APPENDIX A: EVOLUTION OF THE BASSOON

To understand the potential of the bassoon to cause PRMDs it is necessary to provide an explanation of how the bassoon developed historically. While changes to the instrument have occurred (e.g. addition of keys, acoustical improvements), the overall design changes to the bassoon have “lagged behind” the developments on other instruments (Sadie and Levy 2001).

The bassoon is the bass member of the woodwind family. It is related to the oboe as they both have conical bores whereas the other members of the woodwind family, the flute and clarinet, have cylindrical bores (Sadie and Levy 2001). The bassoon also has a double reed in common with the oboe, although the bassoon reed is larger in size. In addition to the standard bassoon there are two other versions of the bassoon, neither of which will be discussed further, the contra or double bassoon and the tenoroon.

There are two distinctly different types of bassoons, the German and the French. They differ in bore size, keywork, fingerings, the position of tone holes, and tone color. The French bassoon is closer in design to that of the early bassoon (Sadie and Levy 2001, p.876). Today, French bassoons are only made in Paris and are played primarily in France. They had a foothold in England until the 1980s when the German bassoon was introduced by Archie Camden (Camden 1962) and became popular. The German bassoon is used more frequently by performers today and is produced all over Europe, as well as in Canada, the United States of America, and Japan.
The bassoon is not a popular instrument; it is not as well known and identifiable to the general public as, for example, the flute. The bassoon “is rather an instrument that appeals to a certain type of musician: a type which stands out from the musical fraternity as a whole” (Jansen 1978a, p.14). This lack of popularity has resulted in neglect by scholars. Although the oldest reference to the bassoon can be traced to 1548 (Jansen 1978a, p.14), the first “serious” attempt to chronicle the history of the instrument was not until 1939 (Langwill 1941).

Current literature about the bassoon’s origins is littered with disagreement (Langwill 1941; Langwill 1965; Jansen 1978b; Joppig 1988). There is little consensus on anything regarding this instrument. In fact, Jensen wrote a five-volume work about the bassoon and has one entire section devoted to “the incorrect date in literature,” providing 11 pages of inaccuracies from previous sources. His section of inaccuracies was prefaced with “the most staggering nonsense is printed about the bassoon” (Jansen 1978a, p.43).

The current primary names used to describe the bassoon include bassoon, basson, fagott, fagot, and fagotto. The term ‘bassoon’ is accredited to an English dictionary appearing in 1706 (Langwill 1965, p.5) and in Purcell’s Dioclesian score in 1690 (Sadie and Levy 2001, p.877). The original meaning for ‘basson’ was “the deep sounding instrument” (Jansen 1978a, p.14). This was applied to the bass register version of many instruments; for example, basson de hautbois and basson-flute.

The term ‘fagot’ has a confusing history and therefore clouds the ancestry and development of the bassoon. ‘Fagot’ is believed to have applied to any bass instrument
“bored with parallel tubes” (Langwill 1941, p.4). For example, in 1532 at a banquet in Mantua “il suo fagoto” was played by Rev. Afranio; it is believed that ‘fagoto,’ in this case, was referring to a phagotum which is not generally credited as a likely ancestor of the bassoon. The phagotum was made up of two tube lengths connected to form a continuous sound column. In other words it had a U-tube, similar to the bassoon. However, the phagotum had a cylindrical bore, which makes it less likely to be an ancestor to the bassoon’s conical bore. No surviving specimen or facsimile of the phagotum exists so a comparison to the modern bassoon is impossible.

The dulcian is most commonly believed to be the ancestor to the bassoon; the choristfagott (mid-range dulcian) is the most similar to the modern bassoon (Jansen 1978a, p.59) although it could be played on either side of the body whereas the modern bassoon must be played on the right side of the body. Not much is known about the dulcian before 1550 when it appears in artwork of the period (Jansen 1978a, p.15; Sadie and Levy 2001, p.876). The dulcian was made from one piece of wood that doubled back on itself which made it more convenient to handle. The dulcian had the double reed of the shawm, the curved crook of the bass-recorder, and the doubling back of the bore meant it had a U-tube similar to the phagotum; all of these traits are visible in the modern bassoon.

The transition from dulcian to early bassoon is not documented. From 1600-1700 a transition took place that resulted in an early bassoon that split into four pieces. Because only one dulcian that split into pieces survived (Sadie and Levy 2001, p.881), it is not known if the dulcian transitioned from one piece to two pieces to three pieces to four or
if it went directly from one piece to four pieces. The separation of the joints allowed for
the elongation of the bell joint and the addition of a low b-flat key. The dulcian only had
a range to C, therefore this additional bore length and key increased the range to b-flat.
It is this extended range that classifies the instrument as a bassