...

*Hmm.Hmm..*

...and then I determine what's not working here, and try and analyse it from a group work perspective. 'So what activity do I need to do now to get this happening', or I might take it back to the group and say 'I'm just really aware that, that a lot is happening'.

*Hmm.*

So with some of the feedback there's one teaching session there, that was continually more of a struggle than others. And that was where it was happening. Um...

*So you would take it back to the class?*

Yeah, if, if that's appropriate....

*(BREAK)*

If I think it is about me then I do what I can before I get into the room, like...

*Which is what?*

Like if I am really tired or something like that.

*And what would your coping strategy be?*

Um, I would still identify what's going on for me.

*Yeah.*

And then do some, um, you know, thought substitution or I do some deep breathing, or I walk outside the college, visualisation, a whole range of things.

*Hmm. A lot of mental teaching skills.*

*Yeah.*

*O.K. Meditation?*

Yeah, anything that's required at that moment and that depends on what's happening in my body too. Because sometimes I could be overly aroused, and so, that's as unhelpful as being under-aroused, I think.

(End of Adult Educator 5)

*Adult Educator 6*

Interview

**Coding Unit: Perceived teaching competence; Description: Work-teaching**

So you agree with that? [After explaining her AMSP & PDS results]

Yes, that is, that is my style for work.

*That is your preference obviously.*

Yeah, my preference for work.

*For work.*

To be organised. Yeah.

*To be organised.*

Yes.

*O.K. Uh...*

*Tell me your ideal way of being when you are teaching.*

O.K. I like to bring to the session planning and organization. I like to know my material [and] environment. I like to have it set up really well. And that provides a blueprint for me to work from. Then the next layout from that is that I can be spontaneous. If I don't have the blueprint, then I can't be spontaneous.

*(BREAK)*

*So how would you describe a competent session?*

Competency for me would be knowing my material.

*O.K.*

Knowing the needs of the students' base.

*O.K.*

...and having some familiarity of the environment, such as the working equipment.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*O.K. Tell me a little bit about when it is not quite like that and you are not really in your right state for teaching.*

When I don't know the environment....so, changing environment. And um...that would mean lack of familiarity with the equipment in the room. Uh, or when I don't know the student profile.

*Meaning?*

I...Let's say...away from the college, broad range of new people with different backgrounds.

*O.K.*

So I am not sure what they are wanting to know, uh, and whether I, whether the material I am actually bringing is what they would want, so, um...not knowing, I suppose, not knowing my clientele...

*O.K.*

...in terms of their learning...have I got the learning goals, learning tasks right here.

*In terms of their learning, uh, goals and needs?*

Hmm [yes].

*O.K.*

So, if I'm...I've got material, but it is not necessarily what they need or want...

*Right?*

I would lose a lot of confidence.

*O.K. So, an incompetent session or a teaching session in that you feel it didn't go quite up to par...*

...would often be connected to one of those three things. And I am pretty good these days at blocking out everything else in the world, it could impact, to have an undercurrent, like if I am not on top of things, fit, or physically... I, I mean like I could ask myself, if I am coughing through sessions and that, that would be...those sorts of, um, things I would bring to the session would affect, like I would feel it might affect my competency. It might not from their perspective, but it might from my competency.

(End of Adult Educator 6)

*Adult Educator 7*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*I would like you to tell me a little bit more about your, uh...when you have a really competent session, that you rated yourself that that was a great session. Tell me a little bit about that.*

Um...I go back to being telic, the objectives that I achieve in a tangible way as evidence being...

*Yup?*

But also process, uh, it's being highly interactive, participative, enjoyable for me, for the participant...

*Enjoyable for you and the participant?*

Yeah, but...

*Yeah?*

Hands on, experiential activities have gone on, um...

*O.K.*

So those two I think combined are essential.

*Yeah. You mentioned enjoyment, um, what is enjoyment for you?*

Enjoyment for me?

*Yeah. What is enjoyment?*

Two things I think...Laughing, having fun, um, and being very active in the process of learning.

Now this is in the teaching. O.K. Very active in the process, um, especially observing the teachers having done that, um, and, but also laughing...

*Hmm.*

Smiling...

*(BREAK)*

I have to be honest, I don't have the charismatic type of teaching, you know, that wins a group over straight away...[unclear]... I've had to work a bit more on being active and fun activities with the group. And I realise that a checkpoint for me is, 'Are they getting something out of the group, and is it making a difference?'

*Hmm.Hmm.*

That's a measure at the end of the day for me.

*Hmm.Hmm.*

**Coding Unit: Perceived less competence; Description: Work-teaching**

*How would you describe, uh, a session that you didn't rate yourself as competent?*

Um, there was probably a couple questionnaires when I didn't rate myself that competent...um, by the way, the backdrop/context to that...the first seven where the same course repeated with different groups.

*O.K.*

[Name of course], a cross section of managers on performance management.

*Same course, different people?*

Seven times.

*O.K.*

One course.

*Yup, yeah.*

[Interviewee discusses in detail about a teaching technique of using role-plays.]

*How do you adjust when you have, as you say too much material in one day, the plan is off course, there is not enough time...how do you adjust to that?*

Happens frequently, uh...

*I am talking really, uh, you getting back on track to your ideal way of being...*

Yes.

*...Ideal arousal level...*

Uh...you've planned and organised and heading towards those objectives. Uh, I think in that case, what I, I get a feeling that their time's out, I'll put it back to the adults in the group basically, 'This is where we are at, this is where we spent our time...what's the best use of your time. Here are three options, for example, A-B and C. We only have time for two. You tell

me.' I'll bounce it back again and get them to decide. They may feel they're driving the show then. Or I'll say, 'You've got A-B-C, but I get the feeling the group should do D, not even on our agenda. What do you think?'

And I let them decide. I'll bounce it back to them. And I'll adjust. And I will stress how flexible I am.

*So it sounds like you are flexible.*

Um..

*You can be flexible?*

I make myself flexible. Yes.

*You make yourself flexible?*

I think early in my teaching experiences when I wasn't flexible, that's when I had the most difficulty.

*(BREAK)*

*When you say, 'When I wasn't flexible I had the most difficulty', what do you mean by difficulty?*

Um...negative reactions, uh, from a group, uh, I got some poor evaluations back, um...and that was often just blindly following objectives, agenda, without checking with the group.

*Hmm.*

So it's more process issues. Having said that... I like to then be organised to be able to be flexible.

*(BREAK)*

How would it tie into your ideal way of being?

I've had to work at, one, being flexible, and two, being better organised. I think they are very much learned behaviours apart from teaching.

*(BREAK)*

*Any other kind of insight that you had?*

For teaching events, the more unknowns the more, I think, worried and aroused I am...negative arousal.

*So, anxiety?*

Yeah, yeah.

*Yeah, O.K.*

And um, before any course actually, it's like that to some degree, but particularly in a course like this where there's a series of seven, and some don't like it, they drop it, and I've done considerable design work and office work beforehand to make sure I was right, so I feel better.

*Hmm. Hmm.*

But still before the first couple of courses, I was sort of I think a bit aroused, anxious, and 'Are we really hitting the mark?' 'Is there too much in the day?' ...A whole lot of questions like that.

(End of Adult Educator 7)

*Adult Educator 8*Interview**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*Tell me about your teaching experience.*

When I thought about filling out those forms, the sessions that I perceived as when I was the best were those ones I hadn't really done a lot of planning, but because I know the content anyway and I know I can go with the flow, and they are the ones that I think went the best or some amazing thing happened or you know, someone had a revelation or...

*Yeah.*

Something like that...

*Yeah.*

Because I wasn't controlling that...I didn't have my whole structure happening.

*Hmm.*

And if there are some subjects where I have to be structured, I can do it, because I am willing to do it, but I think I find it a bit stressful.

*That's interesting. What's stressful about structure...for you?*

Um. It's probably not having that freedom, and also the anxiety, it reminds me of the anxiety of 'not that I don't know that', that it's not...they say that there is no teaching conflict, I know that. I could go in there with nothing, but I couldn't go in there with nothing to [name of class] because I would perceive that there's lot of content I need to remember, and I am just trying to prevent all that.

*Yeah.*

I don't know that that's actually true. I think it's...I have made that up in my head.

*Yeah. Because it's newer material?*

Yeah, probably.

*(BREAK)*

*So how would you describe a more competent class?*

O.K. Umm...[mumbled under breath] I didn't, I really didn't do much preparation because I knew I knew that topic.

*So how would you describe your ideal state, ideal way of being?*

I ideal to go in relaxed...

Yeah.

Calm, yeah, I guess, I guess a bit casual, and kind of just, to go, go with the flow with where they are at, like if they are all in a jokey, happy state, I'll be in that with them. If they are...sometimes they are a bit flat, so I will think something is going on here, so I might just kind of cool that and say 'O.K. What's happening?' And we'll do a debrief, so I am not fanatic. I'm not going to get them to learn while they are all in something that is going on. You know, I am going to have to go there first. [Continues on into specific examples of issues with students in various classes]

*You actually said that you don't enjoy the structure. Tell me about what you do enjoy?*

*What's enjoyment for you when you are teaching?*

When I am teaching, that the students are having fun and that I am having fun with them, that we've got a lot of interaction, that we get with, just go with a lot of success stories, but equally that we get things that didn't work, and we can pick it apart and think, 'Well, O.K., why would it be that that didn't work or that concept didn't get resolved or that didn't occur?'

*Yeah.*

Um. What else do I enjoy...? When their energy is high and they get pretty lively.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*In opposite of that, how would you talk about and describe your unideal state or way of being that is really not ideal for you?*

Hmm, O.K. Probably where I've got lots and lots of theory that I have to get through, and I have to now think of a way to deliver that in an interactive way.

*So is that more or less of a competent session?*

It is probably just less ideal. I could do it competently, but I know I just don't enjoy it as much.

*O.K. Because of...?*

Umm, I guess having to have that structure and all and it being very academic or something like that...that you can't all be involved...I can't get them involved. And, and they are not doing their own learning. Yeah, I think that's what it is...like they are all in that thing where I feel they are relying on me for their learning, and then it's got to come out of my head and into theirs. But where I haven't been able to create an environment where I can get them in groups or I can give them a simulation or I could give them something where they'll get their own learning...

*O.K.*

...where I have just facilitated that.

*Yeah.*

That kind of feels like a pressure that I have to give them something.

*Like...?*

...in a way that I wouldn't...I don't prefer that. It's like that expert-student. I guess I don't like feeling in that situation. I like to be more their learning partner in this situation.

*So you prefer this, they get their learning through the experiences you provide?*

Yeah. And I facilitate that process, but I don't have to give them the answer.

*(BREAK)*

There are groups where if they come in a bit flat, like the Monday morning group, where the students are really great, and I like them and everything, but I have to work harder because [cough] it's Monday morning, they are kind of a bit flat and tired, I kind of feel like I am more, you know, 'on show' where I've got to get them, uh, glad as well.

*Yeah.*

And I don't know if that's right or if I 'm just making it up...if it's just in my own head.

*You said 'I am more on show, and I have to...*

That, that I, yeah, yeah, that I have to get their energy up. That I am really more responsible for getting them more in that state.

*Yeah. It is more work...so that effort is really a stretch for you?*

Hmm (nods). Yeah.

(End of Subject 8)

*Adult Educator 9*

Interview

**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*If you could just tell me, uh, a little bit about when you have a really good teaching session and what's that like for you...what makes you competent?*

O.K.

*What makes you competent?*

What makes me competent?

*Yes, what makes the teaching session really good...you at a competent level?*

What makes me feel competent?

*Yeah, when you have a really good teaching session and you think you have done a great job, why, why is that?*

O.K. There are a number of criteria. Um...It's hard to organise them, um ...

*Hmm?*

One is that I have absolute proof, as I have so often that my students are making shifts.

*O.K. Hmm.Hmm.*

The second is that as I hear myself I recognise just how much I have to offer them myself in terms of my understanding of human nature and the dynamics between human beings, and it's always the proviso of what I know you could write on the head of a pin. But I am very strong in that area, and I am getting stronger and stronger as I grow older.

*Hmm.*

Um...yeah, so I experience myself of making myself available in ways that it has become the truth of the person. So it's not the empty vessel thing...

*Hmm.*

It's that I am skilled in allowing my students to discover.

*Hmm.*

And then it's filling in the pieces that they are not able to articulate about their discovery.

*Hmm.*

*(BREAK)*

In the room, what I love is the significant personal shifts that I'm a part of. So I like seeing the light come on for people. People say 'That was amazing. That was the best thing that ever happened to me.' The feedback is absolutely enormous. And it's not flattery. You can see that it was.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*If you had a session in which you gave yourself a 4 instead of a 5, what was the difference for you?*

I recognised half way through filling these in, I was rather 'shaggerant' a bit, I would think. But I actually thought that most of my classes were 5's.

*Yeah.*

*(BREAK)*

*All ten of them could be 5's?.*

Yeah, but that wouldn't be accurate.

*It wouldn't be accurate?*

Yeah.

*So what would be the difference if it is not a 5?*

*Um...*

*Anything in general?*

I think the ones where it wasn't a 5, were the Monday night ones, with my introverted group, where I was not getting my usually strokes.

*Oh, O.K.*

Because they don't show anything on their faces, you see, so you can't tell...so, the self, the self-valuing has to be higher in that teaching session than elsewhere, and then what would happen after a class, out of the blue one of them would come up to me and say 'That was wonderful!'

And I'd think, "You could've fooled me." (Laughs).

*Hmm.*

Because I am used to, you know, the mirror, as, as we often are with people who are the exact opposite of our type. So, if I am extroverted, spontaneous, creative, and so on, so on, and I am sitting with half a dozen people who aren't...

*Hmm.*

So, it's kind of 'getting to know you' stuff.

*So you need to self-validate?*

Self-soothe, more than self-validate. I need to find the recognition of the job I've done within myself. But those were also the times of when I'd been thinking, um, I need to extend my repertoire here.

*Hmm.*

You know, I need to pull out some other stuff, uh, to deal with them.

(End of Adult Educator 9)

*Adult Educator 10*

Interview

**Coding Unit: Perceived teaching competence; Description: Work-teaching**

*Tell me what teaching...or I might say, teaching is like for you when it all goes well.*

If I am prepared for something really well, then I can relax about it. I don't work hard to get what I need.

*So the preparation is important for you?*

Yes. It all needs to be done before...all the stuff needs to be done in my head. (Pause) 90 percent is at the pre-stage. I have it in my head...where I can be comfortable and I have the structure to keep me focussed.

*(BREAK)*

*So tell me about a competent session. Please describe what the experience is like for you.*

I need to be on top of the content...I mean, I know it and do it. It's integrated.

*O.K.*

...and I immerse myself into the content.

*Meaning what exactly?*

I like to have some conceptual input and, uh, discussion.

*Teaching session discussion you mean?*

Yes, I like when the students participate and take part in the creation of the class. I don't like to have it planned to the last minute. But...there's an element of being connected to people in the room.

*O.K.*

I want students to walk out with more than just the content. I try to live that out in my teaching.

*So you are passionate about what you do?*

Sure. Well, I'm not an academic junkie. I don't look for hits. I do feel a buzz, but I don't go after it. Uh, generally I like to be relaxed and laid back about it.

*Anything else?*

I'm constantly fine-tuning what I do...like an overactive thermostat.

**Coding Unit: Perceived less competence; Description: Work-teaching**

*And when it's not all happening as ideally as you would like and you feel like it is a less competent...or incompetent class, what is your experience?*

In terms of what's different?

*Yes, that's right. What might be the differences or weakness for you?*

Going off on tangents....and...if I wasn't sufficiently prepared to deal with questions, and it felt flat, or...and it felt all one-way...all coming from me, um, not stirring, creating interaction and interest.

*So, uh, if you cannot answer a question, or don't answer it the best that, um, you would like to, then what?*

It would unsettle me. I'd be ruminating...uh, it distracts me.

*Then what?*

I would make a conscious effort to put it aside.

*Hmm. O.K.*

I need to make an effort to contain it and...self-soothe. I put it aside and come back to it later.

It's an action determination.

*Interesting.*

But I don't like appearing less than competent. I'm hard on myself and feel lousy if it didn't go well. I like to know people are perceiving me as competent and they are getting something out of me.

(End of Adult Educator 10)

*Appendix I***HUMAN ETHICS COMMITTEE**

The University of Sydney  
Room N420 Main Quad A14  
Sydney 2006

Tel: (02) 9351.4811 Fax: (02) 9351.6706 E-mail: [gail@reschols.usyd.edu.au](mailto:gail@reschols.usyd.edu.au)

**ETHICS APPLICATION FORM FOR RESEARCH INVOLVING HUMANS**

THIS APPLICATION MUST BE TYPEWRITTEN  
ALL QUESTIONS MUST BE ANSWERED

**USE LAY TERMS WHEREVER POSSIBLE**  
**DO NOT ALTER THE LAYOUT OR PAGINATION OF THE APPLICATION FORM**  
**“Y” SIGNIFIES YES AND “N” SIGNIFIES NO**  
**NOTE: SOME “Y”/“N” BOXES HAVE BEEN REVERSED**

**SECTION 1 : ADMINISTRATION AND SUBMISSION TO OTHER HUMAN (INSTITUTIONAL)  
ETHICS COMMITTEES**

**1.1 (a) Full project title**

Adult educators' Self-Perceived Teaching Competence, Arousal Discrepancy  
and State Self-Esteem in Ideal and Non-Ideal Metamotive States

**(b) Short name by which the project will be known (if appropriate)**

Self-Perceived Teaching Competence of Adult Educators

**(c) Name of Chief Investigator**

Dr. Christopher Lennings

**(d) Provide a brief lay description of the project (in less than 100 words).**

This study investigates adult educators' self-reported perceived teaching competence, state self-esteem and arousal discrepancy in a teaching environment. Ideal states of being were identified in which adult educators perceived teaching with higher competence. Self-recorded influences were compared against each

teaching session in relation to discrepancies existing between their ideal and nonideal states and state self-esteem scores. Interviews were conducted to analyse interpretations of arousal levels and how frustration, satiation and contingent events may have affected shifts in their states and perceived teaching competence. It was hypothesised that successful interpretations and skills developed by adult educators would lead to increased insight and improved performance.

**1.2 Indicate the institution that you consider to be the primary site for this research project.**

University of Sydney

**Acknowledgments.**

The assistance of the following in producing this form is gratefully acknowledged: Mrs Gail Briody (University of Sydney), A/Professor David Cook (University of Sydney/Central Sydney Area Health Service), Professor Simon Gandevia (University of NSW), Dr Rob Loblay (University of Sydney/Australian Health Ethics Committee), Mr Ted McKeown (Hunt & Hunt), Ms Lesley Townsend (Central Sydney Area Health Service), Dr John Watson (University of Sydney), Mrs Margaret Wright (University of NSW).

**1.3 List the following details of the Chief Investigator/Supervisor, any Co-Investigation, Associate Investigator and Student. (If necessary, insert extra pages to follow this.)**

**Chief Investigator / Supervisor**

- name Christopher Lennings
- title Dr.
- Qualifications Ph.D.
- positions held Senior Lecturer in School of Behavioural & Community Health Sciences, University of Sydney
- full mailing address School, Behavioural & Community Health Sciences, University of Sydney, Cumberland Campus (G Block), East Street (P.O. Box 170) N S W 2141
- telephone number (02) 9351-9587
- fax number (02) 9351-9540
- e-mail address c.lennings@cchs.usyd.edu.au

**Co-Investigator(s), Associate Investigator(s) or Student**

- name Lizbeth Luther Wilson
- title Mrs.

- full mailing address 17 Daly Avenue Wahroonga, N S W 2076
- telephone number (02) 9487-8307

- **name**
- title
- full mailing address
- telephone number

- **name**
- title
- full mailing address
- telephone number

- **name**
- title
- full mailing address
- telephone number

- 1.4 (a) **Indicate the proposed date of commencement of the project. Researchers are reminded that projects may not commence without the written approval of the Human Ethics Committee (HEC).**

1 December, 2000

- (b) **Indicate the proposed duration of the project.**

6-8 months

- 1.5 **Indicate the location at which the research will be undertaken.**

Various companies and teaching facilities thereof throughout the Sydney metropolitan area.

- 1.6 (a) **Is this submission being made as part of an application for research funding ?**

X

Y N

If you answered **YES**, list the funding bodies to which you have submitted, or intend to submit this project.

- (b) If the title of the project submitted for funding is different from that listed under Question 1.1, state it below.

1.7 Has this project been submitted to any other HEC(s)?

X  
Y N

If you answered **YES**, give the name of the HEC(s), and indicate the status of the application at each (i.e., submitted, approved, deferred or rejected).

Attach copies of the correspondence with each of the other HEC(s).

|                    |   |
|--------------------|---|
| <b>SECTION 2 :</b> | <b>NATURE OF RESEARCH INCLUDING RISKS</b> |
|--------------------|---|

**2.1 The nature of this project is most appropriately described as:**

(a) A clinical trial of drug(s) or device( s)

**X**

**Y N**

(i) under the Clinical Trial Notification Scheme (CTN)

**X**

**Y N**

(ii) under the Clinical Trial Exemption Scheme (CTX)

**X**

**Y N**

(iii) using only approved drug(s)/device(s) in accordance with  
Therapeutic Goods Administration Approved Product

Information

**X**

**Y N**

(b) Human physiology research

**X**

**Y N**

(c) Human tissue research

**X**

**Y N**

(d) Psychiatry / clinical psychology research

**X**

**Y N**

(e) Behavioural research

**X**

**Y N**

(f) Biomechanical research

**X**  
**Y N**

(g) Research using a questionnaire only

**X**  
**Y N**

(h) Research using qualitative methods

**X**  
**Y N**

(i) Other (indicate the nature of the research below)

**X**  
**Y N**  
Questionnaires, Surveys, and Interview

2.2 (a) Does the protocol require any physically invasive, or potentially harmful procedures (e.g. drug administration, needle insertion, rectal probe, pharyngeal foreign body, electromagnetic stimulation) ?

Y X  
N

If you answered **YES**, state the nature of the procedures, all the risks involved and, if possible, at what rate these risks are expected to occur. (All this information must be included in the Subject Information Statement.)

(b) If you are doing research on patients, list the procedures / techniques which would not form part of routine clinical management.

2.3 Will human placental tissue be used ?

Y X  
N

2.4 Will human embryos or foetal tissue be involved ?

Y X  
N

2.5 Will human tissue be collected for culture of any other purpose ?

Y X  
N

2.6 Will somatic cell gene therapy be used ?

Y X  
N

2.7 Will recombinant DNA techniques be used ?

Y X  
N

2.8 Will toxins, mutagens, teratogens or carcinogens be used ?

Y X  
N

2.9 Will subjects or researchers be exposed to ionizing radiation ?

Y X  
N

If you answered **YES**, provide details of the radiation exposure, including a quantitative assessment of the absorbed dose, supported either by dosimetric calculations or by other information.

**2.10 Please list any drugs / devices to be used, and their approval status both overseas and in Australia.**

**2.11 Is this research expected to benefit the subjects directly or indirectly ?**

X  
Y      N

If you answered **YES**, provide details.

Insightful knowledge of states/ways of being and reversals or shifts in these states caused by frustration, satiating, and contingencies, as well as how stress, arousal discrepancies and self-esteem affect one's perceived performance as an adult educator. Various skills connected to this process could be learned by the adult educator.

**2.12 Will the true purpose of the research be concealed from the subject(s) ?**

X  
Y      N

If you answered **YES**, provide details of the concealment and any debriefing.

**2.13 Will the research induce any psychological or physical stress in the subject(s) ?**

X  
Y      N

If you answered **YES**, state what form this stress will take.

**2.14 Could participation in the research adversely affect the subject(s) ?**

|   |   |
|---|---|
|   | X |
| Y | N |

If you answered **YES**, what facilities / taught personnel are available to deal with such problems ?

|                    |  |
|--------------------|--|
| <b>SECTION 3 :</b> | <b>INDEMNITY, COMPENSATION AND POSSIBLE CONFLICT OF INTEREST</b> |
|--------------------|--|

- 3.1 (a) Will this research be undertaken on behalf of (or at the request of) a pharmaceutical company, or other commercial entity or any other sponsor ?

Y            X  
                 N

If you answered **YES**, will the sponsor provide support in money or kind ?  
Provide details.

- (b) If you answered **YES** to (a), will that entity undertake in writing to abide by either the ABPI Clinical Trial Compensation Guidelines or the APMA Guidelines for Injury Resulting from Participation in an Industry-Sponsored Clinical Trial ?

Y            X  
                 N

- (c) If you answered **YES** to (a), will that entity undertake in writing to indemnify the institution, the HEC(s) and the researchers ?

Y            X  
                 N

- (d) If you answered **YES** to (a), (b) or (c), does the sponsor hold a current insurance policy to cover this project ? If you answered **YES**, provide a certificate of currency. If you answered **NO**, provide details.

Y            X  
                 N

- 3.2 Do the researchers have any affiliation with, or financial involvement in, any organisation or entity with direct or indirect interests in the subject matter or materials of this research ?

Y            X  
                 N

If you answered **YES**, provide details.

- 3.3 Do the researchers expect to obtain any direct or indirect financial or other benefits from conducting this project ?

Y            X  
                 N

If you answered **YES**, provide details.

3.4 Are there any further ethical considerations that you wish to raise ?  
For example, have conditions been imposed upon the use, publication  
ownership of the results ?

   
or

Y X  
N

If you answered **YES**, detail what these considerations are.

|                    |                 |
|--------------------|-----------------|
| <b>SUBJECT 4 :</b> | <b>SUBJECTS</b> |
|--------------------|-----------------|

**4.1 Are the subjects :**

- |                             |   |                                  |                          |
|-----------------------------|---|----------------------------------|--------------------------|
| - 0-13 years of age ?       | <input checked="" type="checkbox"/><br>NONE | <input type="checkbox"/><br>SOME | <input type="checkbox"/> |
| - 14-16 years of age ?      | <input checked="" type="checkbox"/><br>NONE | <input type="checkbox"/><br>SOME | <input type="checkbox"/> |
| - 17 years of age or over ? | <input type="checkbox"/><br>NONE            | <input type="checkbox"/><br>SOME | <input type="checkbox"/> |

YES -A LL

**42. Are the subjects ?**

- |   |      |                          |                          |
|---|------|--------------------------|--------------------------|
| - unconscious or critically ill patients ?<br><br>N     Y<br>X  | None | <input type="checkbox"/> | <input type="checkbox"/> |
| - mentally ill ?<br><br>N     Y<br>X  | None | <input type="checkbox"/> | <input type="checkbox"/> |
| - wards of state<br><br>N     Y<br>X  | None | <input type="checkbox"/> | <input type="checkbox"/> |
| - prisoners ?<br><br>N     Y<br>X   | None | <input type="checkbox"/> | <input type="checkbox"/> |
| - members of the armed services ?<br><br>N     Y<br>X   |      | <input type="checkbox"/> | <input type="checkbox"/> |
| - in a doctor-patient relationship or a health giver-receiver relationship with the researchers or their associates ?<br><br>N     Y<br>X |      | <input type="checkbox"/> | <input type="checkbox"/> |
|   |      | <input type="checkbox"/> | <input type="checkbox"/> |

- in an adult educator-student relationship with the researchers or their associates ?

N      Y  
X

- in an employer-employee relationship with the researchers or their associates ?

N      Y  
X

- in any other dependent relationship with the researchers or their associates ?

N      Y  
X

If you answered **YES** to any of the above, provide details

**4.3 If the subjects are to undergo a medical or other procedure are they :**

- capable of understanding the general nature and effect of the proposed treatment ?

Y      N  
         X

- capable of indicating whether they consent or do not consent to the proposed treatment ?

Y      N  
         X

- If you answered **NO** to either of the above, is the treatment a new treatment that has not yet gained the support of a substantial number of medical practitioners or dentists specialising in the area of practice concerned ?

Y      N  
         X

- Has the treatment been declared to be special treatment under the terms of the Guardianship Act 1987 ? (as amended).

Y      N  
         X

|                    |                                |
|--------------------|--------------------------------|
| <b>SUBJECT 5 :</b> | <b>RECRUITMENT OF SUBJECTS</b> |
|--------------------|--------------------------------|

5.1 (a) How many subjects will be recruited ? 10 -12

(b) How will the subjects be recruited ?

Random phoning of various companies for interest, which is followed by a half hour interview of those showing a willingness to possibly participate. Subjects must have certain qualifications (i.e., B. Ed., Workplace Teaching Level IV Certificate, and/or Registered Psychologist) and a minimum of five years' teaching experience.

5.2 (a) Does recruitment involve a direct personal approach from the  
researchers to the potential subjects ?

X  
Y N

If you answered **YES**, is there any pressure from researchers or others  
that might influence the potential subject to enrol ?

X  
Y N

If you answered **YES**, explain.

(b) Does recruitment involve the circulation / publication of an advertisement, circular, letter, etc ?

Y            X  
              N

If you answered **YES**, provide a copy and indicate where and how often it will be published.

5.3 Will subjects receive any financial or other benefits as a result of participation ?

Y            X  
              N

If you answered **YES**, what is the amount/benefit and the justification for this ?

5.4 Is the research targeting any particular ethnic or community group ?

Y            X  
              N

If you answered **YES**, which group is being targeted ?

If you answered **YES**, has this been done in consultation with a representative of this group ?

Y            N

If you have not consulted a representative of this group, give reasons.

If you have consulted a representative, who have you consulted and how do they represent this group ?

|                    |   |
|--------------------|---|
| <b>SECTION 6 :</b> | <b>PRIVACY AND PUBLICATION OF RESULTS</b> |
|--------------------|---|

**6.1 Is there a requirement for the researchers to obtain information of a personal nature about individuals without their consent :**

- From Commonwealth departments or agencies ?

Y      X  
         N

From other third parties, such as universities, hospitals, State government agencies or employers ?

Y      X  
         N

If you answered **YES**, state what information will be sought and why written consent will not be obtained from the individual subjects.

**6.2 Will any part of the experimental procedures be placed on audio tape, film/video, or other electronic medium ?**

Y      X  
         N

If you answered **YES**, what is the medium and how will it be used ?

Each subject will participate in approximately a 90 - 120 minute interview which will be audio taped for the researcher's use only.

**6.3 Is there any possibility that information of a personal nature could be revealed to persons not directly connected with this project ?**

Y            X  
              N

If you answered **YES**, provide details.

**6.4 (a) How will the results of the study be disseminated ?**

The researcher will meet with the subject one-to-one (as requested by the subject). Otherwise, the results will be written up in the results and discussion sections of the thesis.

**(b) How will the confidentiality of data collected / disseminated, including the identity of subjects, be ensured ?**

The subjects will be identified by letter and/or number.

**(c) What is the proposed storage of, and access to, files, audiotapes etc during the study ?**

They will be held in possession in a locked cabinet of the researcher at her home office.

**(d) Specify how long the data files / audiotapes will be retained after the study and how they will be disposed of.**

They will be held until the degree is granted and then subsequently, the files and audio tapes will be entirely erased and destroyed.



X  
Y      N

- give the name and telephone number of an appropriate investigator ?

X  
Y      N

- give a telephone number for an Executive Officer of the HEC, should a subject wish to make a complaint about the conduct of the research

X  
Y      N

If you answered **NO** to any of the above, give reasons.

(b) **Are the first page of the Subject Information Statement and Consent Form printed on appropriate institutional letterhead ?**

|                    |                               |
|--------------------|-------------------------------|
| <b>SECTION 8 :</b> | <b>DESCRIPTION OF PROJECT</b> |
|--------------------|-------------------------------|

- 8.1 Describe the project in lay terms including the aims, hypotheses, potential significance and research plan (including inclusion / exclusion criteria, where relevant). You must satisfy the HEC that the study is valid and in accordance with accepted principles governing research involving humans. Where relevant, provide the projected number, sex and age range of subjects. The description must be no longer than 2 pages and must be in a font size of at least 10 points.**

As an adult educator, self-perceptions about competence can influence one's performance level.

Adult educators are often evaluated by the audience and therefore frequently reminded of their competency to teach. When someone perceives they have performed well, what were the psychological contributing factors to a high competency level? If they have low self-perceptions of their teaching ability at any given time, in that instance, what might the contributing psychological factors be? How is (performance) self-esteem affected by one's perceptions of teaching competence? Is there an ideal arousal state for an adult educator to achieve a high perceived performance level? How is perceived performance affected when one is not in their ideal (performance) state?

The way individuals structure their experience, termed structural phenomenology, is the way reversal theorists examine human behaviour (Apter, 1982). Reversal theory is a general theory used in this study. It explores certain tenants about human experience and formulates the theoretical basis of the current investigation. Because the theory is phenomenological, meaning it is concerned with subjective interpretation rather than behavioural processes, each adult educator is observed on an individual basis. Apter (1991) described reversal theory as an approach that views the conscious experience as the pivotal starting point by which to understand behaviour. It is believed that reversal theory provides the most comprehensive theoretical basis for determining the uniqueness and individuality of adult educators.

Within reversal theory individuals are viewed as consistently inconsistent because a person can shift, reversing back and forth between two bipolar states instantaneously depending on how they view their perception of their experience (Apter, 1982). These reversals of metamotivational states are caused by frustration, satiation, or a contingency (contingent event). Reversal theory, therefore, is primarily concerned with metamotives, or how a person tends to view their 'in the moment' experience.

## 8.1 (continued)

Telic and paratelic are the two states in reversal theory which specifically refer to one's goal-orientation (Apter, 1989). Therefore, these are the two states that will be under investigation in this study. In the telic state people are serious-minded, goal-oriented and plan ahead (Kerr et al., 1993). In the paratelic state people are playful, spontaneous and in the moment (Kerr et al., 1993).

The contention of this investigation is that when individuals are in their ideal state and also their ideal arousal level, it can influence their perceived teaching competence. Best performances from a performer should occur in conditions associated with pleasant moods and in situations in which a performer's ideal level of arousal is matched by their actual felt level of arousal (Males & Kerr, 1996).

In a study by Wilson and Phillips (1995) it was possible to compare performers' predominant metamotivational combinations (of states) pre, during and post performance. Significant differences have also been found between successful and unsuccessful performers on a dominance or ideal state of being measure. It is in this sense that researchers in reversal theory gain credibility and can go beyond conventional state-trait theory approaches in explaining individual motivational and emotional processes (Fontana, 1983).

An individual's perception of their teaching competence along with one's arousal level and state self-esteem can determine the level of performance experienced. This can be based on measuring the adult educators being in their ideal state (ideal state) or not, perceptions and discrepancy of their arousal level, as well as their performance state self-esteem.

Investigations are needed in the area of establishing "experience-driven research" (Apter, 1989) which is the intention of this study. Ten adults of both genders will comprise the subject population. Ideal metamotivational states will initially be identified in which adult educators believe they perform with the most competence.

Self-recorded influences are compared against each of their teaching session in relation to any discrepancy existing between their ideal and nonideal metamotivational states as well as their state (performance) self-esteem scores. Interviews analyse interpretations of the adult educators' perceived arousal levels and how frustration, satiation and contingent events, according to reversal theory, may have affected shifts in their (metamotive) states, their perceived teaching competence and state self-esteem. Successful interpretation of the

adult educator's results will ideally lead to insight as well as skill development for increased teaching competence.

|                                   |
|-----------------------------------|
| <b>DECLARATION OF RESEARCHERS</b> |
|-----------------------------------|

***I/we apply for approval to conduct the research. If approval is granted, it will be undertaken in accordance with this application and other relevant laws, regulations and guidelines.***

**Signature of Chief Investigator or Supervisor**

Name ..... Signature: ..... Date:  
 .....  
 (print)

**Signature of Associate Investigator(s) or Student(s)**

Name ..... Signature: .....  
 Date: .....

Name ..... Signature: ..... Date:  
 .....

Name ..... Signature: ..... Date:  
 .....

***After careful consideration and appropriate consultation, I am satisfied that the scientific merit of this work justifies its being performed and that the information which will be obtained justifies the inconvenience, discomfort and risks to subjects.***

**Signature of appropriate senior officer NOT ASSOCIATED with the research (e.g. Head of School / Department / Unit / Dean of Faculty).**

Name: .....  
 (print)

Title: .....  
 (print)

Position: .....  
 (print)

Signature: .....  
 (print)

Date: .....

(print)

### CHECKLIST FOR UNIVERSITY OF SYDNEY

The following documents are to be attached as indicated in the Guide to Applicants. Type N/A if not applicable.

Have you included the **original copies** of the following:

- Original application
- Consent Form(s)
- Subject Information Statement
- Recruitment advertisement/circular N/A
- Evidence of permission to conduct research in locations not associated with the University of Sydney
- Evidence of approval/rejection by other HEC(s), including comments and requested alterations to the protocol
- Copy of questionnaire(s), survey questions, interview topics to be covered etc.
- Statement from a medical/paramedical practitioner accepting responsibility for specific procedures N/A
- Radiation Safety Report N/A
- Relevant references or reference list N/A
- One copy of the grant application with appropriate clearance forms as requested by the Research Office N/A
- Any form requiring signature by the HEC (one copy)

When submitting an application to undertake a clinical trial of a drug or device, the following documents (**the original copies**) must be provided:

- Trial protocol
- Statement from the trial sponsor indicating compliance with the ABPI or APMA clinical trial compensation guidelines
- Statement from the trial sponsor indemnifying the relevant Area Health Service, University of Sydney, the HECs and the investigators (as appropriate)
- Certificate of currency/sponsor's insurance

When submitting an application to undertake a drug or device under the CTN and CTX Schemes, the following documents (**the original copies**) should also be provided:

- Section 4 of the CTX application or, for a CTN application, summary information, pharmaceutical chemistry, toxicology and clinical experience, i.e.:
  - Summary Statement
  - Overseas status
  - Pharmaceutical data sheet
  - Clinical summary
  - Objections/comments by other HECs/the TGA/overseas regulatory bodies
  - Investigator's brochure
  - References to support efficacy and safety of the proposed use
  - Investigator's own summary of risks and benefits of the trial
  - Therapeutic Goods Administration/Clinical Trial Notification Application Form

### **Permission Granted**

Apter International provided permission to use the Apter Motivational Style Profile (Apter International, 1999a, 1999b) from April, 17, 2000 through April 16, 2001 for research purposes only. They provided the researcher with a password to the web page in order to collect data and conduct the analysis.

*Appendix J***Subject Information Statement & Consent Form**

School of Behavioural and Community Health Sciences

Faculty of Health Sciences

College of Health Sciences

Dr Christopher J. Lennings                      Cumberland Campus C42  
Senior Lecturer in Psychology              East Street (PO Box 170)  
Lidcombe NSW 2141  
Telephone: +61 2 9351 9587  
Facsimile: +61 2 9351 9540  
Email: [c.lennings@cchs.usyd.edu.au](mailto:c.lennings@cchs.usyd.edu.au)

Subject Information Statement

“Self-Perceived Teaching Competence of Adult Educators” is a Ph.D. study undertaken by Lizbeth Luther Wilson.

The purpose of this study is to examine self-perceptions of your performance as an adult educator in the field.

If you have a degree in Adult Education or Psychology and have been teaching for a minimum of five years, and you foresee doing at least ten teaching sessions with 12 weeks, you meet the requirements to participate in this study.

In terms of a time commitment, initially it will take you approximately one hour to fill out some questionnaires and information required prior to the commencement of your class. Then immediately before and immediately after the subsequent ten classes, you will be required to fill out questionnaires that will take approximately five minutes each time to complete. After you have done ten classes, you will meet the researcher for a 45-60 minute interview.

This completes your participation. It is strictly on a voluntary basis. You may withdraw without stating your reason at any time throughout the length of this study. It will not be videotaped, but your interview will be audiotaped for the researcher's use only. You may contact my supervisor, Dr. Lennings, if you have any queries about this study. If you have any ethical concerns, you may contact the secretary of the Ethics Committee on (02) 9351-4811.

School of Behavioural and Community Health Sciences

Faculty of Health Sciences  
College of Health Sciences

Dr Christopher J. Lennings                      Cumberland Campus C42  
Senior Lecturer in Psychology              East Street (PO Box 170)  
Lidcombe NSW 2141  
Telephone: +61 2 9351 9587  
Facsimile: +61 2 9351 9540  
Email: c.lennings@cchs.usyd.edu.au

#### Consent Form

Agreement between Adult educator and Lizbeth Wilson, M.Ed., M.Sp.Sc.

I, \_\_\_\_\_, am a qualified adult educator volunteering to take part in the following

psychological experiment: "Self-Perceived Teaching Competence of Adult Educators" of my own volition.

I realise that the information will be kept confidential, and that I may withdraw at any time in the participation of this study for any reason without penalty.

Signed \_\_\_\_\_ Date \_\_\_\_\_

## *Appendix K*

### *Review of Literature: Self-Esteem*

#### *Self-Concept*

Self-concept is “the individual’s evaluation of him/herself; the appraisal of the self by the individual him/herself” (DeVito, 1998, p. 42). DeVito emphasised that image is a reflection of one’s self-concept. It is composed of feelings and thoughts about strengths and weaknesses, abilities and limitations. Self-concept, according to DeVito, develops from at least these three sources: the image that others have of oneself and that is revealed; the comparisons a person makes between themselves and others; and the way one interprets and evaluates their own thoughts and behaviours.

#### *Self-Confidence.*

“Self-confidence is the belief that one can successfully execute a specific activity rather than a global trait that accounts for overall optimism” (Feltz, 1988, p. 22). Self-efficacy, or the strength of a person’s conviction that he or she can successfully execute a behaviour, carry out a task, or handle the responsibilities necessary to produce a desired outcome, is a situationally specific form of self-confidence (Carron, 1984, p. 116). It is the conviction one has in order to perform successfully the skills that are required to produce a certain, desirable outcome (Anshel, 1988).

Self-confidence was identified by Martens and his colleagues (1990) as another component of cognitive anxiety, and their research helped to clarify cognitive anxiety within the literature. In their research, questionnaires were used to differentiate between two separate components of cognitive anxiety. Negatively worded items on a questionnaire were identified as a cognitive anxiety component, while positively worded items were identified as a self-

confidence component. This meant that cognitive anxiety may be exhibited either in the form of increased negativity or by a decrease in one's ability to be positive.

Martens et al (1990) explained that performers may be affected by either a negative concern, such as worry; or they may have an inability to be positive. The performer's inability to be positive may arise from either not meeting the demands of their assigned task or the unfortunate outcome of their performance. Therefore, according to Martens et al., it appears that self-confidence is more vulnerable to situational changes than cognitive anxiety.

The effects of an individual's self-concept and various goal-setting techniques have been proposed by several theorists to increase one's self-confidence and/or self-esteem.

Researchers who look at individual differences, such as Carroll and Tosi (1970) found that individuals with high self-assurance increase their effort when faced with difficult goals. Those individuals with low self-assurance put forth less effort as goal difficulty increases.

Research in individual differences of goals was conducted by Hollenbeck and Brief (1987). They identified the several variables as being related to the self-concept's impact on the degree of goal difficulty (when the goals were self-assigned by the performer themselves). These variables consisted of generalised self-esteem; perceived task-specific ability; locus of control; need for achievement; and, ability or past performance.

#### *Self-Worth and self-actualisation.*

Self-worth is a composite of self-concept, self-confidence, self-esteem, and self-efficacy (DeVito, 1998). The two basic psychological needs humans have, according to Glasser (1965) are (a) the need to love and be loved; and (b) the need to feel that we are worthwhile to ourselves and to others. Glasser stated that having both needs met, an individual tends to have a high self-esteem and to highly evaluate oneself.

Maslow (1970) contributed to the research by stating that self-esteem represents two areas of need: (a) self-respect; and (b) esteem from others. He stated that self-respect includes such aspects as: feeling competent, confident, adequate, and having personal strength, as well as having a sense of achievement, independence and freedom. An individual at this high level would need to know that he/she is worthwhile, having the ability to master tasks and life's challenges. Esteem from others includes: feeling proud, recognised, accepted and appreciated in society, being given attention, having status, fame, and prestige, and overall, a good reputation. According to Maslow, an individual meeting this esteem would experience a sense of worth and that they are valued by significant others based on their competence and contribution.

Self-actualisation is the pinnacle level representing the desire to become everything that a person has the capability of becoming (Maslow, 1970). To "self-actualise" is to become the kind of person one wants to be by reaching his/her potential. At this level, uniqueness is emphasised and people have a high self-esteem. They live with zest, drive, and a specific purpose that keeps them motivated. Maslow explained that the self-actualisation motive, however, influences attitudes and behaviours only after all other needs are satisfied.

### *Challenges to Self-Esteem*

#### *The Inner Voice*

The role of the inner voice, or inner critic, can be quite powerful to one's self-worth. The inner voice usually provides a message, and the way one perceives and reacts to these messages can affect self-esteem (McKay et al., 1998). According to McKay et al., the thoughts one has about oneself can determine an individual's perception of who they are and the situation in which they find themselves. If an individual's inner critic is pathological, it is attacking, judging, blaming, and basically unaccepting. Lastly, McKay et al. explained that the individual having a

continuous negative inner critic eventually develops a limited perspective and perception of oneself.

*Cognitive distortions.*

Faulty thought patterns, also known as cognitive distortions, are a result of an individual's worldview. Those with a low self-esteem (e.g., depressed) are embedded in their own limited construction of the world. Beck (1991) the founder of cognitive therapy stated that individuals usually have the ability to examine themselves, and it is a matter of them becoming aware of their distortions. One's metamotives can also act as an automatic response, as this current study examines, and these reversals can influence a performer's perceived teaching competence.

The most frequent distortions as discussed by Beck (1991) are: overgeneralisation, global labelling, filtering, polarised thinking, self-blame, personalisation, mind-reading, control fallacies, and mind reading.

Overgeneralisation is to make a sweeping statement with little factual reference. Global labelling is to make an overall judgement. Filtering is seeing only what one wants to see. Polarised thinking - is all-or-none perceptions. Self-blame is accusing oneself for every shortcoming or weakness that they might have. Personalisation is an individual's belief that they are the centre of the universe; everything stems from and returns back to them. Mind reading is when an individual believes that everyone is thinking and feeling exactly as they are. Control fallacies - are a manipulation of either an individual taking charge of everyone in their world or they have others do everything for them. Emotional reasoning is relying totally on emotions while ignoring any thought processes.

“Automatic thoughts” as discussed by Beck (1991) can be most difficult for individuals to rid themselves of the mental intrusion. Every thought can be paid attention to, but often one thought triggers another. This pattern is similar to what triggers a metamotivational shift. When individuals get drawn into a distorted thinking pattern and a reversal takes place, the continual reinforcement could be damaging to their self-esteem.

Internal and external personalisation affects one’s think patterns. As researched by Seligman (1993), he stated the following about personalisation:

When bad things happen, we can blame ourselves (internalise) or we can blame other people or circumstances (externalise). People who blame themselves when they fail have low self-esteem as a consequence. They think they are worthless, talentless, and unlovable. People who blame external events do not lose self-esteem when bad events strike. On the whole, they like themselves better than people who blame themselves better than people who blame themselves do (p. 49).

With personalising, an individual generally learns to do so at a young age. It takes maturity before one realises that there are others with perhaps different viewpoints. Along with personalisation, people learn to self-evaluate.

### *Values and Core Beliefs*

#### *Values.*

A value refers to the relative worth one places on an object, person, or position. Technically, value can refer to either positive or negative worth. In popular usage, however, it is a term often reserved for positive evaluation (DeVito, 1998).

To summarise, healthy values are flexible rather than rigid, owned rather than introjected, realistic, and life-enhancing rather than life-restricting (McKay et al., 1998). Each of these four points about values is interconnected. If a value is weak in one of these four areas, its effects are made evident in the other three areas. Strasser and Strasser (1997) stated:

Values and beliefs vary enormously between (individuals), but once established it is easy to recognise how these beliefs permeate all aspects of living. People carry with them more than one set of values, but some of them include: modesty, exhibitionism, perfectionism, competence, naturalness, academic laziness, superiority, good judgement, cheating, deceit, tricking, swindling, risk taking, caution, honesty, and dishonesty (p. 87).

Individuals' values and assumptions about living and behaviour patterns become so integrated and enmeshed in their day-to-day operations they become totally unaware of their values, much less from where these values originated.

Strasser et al., (1997) continued that:

(w)e can be dogmatic or stuck to such an extent that it is often hard to realise that there might be other ways of viewing the world or other ways of conducting our lives. We all have a vested interest in defending our old ways of thinking and predictable ways of behaving. After all, we have spent many years building up these patterns to make them work for us.... These rigid, dogmatic tunnel visions are known as 'sedimented' outlooks...and there is always the possibility to unlearn them or 'desedimentalise' them (p. 94).

The most vital aspect of flexibility is having a true sense of ownership of one's values. To recognise values as one's own, it is necessary to look at repeated daily behaviour patterns that determine these true values.

The important point is to recognise the sedimentation and attempt to challenge the rigid value system that may precipitate the shift of deep-seated behaviour patterns. In fact, there is no need to search for the so-called sources of sedimentations, as there is always a multitude of events that create, recreate, and reinforce those sedimented perceptions (Strasser et al., 1997, pp. 95-96).

Once an individual comes to terms with their real (current) value system, they can challenge their belief system (and behaviour system) as being their own. Taking responsibility for one's values is the most important step towards ownership of one's values. As an individual might not always know where they are in terms of their values (i.e., ambivalence) they may view themselves as having a low self-esteem.

#### *Core beliefs.*

A belief is the confidence in the existence or truth of something: conviction (DeVito, 1998).

The fundamental building blocks of self-esteem are one's core beliefs. ... Core beliefs are the very foundation of your self-esteem: they largely dictate what you can and cannot do (expressed as your rules), and how you interpret events in your world (expressed as your inner monologue) (McKay et al., 1992, p. 225).

Positive core beliefs may affirm one's competence. Negative core beliefs may affirm one's incompetence. Beliefs of oneself are made evident through actions, verbal and non-verbal, according to McKay et al., 1998. A belief dilemma, according to Chaplin (1985) is an attitude or opinion whose positive and negative components are in a state of imbalance.

“The way in which we speak reflects our belief about ourselves” (Corey, 1991, p. 242).

An individual with low self-esteem may have a tendency to deny their personal power by adding qualifiers or disclaimers (e.g., “but”, “I can't”, “I guess”, “possibly”, “I suppose”, “I won't”, etc.) to their statements. Corey also stated that individuals of low self-esteem use language that reveals an internal struggle.

#### *Non-Verbal Behaviour*

In the non-verbal dimension, individuals with low self-esteem express their true core self-beliefs through their body language (Argyle, 1988). He stated that an individual with low self-esteem often keeps the head down, has slouched posture, and inefficient breathing. In the face, there is usually poor eye contact, often with frequent blinking of the eyes, and frequent movements with the lips. Often the hands are covering part of the face or playing with their hair. Also, as Argyle pointed out, the speech is often quiet and suppressed, sometimes with much hesitation, stuttering and sighing.

*Appendix L*

*Results: Raw Data*

*Adult Educator 1*

*Description:* Adult educator 1 was female, 44, and had 22 years of teaching experience with qualifications consisting of a BA, Diploma of Education in vocational communication and a sub-major in psychology. She was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Inducing/change agent:* Frustration is what caused her to perceive less teaching competence in her class.

*Situational state balance:* Paratelic

*Metamotivational Preference*

AMSP\*

Result: Telic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 22 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 21 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 1 (0 = no dominance)                             |
| Telic/Paratelic Saliency = | 43 (lowest score = 12 and highest score = 60)    |

PDS\*

Result: Telic dominant

|         |                               |
|---------|-------------------------------|
| PLAY4 = | 3 (out of a total score of 4) |
| SPON5 = | 1 (out of a total score of 5) |
| ARSK6 = | 2 (out of a total score of 6) |

\* Note: See Appendix A for the AMSP and Appendix B for the PDS.

*Dependent/Independent Variables: Raw Data of Adult Educator 1*

| <b>Session :</b>        | <b>1</b>  |            | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|-------------------------|-----------|------------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                         | <b>B*</b> | <b>A**</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> *** | 0         | 0          | -2       | 0        | -2       | 0        | -1       | 0        | -1        | 0        |
| <b><u>SSEPS</u></b>     | 34        | 35         | 35       | 29       | 35       | 26       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>      | 5         | 6          | 4        | 6        | 2        | 4        | 2        | 2        | 5         | 4        |
| <b><u>TPPS</u></b>      | 2         | 3          | 1        | 3        | 3        | 2        | 2        | 2        | 2         | 5        |
| <b><u>TSME</u></b>      | 4         | 5          | 6        | 6        | 2        | 3        | 4        | 3        | 4         | 4        |
| <b><u>SPTC</u></b> **** | -         | 5          | -        | 4        | -        | 5        | -        | 5        | -         | 4        |
|                         | <b>6</b>  |            | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                         | <b>B</b>  | <b>A</b>   | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b>     | -1        | -1         | 0        | 0        | -1       | -2       | -1       | 0        | -1        | 0        |
| <b><u>SSEPS</u></b>     | 32        | 31         | 35       | 34       | 35       | 29       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>      | 4         | 4          | 5        | 3        | 2        | 1        | 3        | 4        | 4         | 5        |
| <b><u>TPPS</u></b>      | 3         | 3          | 2        | 2        | 3        | 3        | 3        | 3        | 5         | 4        |
| <b><u>TSME</u></b>      | 4         | 4          | 5        | 5        | 5        | 6        | 3        | 3        | 4         | 4        |
| <b><u>SPTC</u></b>      | -         | 5          | -        | 5        | -        | 4        | -        | 5        | -         | 5        |

\* Before class/teaching session

\*\*After class/teaching session

\*\*\*CODE: TSMAD= Telic State Measure Arousal Discrepancy; SSEPS= State Self-Esteem (performance) Scale; TPSP= Telic/Paratelic Serious-Playful; TPPS=Telic/Paratelic Planned-Spontaneous; Telic State Measure-Effort; SPTC=Self-Perceived Teaching Competence

\*\*\*\* Individual independent variable

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.745),  $p = .013$ .

##### *State Self-Esteem (performance) Scale*

###### *Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale *before* the teaching session (.745),  $p = .013$ .

###### *After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.792),  $p = .006$ .

##### *Telic State Measure Perceived Effort*

###### *Before class.*

The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.877),  $p = .001$ .

*After class.*

The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session (.877),  $p = .001$ .

*Insignificant Correlations\**

(\* Insignificant correlations are reported by listing each of the insignificant, repeated-measures variables by name for the Self-Perceived Teaching Competence. For the remaining reports, the insignificant, repeated-measures variables are listed, except in those instances in which two or less significant variables are cited as the exception.)

*Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*State Self-Esteem (performance) Scale*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum\**

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant with this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum\**

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Perceived Effort score *after* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 1)

---

\* Note: The word 'continuum' in the title is lower case as it is not a part of the name per se, but an added description.

### *Adult Educator 2*

*Description:* Adult educator 2 was male, 61, and had 40 years of teaching experience with qualifications consisting of a PhD in clinical psychology, and master's degrees in psychotherapy counselling, organisational behaviour, and a graduate diploma in adult education. He was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Inducing/change agent:* Contingent Event

*Situational state balance:* Telic

*Metamotivational Preference*

#### AMSP

Result: Telic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 26 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 22 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 4 (0 = no dominance)                             |
| Telic/Paratelic Saliency = | 48 (lowest score = 12 and highest score = 60)    |

#### PDS

Result: Telic dominant

|         |   |
|---------|---|
| PLAY4 = | 3 |
| SPON5 = | 1 |
| ARSK6 = | 2 |

*Dependent/Independent Variables: Raw Data for Adult Educator 2*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | 0        | -1       | -1       | 0        | 0        | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 32       | 34       | 35       | 35       | 35       | 35       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>  | 4        | 5        | 4        | 4        | 4        | 4        | 5        | 5        | 5         | 5        |
| <b><u>TPPS</u></b>  | 2        | 2        | 2        | 2        | 2        | 2        | 2        | 2        | 2         | 2        |
| <b><u>TSME</u></b>  | 5        | 5        | 4        | 4        | 4        | 5        | 5        | 5        | 5         | 5        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 4        | -        | 5        | -         | 5        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | -1       | 1        | -1       | 0        | -1       | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 35       | 35       | 35       | 35       | 35       | 35       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>  | 5        | 5        | 4        | 4        | 4        | 5        | 4        | 4        | 5         | 5        |
| <b><u>TPPS</u></b>  | 2        | 2        | 2        | 2        | 2        | 2        | 2        | 2        | 2         | 2        |
| <b><u>TSME</u></b>  | 5        | 5        | 5        | 6        | 5        | 6        | 4        | 5        | 6         | 5        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 5        | -        | 5        | -        | 5        | -         | 5        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.697),  $p = .025$ .

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.667),  $p = .035$ .

###### *After class.*

The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy *after* the teaching session (.818),  $p = .004$ .

##### *State Self-Esteem (performance) Scale.*

###### *Before class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.1000),  $p = .01$ .

###### *After class.*

The State Self-Esteem (performance) scale score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (1.000),  $p = .01$ .

*Telic/Paratelic Serious-Playful continuum**Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.667),  $p = .035$ .

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *before* the teaching session (.667),  $p = .035$ .

*After class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *after* the teaching session (.667),  $p = .035$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *after* the teaching session (.773),  $p = .009$ .

*Telic State Measure Perceived Effort**Before class.*

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.773),  $p = .009$ . The Self-Perceived Teaching Competence score was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.697),  $p = .025$ .

*After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session (.818),  $p = .004$ .

### *Insignificant Correlations*

#### *Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and each of the repeated-measures variables in this study except for the Telic State Measure Perceived Effort before the teaching session were all found to be insignificant for this subject.

#### *Telic State Measure Arousal Discrepancy*

##### *Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful Continuum score *before* the teaching session were found to be insignificant for this subject.

##### *After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Perceived Effort score *after* the teaching session were found to be insignificant for this subject.

#### *State Self-Esteem (performance) Scale*

##### *Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *after* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *before* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session and the Telic/Paratelic Serious-Playful continuum score *after* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum.*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic Perceived Effort score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic Perceived Effort score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 2)

*Adult Educator 3*

*Description:* Adult educator 3 was female, 39, and had 5 years of teaching experience with qualifications consisting of a Bachelor of Counselling, a Diploma in Psychotherapy, and a Diploma in Professional Counselling. She was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Inducing/change agent:* Contingent Event. The sessions in which she rated herself as having less teaching competence were those in which she was substituting.

*Situational state balance:* Telic

*Metamotivational Preference*

AMSP

Result: Paratelic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 18 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 20 (6 = least paratelic and 30 = most paratelic) |
| Paratelic Dominance =      | -2 (0 = no dominance)                            |
| Telic/Paratelic Saliency = | 38 (lowest score = 12 and highest score = 60)    |

PDS

Result: Telic dominant

|         |   |
|---------|---|
| PLAY4 = | 1 |
| SPON5 = | 1 |
| ARSK6 = | 2 |

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | -2       | -1       | -2       | -2       | 0        | 0        | -1        | -2       |
| <b><u>SSEPS</u></b> | 29       | 33       | 26       | 32       | 24       | 26       | 34       | 35       | 32        | 28       |
| <b><u>TPSP</u></b>  | 5        | 5        | 2        | 4        | 2        | 2        | 4        | 5        | 4         | 2        |
| <b><u>TPPS</u></b>  | 2        | 3        | 2        | 3        | 1        | 1        | 2        | 3        | 2         | 2        |
| <b><u>TSME</u></b>  | 5        | 5        | 5        | 5        | 5        | 5        | 6        | 6        | 3         | 6        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 5        | -        | 2        | -        | 5        | -         | 4        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | -3       | -3       | 0        | -3       | 0        | 0        | -1       | 0        | -2        | 0        |
| <b><u>SSEPS</u></b> | 26       | 31       | 32       | 28       | 32       | 33       | 32       | 32       | 24        | 24       |
| <b><u>TPSP</u></b>  | 3        | 3        | 5        | 2        | 5        | 5        | 4        | 5        | 2         | 4        |
| <b><u>TPPS</u></b>  | 1        | 2        | 2        | 2        | 2        | 2        | 2        | 2        | 2         | 2        |
| <b><u>TSME</u></b>  | 5        | 6        | 5        | 6        | 6        | 6        | 6        | 6        | 6         | 4        |
| <b><u>SPTC</u></b>  | -        | 3        | -        | 3        | -        | 5        | -        | 5        | -         | 3        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

The State Self-Esteem (performance) Scale score *after* the teaching session was found to be correlated in a positive direction with the Self-Perceived Teaching Competence score (.792),  $p = .006$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was found to be correlated in a positive direction with the Self-Perceived Teaching Competence score (.737),  $p = .015$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was found to be correlated in a positive direction with the Self-Perceived Teaching Competence score (.639),  $p = .047$ .

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.766),  $p = .010$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.871),  $p = .001$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was positively correlated to the Telic State Measure Arousal Discrepancy score *before* the teaching session (.639),  $p = .047$ .

###### *After class.*

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction to the Telic State Measure Arousal

Discrepancy score *after* the teaching session (.874),  $p = .001$ . The Telic State Measure Perceived Effort *before* the teaching sessions core was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (.734),  $p = .016$ .

#### *State Self-Esteem (performance) Scale*

##### *Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated with the State Self-Esteem (performance) Scale *before* the teaching session (.766),  $p = .010$ . The State Self-Esteem (performance) Scale score *after* the teaching session was correlated with the State Self-Esteem (performance) Scale score *before* the teaching session (.632),  $p = .050$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated with the State Self-Esteem (performance) Scale score *before* the teaching session (.712),  $p = .021$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in the positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.796),  $p = .006$ .

##### *After class.*

The State Self-Esteem (performance) scale score *before* the teaching sessions correlated in the positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.632),  $p = .050$ . The Telic/Paratelic Serious-Playful score *after* the teaching sessions correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.789),  $p = .007$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.707),  $p =$

.022. The Self-Perceived Teaching Competence score positively correlated with the State Self-Esteem (performance) Scale score *after* the teaching session (.792),  $p = .006$ .

*Telic/Paratelic Serious to Playful continuum*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching sessions correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.871),  $p = .001$ . The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.712),  $p = .712$ .

*After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious- Playful continuum score *after* the teaching session (.874),  $p = .001$ . The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.789),  $p = .007$ . The Telic State Measure perceived Effort score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.717),  $p = .020$ . The Self-Perceived Teaching Competence Score was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.737),  $p = .015$ .

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score

*before* the teaching session (.639),  $p = .047$ . The Self-Perceived Teaching Competence score correlated in a positive direction (.639),  $p = .047$ .

*After class.*

The State Self-Esteem (performance) Scale score was correlated in a positive direction *before* the teaching session with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (.707),  $p = .022$ .

*Telic State Measure Perceived Effort*

*Before class.*

The Telic State Measure arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teachings sessions (.734),  $p = .016$ . The Telic/Paratelic Serious-Playful continuum score *after* the teachings session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* a teaching session (.717),  $p = .020$ . *After class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session (.796),  $p = .006$ .

*Insignificant Correlations*

*Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *before* the class, the Telic/Paratelic Serious-Playful continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous continuum score

*after* the class, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

*Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and the Telic State Measure Arousal Discrepancy score *after* the class, the State Self-Esteem (performance) Scale score *after* the class, the Telic/Paratelic Serious-Playful continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *after* the class, the Telic State Measure Perceived Effort scores both *before* and *after* the class, and the Self-Perceived Teaching score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the class, the Telic State Measure Arousal Discrepancy score *before* the class, the State Self-Esteem (performance) Scale score both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous scores both *before* and *after* the class, the Telic State Measure Perceived Effort score *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*State Self-Esteem (performance) Scale*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* teaching session and the Telic State Measure Arousal Discrepancy score *after* the class, the State Self-Esteem (performance) Scale score *before* the class, the Telic/Paratelic Serious-Playful continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, the Telic State Measure Perceived Effort score *before*

the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful Continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous Continuum score *before*, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the repeated-measures variables in this study were found to be insignificant except for the Telic State Measure Arousal Discrepancy score *before* the teaching session and the State Self-Esteem (performance) Scale score *before* the teaching session for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and the Telic State Measure Arousal Discrepancy score *after* the class, the State Self-Esteem Scale score *before* the class, the Telic/Paratelic Serious-Playful continuum scores *before* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum *score* before the teaching session and the repeated-measures variables in this study except for the State Measure Arousal Discrepancy score *before* the teaching session and the Perceived Performance of Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *after* the teaching session were found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort *before* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session and the Telic/Paratelic Serious-Playful Continuum score *after* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *before* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 3)

*Adult Educator 4*

*Description:* Adult educator 4 was female, 34, and had 8 years of teaching experience with qualifications consisting of a B.Sc. in psychology and a M.A. in Adult Education and was a registered psychologist. She was rated as telic/paratelic in the AMSP and paratelic dominant on the PDS.

*Inducing/change agent:* The sessions in which she rated herself as having less teaching competence were those in which she was feeling somewhat unexcited.

*Situational state balance:* Telic

*Metamotivational Preference*

AMSP

Result: Telic/Paratelic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 27 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 21 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 6 (0 = no dominance)                             |
| Telic/Paratelic Saliency = | 48 (lowest score = 12 and highest score = 60)    |

PDS

Result: Paratelic dominant

|         |   |
|---------|---|
| PLAY4 = | 3 |
| SPON5 = | 2 |
| ARSK6 = | 5 |

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 1        | 4        | -1       | 3        | -2       | 2        | -1       | 0        | -1        | 0        |
| <b><u>SSEPS</u></b> | 27       | 35       | 34       | 35       | 28       | 31       | 29       | 30       | 33        | 35       |
| <b><u>TPSP</u></b>  | 1        | 5        | 2        | 5        | 1        | 5        | 2        | 4        | 3         | 4        |
| <b><u>TPPS</u></b>  | 6        | 5        | 3        | 3        | 3        | 5        | 2        | 3        | 3         | 4        |
| <b><u>TSME</u></b>  | 3        | 5        | 2        | 5        | 3        | 5        | 4        | 5        | 3         | 5        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 5        | -        | 5        | -        | 5        | -         | 5        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMA</u></b>  | -1       | 0        | -3       | 0        | -1       | 0        | 0        | 0        | -1        | -2       |
| <b><u>SSEPS</u></b> | 33       | 35       | 32       | 33       | 31       | 35       | 35       | 35       | 31        | 35       |
| <b><u>TPSP</u></b>  | 2        | 3        | 2        | 2        | 2        | 3        | 3        | 5        | 3         | 3        |
| <b><u>TPPS</u></b>  | 3        | 3        | 3        | 3        | 5        | 4        | 2        | 4        | 3         | 5        |
| <b><u>TSME</u></b>  | 4        | 5        | 4        | 5        | 4        | 4        | 4        | 5        | 4         | 4        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 5        | -        | 5        | -         | 4        |

## *Quantitative Analysis: Correlations*

### *Significant Correlations*

#### Self-Perceived Teaching Competence

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.639),  $p = .047$ .

#### *Telic State Measure Arousal Discrepancy*

*After class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (-.749),  $p = .013$ . The Telic/Paratelic Serious-Playful continuum score was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (.705),  $p = .023$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (-.777),  $p = .008$ .

#### *State Self-Esteem (performance) Scale*

*Before class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in the positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.662),  $p = .037$ .

#### *Telic/Paratelic Serious-Playful continuum*

*Before class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Serious-Playful Continuum score *before* the teaching session ( $-.749$ ),  $p = .013$ . The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session ( $.662$ ),  $p = .037$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session ( $-.783$ ),  $p = .007$ .

*After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful Continuum score *after* the teaching session ( $.705$ ),  $p = .023$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session ( $-.676$ ),  $p = .032$ . The Self-Perceived Teaching Competence score was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session ( $.639$ ),  $p = .047$ .

*Telic State Measure Perceived Effort*

*Before class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.777$ ),  $p = .008$ . The Telic/Paratelic Serious-Playful Continuum score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.676$ ),  $p = .032$ .



*After class.*

The Telic/Paratelic Serious-Playful Continuum score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $-.783$ ),  $p = .007$ .

### *Insignificant Correlations*

#### *Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

#### *Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and the Telic State Measure Arousal Discrepancy *before* the class, the State Self-Esteem (performance) Scale scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, the Telic State

Measure Perceived Effort score *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*State Self-Esteem (performance) Scale*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful Continuum*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the Telic State Measure Arousal Discrepancy *before* the class, the State Self-Esteem (performance) Scale score *after* the class, the Telic/Paratelic Serious-Playful continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, the Telic State Measure Perceived Effort score *before* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and the Telic State Measure Arousal Discrepancy *before* the class, the State Self-Esteem (performance) Scale scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session and the Telic/Paratelic Serious-Playful continuum score *after* the teaching session were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *before* the teaching session were all found to be insignificant for this subject. (End of Adult Educator 4)

*Adult Educator 5*

*Description:* Adult educator 5 was female, 41, and had 15 years of teaching experience with qualifications consisting of a B.Ed. and a M.Ed., a Graduate Certificate in Helping Skills, Advanced Certificate in Teaching and Development, and a Certificate in Personnel Management. She was rated as paratelic dominant in the AMSP and paratelic dominant on the PDS.

*Situational state balance:* Paratelic

*Inducing/change agent:* The sessions in which she rated herself as having less teaching competence were the ones in which she felt not totally in tune with the students.

*Metamotivational Preference*

AMSP

Result: Paratelic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 19 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 25 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | -6 (0 = no dominance)                            |
| Telic/Paratelic Salience = | 44 (lowest score = 12 and highest score = 60)    |

PDS

Result: Paratelic dominant

|         |   |
|---------|---|
| PLAY4 = | 2 |
| SPON5 = | 4 |
| ARSK6 = | 6 |



*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | -1       | 0        | 0        | 0        | 0        | 0        | 0         | -1       |
| <b><u>SSEPS</u></b> | 35       | 35       | 35       | 33       | 35       | 35       | 35       | 35       | 34        | 35       |
| <b><u>TPSP</u></b>  | 6        | 5        | 5        | 4        | 6        | 4        | 5        | 4        | 5         | 4        |
| <b><u>TPPS</u></b>  | 5        | 5        | 4        | 4        | 5        | 4        | 5        | 5        | 5         | 5        |
| <b><u>TSME</u></b>  | 5        | 6        | 6        | 5        | 6        | 6        | 5        | 5        | 5         | 6        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 5        | -        | 4        | -         | 4        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | -1       | 0        | 0        | 0        | 0        | 0        | +1       | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 33       | 31       | 35       | 35       | 35       | 35       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>  | 3        | 3        | 5        | 5        | 5        | 5        | 5        | 6        | 5         | 6        |
| <b><u>TPPS</u></b>  | 5        | 5        | 5        | 5        | 5        | 5        | 5        | 5        | 5         | 5        |
| <b><u>TSME</u></b>  | 5        | 6        | 5        | 5        | 6        | 6        | 6        | 6        | 6         | 6        |
| <b><u>SPTC</u></b>  | -        | 3        | -        | 5        | -        | 5        | -        | 4        | -         | 5        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.645),  $p = .044$ . The Telic/Paratelic Serious-Playful Continuum score *before* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.671),  $p = .034$ .

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.855),  $p = .002$ . The Telic/Paratelic Serious-Playful Continuum score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.711),  $p = .021$ .

##### *State Self-Esteem (performance) Scale*

###### *Before class.*

The Self-Perceived Teaching Competence score was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.645),  $p = .044$ .

###### *After class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance)

Scale score *after* the teaching session (.855),  $p = .002$ . The Self-Perceived Teaching Competence score was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.645),  $p = .044$ .

*Telic/Paratelic Planned-Spontaneous continuum.*

*Before class.*

The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (.667),  $p = .035$ .

*After class.*

The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (.667),  $p = .035$ .

*Insignificant Correlations*

*Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *after* the class, the Telic/Paratelic Serious-Playful continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

### *Telic State Measure Arousal Discrepancy*

#### *Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score before the teaching session and each of the repeated-measures variables in this study except for the State Self-Esteem (performance) scale score after the teaching session and the Telic/Paratelic Serious-Playful continuum score after the teaching session were found to be insignificant for this subject.

#### *After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

### *State Self-Esteem (performance) Scale*

#### *Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study except for the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

#### *After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum**Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and each of the repeated-measures variables in this study except for the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum**Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session were found to be insignificant for this subject.

*Telic State Measure Perceived Effort.*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

(End of Adult Educator 5)

### *Adult Educator 6*

*Description:* Adult educator 6 was female, 48, and had 13 years of teaching experience with qualifications consisting of a registration as a nurse, a graduate diploma in natural therapies and a M.A. in Counselling. She was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Situational state balance:* Telic

*Inducing/change agent:* The sessions in which she rated herself as having less teaching competence were the ones in which she was feeling complacent.

#### *Metamotivational Preference*

##### AMSP

Result: Telic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 22 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 17 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 5 (0 = no dominance)                             |
| Telic/Paratelic Saliency = | 39 (lowest score = 12 and highest score = 60)    |

##### PDS

Result: Telic dominant

|         |   |
|---------|---|
| PLAY4 = | 3 |
| SPON5 = | 2 |
| ARSK6 = | 2 |

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | 0        | 0        | 2        | 0        | 2        | 2        | 0         | -2       |
| <b><u>SSEPS</u></b> | 29       | 30       | 32       | 32       | 32       | 24       | 29       | 29       | 29        | 31       |
| <b><u>TPSP</u></b>  | 4        | 5        | 2        | 5        | 1        | 3        | 1        | 2        | 2         | 2        |
| <b><u>TPPS</u></b>  | 2        | 2        | 2        | 2        | 3        | 2        | 2        | 2        | 2         | 2        |
| <b><u>TSME</u></b>  | 5        | 5        | 5        | 5        | 4        | 5        | 4        | 4        | 4         | 4        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 4        | -        | 4        | -        | 3        | -         | 4        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | 0        | 0        | -1       | -1       | 0        | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 0        | 0        | 0        | 0        | -1       | -1       | 0        | 0        | 0         | 0        |
| <b><u>TPSP</u></b>  | 2        | 3        | 3        | 3        | 2        | 2        | 2        | 2        | 3         | 3        |
| <b><u>TPPS</u></b>  | 3        | 3        | 2        | 3        | 3        | 3        | 3        | 3        | 3         | 3        |
| <b><u>TSME</u></b>  | 3        | 3        | 3        | 3        | 3        | 3        | 3        | 3        | 3         | 3        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 4        | -        | 3        | -        | 4        | -         | 4        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.673),  $p = .033$ . The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (.672),  $p = .033$ .

###### *After class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching Sessions was correlated in a positive direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (.673),  $p = .033$ .

##### *State Self-Esteem (performance) Scale*

###### *Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.672),  $p = .033$ . The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.885),  $p = .001$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *before* the teaching session (-.913),  $p = .000$ . The Telic State Measure Perceived Effort score *before* the teaching session

was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.880),  $p = .001$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.932),  $p = .000$ .

*After class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.885),  $p = .001$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *after* the teaching session (-.718),  $p = .019$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *after* the teaching session (-.898),  $p = .000$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.916),  $p = .000$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.849),  $p = .002$ .

*Telic/Paratelic Planned-Spontaneous continuum.*

*Before class.*

The State Self-Esteem (performance) scale score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (-.718),  $p = .019$ . The Telic State

Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (-.643),  $p = .045$ .

*After class.*

The State Self-Esteem (performance) scale score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.913),  $p = .000$ . The State Self-Esteem (performance) scale score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.898),  $p = .000$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.945),  $p = .000$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.945),  $p = .000$ .

*Telic State Measure Perceived Effort*

*Before class.*

The State Self-Esteem (performance) scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.880),  $p = .001$ . The State Self-Esteem (performance) scale score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.916),  $p = .000$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction

with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.643$ ),  $p = .045$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.945$ ),  $p = .000$ . The Telic State Measure Perceived Effort *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session ( $.964$ ),  $p = .000$ .

#### *After class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $.932$ ),  $p = .000$ . The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $.849$ ),  $p = .002$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $-.945$ ),  $p = .000$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $.964$ ),  $p = .000$ .

#### *Insignificant Correlations*

##### *Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence score and each of the repeated-measures variables were all found to be insignificant for this subject.

##### *Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session and the State Self-Esteem (performance) Scale score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy *after* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy *before* the teaching session were found to be insignificant for this subject.

*State Self-Esteem (performance) Scale**Before class.*

The relationships between the Self-Esteem (performance) Scale score *before* the teaching session and the Telic State Measure Arousal Discrepancy score *after* the class, the Telic/Paratelic Serious-Playful continuum scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *before* the class, and the Self-Perceived Teaching Competence scores were found to be insignificant for this subject.

*After class.*

The relationships between the Self-Esteem (performance) Scale score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful Continuum scores both *before* and *after*

the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum.*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum scores *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant with this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum scores *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum scores *before* the teaching session and each of the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *after* the teaching session and the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant with this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *before* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful Continuum scores both *before* and *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *before* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

(End of Adult Educator 6)

*Adult Educator 7*

*Description:* Adult educator 7 was male, 45, and had 15 years of teaching experience with qualifications consisting registration as a psychologist, with honours and a MA in psychology, and Certificate IV in Assessment and Workplace Teaching. He was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Inducing/change agent:* The sessions in which he rated himself as having less teaching competence were the ones in which he was repeating teaching session material and felt unchallenged.

*Situational state balance:* Telic

*Metamotivational Preference*

AMSP

Result: Telic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 21 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 16 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 5 (0 = no dominance)                             |
| Telic/Paratelic Saliency = | 37 (lowest score = 12 and highest score = 60)    |

PDS

Result: Telic dominant

|         |   |
|---------|---|
| PLAY4 = | 2 |
| SPON5 = | 0 |
| ARSK6 = | 1 |

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 1        | 2        | 0        | 0        | -1       | 0        | 0        | 0        | 1         | 0        |
| <b><u>SSEPS</u></b> | 22       | 23       | 22       | 25       | 27       | 24       | 25       | 30       | 31        | 35       |
| <b><u>TPSP</u></b>  | 3        | 3        | 4        | 4        | 3        | 4        | 5        | 5        | 5         | 5        |
| <b><u>TPPS</u></b>  | 3        | 2        | 4        | 2        | 4        | 4        | 3        | 5        | 5         | 5        |
| <b><u>TSME</u></b>  | 5        | 4        | 5        | 5        | 5        | 5        | 5        | 5        | 5         | 5        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 4        | -        | 4        | -        | 5        | -         | 5        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 2        | 0        | 2        | 0        | 0        | 0        | 2        | 1        | -1        | 0        |
| <b><u>SSEPS</u></b> | 33       | 33       | 26       | 31       | 32       | 23       | 34       | 32       | 32        | 32       |
| <b><u>TPSP</u></b>  | 5        | 6        | 2        | 5        | 5        | 4        | 5        | 5        | 3         | 4        |
| <b><u>TPPS</u></b>  | 4        | 4        | 4        | 5        | 3        | 4        | 3        | 4        | 2         | 4        |
| <b><u>TSME</u></b>  | 5        | 5        | 4        | 4        | 5        | 5        | 5        | 4        | 4         | 5        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 5        | -        | 5        | -         | 5        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-perceived Teaching Competence*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.715),  $p = .020$ . The Telic/Paratelic Serious-Playful continuum score before the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.769),  $p = .009$ .

##### *Telic State Measure Arousal Discrepancy*

###### *After class.*

The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (-.759),  $p = .011$ .

##### *State Self-Esteem (performance) Scale*

###### *Before class.*

The Self-Perceived Teaching Competence score was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.715),  $p = .020$ .

###### *After class.*

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.764),  $p = .010$ .

*Telic/Paratelic Serious-Playful continuum**Before class.*

The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.659),  $p = .038$ . The Self-Perceived Teaching Competence score was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *before* the teaching session (.769),  $p = .009$ .

*After class.*

The State Self-Esteem (performance) Scale score after the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *after* the teaching session (.764),  $p = .010$ .

The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum *after* the teaching session (.656),  $p = .039$ .

*Telic/Paratelic Planned-Spontaneous continuum**After class.*

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (.656),  $p = .039$ .

*Telic State Measure Perceived Effort**Before class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *before* the teaching session (.659),  $p = .038$ .

*After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *after* the teaching session (-.759),  $p = .011$ .

### *Insignificant Correlations*

#### *Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *after* the class, the Telic/Paratelic Serious-Playful Continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous Continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

#### *Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Perceived Effort Score *after* the teaching session were found to be insignificant for this subject.

*State Self-Esteem (performance) Scale*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and the repeated-measures variables in this study except for the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Perceived Effort score *before* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *after* the teaching session and the Telic/Paratelic Planned-Spontaneous Continuum score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum**Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous Continuum score *after* the teaching session and the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful Continuum score *after* the teaching session were found to be insignificant for this subject.

*Telic State Measure Perceived Effort**Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful Continuum Score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 7)

*Adult Educator 8*

*Description:* Adult educator 8 was female, 33, and had 6 years of teaching experience with qualifications in a B.Sc. and an MBA and a graduate diploma in counselling. She was rated paratelic on the AMSP and paratelic dominant on the PDS.

*Situational state balance:* Paratelic

*Inducing/change agent:* The sessions in which she rated herself as having less teaching competence were the ones in which she felt she needed to exert more effort.

*Metamotivational Preference*

AMSP

Result: Paratelic

Telic Subscale = 20 (6 = least telic and 30 = most telic)

Paratelic Subscale = 26 (6 = least paratelic and 30 = most paratelic)

Paratelic Dominance = -6 (0 = no dominance)

Telic/Paratelic Saliency = 46 (lowest score = 12 and highest score = 60)

PDS

Result: Paratelic dominant

PLAY4 = 4

SPON5 = 2

ARSK6 = 6

*Dependent/Independent Variables: Raw data*

|                     | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | -1       | 0        | 1        | 0        | -1       | 0        | 1        | -1        | -1       |
| <b><u>SSEPS</u></b> | 34       | 35       | 33       | 31       | 35       | 35       | 35       | 34       | 35        | 35       |
| <b><u>TPSP</u></b>  | 5        | 5        | 2        | 2        | 5        | 5        | 3        | 5        | 3         | 4        |
| <b><u>TPPS</u></b>  | 4        | 6        | 3        | 2        | 5        | 5        | 3        | 3        | 5         | 4        |
| <b><u>TSME</u></b>  | 4        | 2        | 5        | 4        | 2        | 1        | 3        | 3        | 2         | 3        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 5        | -        | 4        | -         | 5        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 1        | 0        | -1       | 0        | 2        | 0        | -1       | 1        | 0         | 0        |
| <b><u>SSEPS</u></b> | 33       | 35       | 35       | 35       | 33       | 33       | 35       | 35       | 35        | 35       |
| <b><u>TPSP</u></b>  | 4        | 5        | 4        | 5        | 3        | 3        | 5        | 5        | 5         | 5        |
| <b><u>TPPS</u></b>  | 4        | 5        | 5        | 5        | 2        | 3        | 5        | 6        | 2         | 5        |
| <b><u>TSME</u></b>  | 3        | 2        | 3        | 3        | 4        | 3        | 1        | 3        | 3         | 3        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 5        | -        | 4        | -        | 4        | -         | 5        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

###### *After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a negative direction with the Self-Perceived Teaching Competence score (-.775),  $p = .009$ . The State Self-Esteem (performance) Scale score *after* the teachings sessions was correlated in a positive direction with the Self-Perceived Teaching Competence score (.643),  $p = .045$ .

##### *Telic State Measure Arousal Discrepancy*

###### *Before class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (-.728),  $p = .017$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (-.710),  $p = .021$ .

###### *After class.*

The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a positive Telic State Measure Arousal Discrepancy score *after* the teaching session (.661),  $p = .038$ . The Self-Perceived Teaching Competence score was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *after* the teaching session (-.775),  $p = .009$ .

*State Self-Esteem (performance) Scale*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *before* the teaching session ( $-.728$ ),  $p = .017$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *before* the teaching session ( $-.745$ ),  $p = .013$ .

*After class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction to the State Self-Esteem (performance) Scale score *after* the teaching session ( $-.774$ ),  $p = .009$ . The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction to the State Self-Esteem (performance) Scale score *after* the teaching session ( $-.706$ ),  $p = .022$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction to the State Self-Esteem (performance) Scale score *after* the teaching session ( $.836$ ),  $p = .003$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the State Self-Esteem (performance) Scale score *after* the teaching session ( $-.650$ ),  $p = .042$ . The Self-Perceived Teaching Competence score was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session ( $.643$ ),  $p = .045$ .

*Telic/Paratelic Serious-Playful continuum*

*Before class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.774),  $p = .009$ . The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.774),  $p = .009$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (.911),  $p = .000$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Serious-Playful continuum score *before* the teaching session (-.636),  $p = .048$ .

*After class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.707),  $p = .022$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.774),  $p = .009$ . The Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.743),  $p = .014$ .

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (-.710),  $p = .021$ .

The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (-.689),  $p = .028$ .

*After class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (.836),  $p = .003$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.911),  $p = .000$ . The Telic/Paratelic Serious-Playful continuum score *after* the teaching sessions correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.743),  $p = .014$ .

*Telic State Measure Perceived Effort*

*Before class.*

The State Self-Esteem (performance) Scale score *before* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session (-.745),  $p = .013$ . The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session (-.650),  $p = .042$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction

with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.689$ ),  $p = .028$ .

*After class.*

The Telic State Measure Arousal Discrepancy score *after* the teaching session was correlated in a positive direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $.661$ ),  $p = .038$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $-.636$ ),  $p = .048$ .

*Insignificant Correlations*

*Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence and the Telic State Measure Arousal Discrepancy score *before* the class, the State Self-Esteem (performance) Scale score *before* the class, the Telic/Paratelic Serious-Playful Continuum scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous Continuum scores both *before* and *after* the class, and the Telic State Measure Perceived Effort scores both *before* and *after* the teaching session were found to be insignificant for this subject.

*Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and the repeated-measures variables in this study except for the State Self-Esteem (performance) Scale score *before* the teaching session and the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Perceived Effort score *after* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*State Self-Esteem (performance) Scale*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session and the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *before* the class, the Telic/Paratelic Planned-Spontaneous Continuum score *before* the class, and the Telic State Measure Perceived Effort score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum.*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *before* the class, the

Telic/Paratelic Planned-Spontaneous Continuum score *before* the class, the Telic State Measure Perceived Effort score *before* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale score *before* the class, the Telic/Paratelic Planned-Spontaneous Continuum score *before* the class, the Telic State Measure Perceived Effort scores both *before* and *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *before* the teaching session and the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale scores *before* the class, the Telic/Paratelic Planned-Spontaneous Continuum score *before* the class, the Telic State Measure

Perceived Effort scores both *before* and *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum scores both *before* and *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *after* the class, the Telic State Measure Perceived Effort score *after* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy score *after* the teaching session and the Telic/Paratelic Serious-Playful continuum score *before* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 8)

*Adult Educator 9*

*Description:* Adult educator 9 was female, 54, and had 5 years of teaching experience with qualifications consisting of a BA (Honours), Diploma of Education, Graduate Diploma in Applied Psychology and Teach the Adult educator. She was rated as telic dominant in the AMSP and paratelic dominant on the PDS.

*Inducing/change agent:* The sessions in which she rated herself as having less teaching competence were the ones in which she felt tired.

*Situational state balance:* Paratelic

*Metamotivational Preference*

AMSP

Result: Telic

Telic Subscale = 17 (6 = least telic and 30 = most telic)  
 Paratelic Subscale = 20 (6 = least paratelic and 30 = most paratelic)  
 Paratelic Dominance = -3 (0 = no dominance)  
 Telic/Paratelic Saliency = 37 (lowest score = 12 and highest score = 60)

PDS

Result: Paratelic

PLAY4 = 3  
 SPON5 = 2  
 ARSK6 = 4

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | 0        | 0        | 0        | 1        | 2        | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 30       | 32       | 33       | 33       | 33       | 33       | 30       | 31       | 33        | 29       |
| <b><u>TPSP</u></b>  | 5        | 5        | 5        | 6        | 4        | 6        | 4        | 4        | 4         | 5        |
| <b><u>TPPS</u></b>  | 3        | 3        | 5        | 4        | 4        | 4        | 4        | 4        | 4         | 4        |
| <b><u>TSME</u></b>  | 3        | 3        | 2        | 2        | 3        | 6        | 3        | 3        | 3         | 5        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 5        | -        | 5        | -        | 4        | -         | 5        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0        |
| <b><u>SSEPS</u></b> | 32       | 33       | 31       | 32       | 32       | 33       | 35       | 35       | 29        | 35       |
| <b><u>TPSP</u></b>  | 4        | 5        | 4        | 5        | 4        | 4        | 4        | 5        | 4         | 5        |
| <b><u>TPPS</u></b>  | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4         | 4        |
| <b><u>TSME</u></b>  | 2        | 3        | 2        | 3        | 2        | 2        | 3        | 2        | 3         | 3        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 4        | -        | 5        | -        | 5        | -         | 5        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

The relationships between the Self-Perceived Teaching Competence and each of the repeated-measures variables in this study were found to be insignificant with this subject.

##### *Telic/Paratelic Serious-Playful continuum.*

###### *Before class.*

The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Serious-Playful score *before* the teaching session (-.667),  $p = .035$ .

##### *Telic/Paratelic Planned-Spontaneous continuum.*

###### *After class.*

The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (-.667),  $p = .035$ . The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session (.745),  $p = .013$ .

#### *Insignificant Correlations*

##### *Self-Perceived Teaching Competence*

The relationships between Self-Perceived Teaching Competence score and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*State Self-Esteem (performance) Scale.*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant with this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum.*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and each of the repeated-measures variables except the Telic/Paratelic

Planned-Spontaneous continuum score *after* the teaching session were found to be insignificant with this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous continuum score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session were found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

(End of Adult Educator 9)

#### *Adult Educator 10*

*Description:* Adult educator 10 was male, 34, and had 11 years of teaching experience with qualifications consisting of a B. Soc. Sc. and an honours degree in psychology, and Teach the Adult educator. He was rated as telic dominant in the AMSP and telic dominant on the PDS.

*Situational state balance:* Telic

*Inducing/change agent:* The sessions in which he rated himself as having less teaching competence were the ones in which he felt unprepared.

#### *Metamotivational Preference*

##### AMSP

Telic

|                            |  |
|----------------------------|--|
| Telic Subscale =           | 24 (6 = least telic and 30 = most telic)         |
| Paratelic Subscale =       | 20 (6 = least paratelic and 30 = most paratelic) |
| Telic Dominance =          | 4 (0 = no dominance)                             |
| Telic/Paratelic Salience = | 44 (lowest score = 12 and highest score = 60)    |

##### PDS

Telic dominant

|         |   |
|---------|---|
| PLAY4 = | 3 |
| SPON5 = | 1 |
| ARSK6 = | 2 |

*Dependent/Independent Variables: Raw data*

| <b>Session #:</b>   | <b>1</b> |          | <b>2</b> |          | <b>3</b> |          | <b>4</b> |          | <b>5</b>  |          |
|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 1        | 2        | 0        | 2        | 3        | 1        | 0        | 2        | 1         | 3        |
| <b><u>SSEPS</u></b> | 31       | 32       | 32       | 32       | 23       | 31       | 31       | 27       | 32        | 28       |
| <b><u>TPSP</u></b>  | 4        | 6        | 5        | 6        | 1        | 3        | 4        | 2        | 5         | 2        |
| <b><u>TPPS</u></b>  | 2        | 4        | 3        | 3        | 1        | 3        | 4        | 2        | 4         | 2        |
| <b><u>TSME</u></b>  | 2        | 5        | 3        | 4        | 1        | 5        | 5        | 5        | 3         | 4        |
| <b><u>SPTC</u></b>  | -        | 5        | -        | 5        | -        | 4        | -        | 3        | -         | 3        |
|                     | <b>6</b> |          | <b>7</b> |          | <b>8</b> |          | <b>9</b> |          | <b>10</b> |          |
|                     | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b> | <b>A</b> | <b>B</b>  | <b>A</b> |
| <b><u>TSMAD</u></b> | 0        | 2        | 0        | 3        | 2        | 0        | -1       | 1        | 0         | 2        |
| <b><u>SSEPS</u></b> | 30       | 33       | 27       | 32       | 20       | 26       | 30       | 25       | 29        | 32       |
| <b><u>TPSP</u></b>  | 5        | 5        | 4        | 5        | 4        | 4        | 5        | 3        | 4         | 5        |
| <b><u>TPPS</u></b>  | 5        | 5        | 2        | 4        | 2        | 5        | 6        | 4        | 5         | 5        |
| <b><u>TSME</u></b>  | 3        | 4        | 4        | 5        | 3        | 4        | 4        | 4        | 5         | 3        |
| <b><u>SPTC</u></b>  | -        | 4        | -        | 4        | -        | 3        | -        | 4        | -         | 4        |

### *Quantitative Analysis: Correlations*

#### *Significant Correlations*

##### *Self-Perceived Teaching Competence*

The Telic/Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the Self-Perceived Teaching Competence score (.834),  $p = .003$ .

##### *Telic State Measure Arousal Discrepancy*

*Before class.*

The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (-.770),  $p = .009$ . The Telic State Measure Perceived Effort score *before* the teaching session was correlated in a negative direction with the Telic State Measure Arousal Discrepancy score *before* the teaching session (-.724),  $p = .018$ .

##### *State Self-Esteem (performance) Scale*

*After class.*

The Telic-Paratelic Serious-Playful continuum score *after* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *after* the teaching session (.722),  $p = .018$ .

##### *Telic/Paratelic Serious-Playful continuum*

*Before class.*

The Telic-Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a positive direction with the State Self-Esteem (performance) Scale score *before* the teaching session (.676),  $p = .032$ .

*After class.*

The State Self-Esteem (performance) Scale score *after* the teaching session was correlated in a positive direction with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.722),  $p = .018$ . The Self-Perceived Teaching Competence score was correlated with the Telic/Paratelic Serious-Playful continuum score *after* the teaching session (.834),  $p = .003$ .

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the class (-.770),  $p = .009$ . The Telic/Paratelic Serious-Playful continuum score *before* the teaching session was correlated in a positive direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (.676),  $p = .032$ . The Telic State Measure Perceived Effort score *after* the teaching session was correlated in a negative direction with the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session (.645),  $p = .044$ .

*Telic State Measure Perceived Effort*

*Before class.*

The Telic State Measure Arousal Discrepancy score *before* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *before* the teaching session ( $-.724$ ),  $p = .018$ .

*After class.*

The Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session was correlated in a negative direction with the Telic State Measure Perceived Effort score *after* the teaching session ( $-.645$ ),  $p = .044$ .

*Insignificant Correlations*

*Self-Perceived Teaching Competence.*

The Self-Perceived Teaching Competence score and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the class, the State Self-Esteem (performance) Scale scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum score *before* the class, the Telic/Paratelic Planned-Spontaneous continuum scores both *before* and *after* the class, and the Telic State Measure Arousal Discrepancy scores both *before* and *after* the teaching session were found to be insignificant for this subject.

*Telic State Measure Arousal Discrepancy*

*Before class.*

The relationships between the Telic State Measure Arousal Discrepancy score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session and the Telic State Measure Perceived Effort score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Arousal Discrepancy score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*State Self-Esteem (performance) Scale.*

*Before class.*

The relationships between the State Self-Esteem (performance) Scale score *before* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*After class.*

The relationships between the State Self-Esteem (performance) Scale score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Serious-Playful Continuum score *after* the teaching session were found to be insignificant for this subject.

*Telic/Paratelic Serious-Playful continuum.*

*Before class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Planned-Spontaneous continuum score *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Serious-Playful continuum score *after* the teaching session and each of the repeated-measures variables in this study except for the State

Self-Esteem (performance) Scale score *after* the teaching session and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*Telic/Paratelic Planned-Spontaneous continuum*

*Before class.*

The relationships between the Telic/Paratelic Planned-Spontaneous score *before* the teaching session and The Telic State Measure Arousal Discrepancy score *after* the class, the State Self-Esteem (performance) Scale scores both *before* and *after* the class, the Telic/Paratelic Serious-Playful continuum score *after* the class, the Telic/Paratelic Planned-Spontaneous continuum score *after* the class, the Telic State Measure Perceived Effort score *before* the class, and the Self-Perceived Teaching Competence score were found to be insignificant for this subject.

*After class.*

The relationships between the Telic/Paratelic Planned-Spontaneous score *after* the teaching session and each of the repeated-measures variables in this study were all found to be insignificant for this subject.

*Telic State Measure Perceived Effort*

*Before class.*

The relationships between the Telic State Measure Perceived Effort score *before* the teaching session and each of the repeated-measures variables in this study except for the Telic State Measure Arousal Discrepancy *before* the teaching session were found to be insignificant for this subject.

*After class.*

The relationships between the Telic State Measure Perceived Effort score *after* the teaching session and each of the repeated-measures variables in this study except for the Telic/Paratelic Planned-Spontaneous Continuum score *before* the teaching session were found to be insignificant for this subject.

(End of Adult Educator 10)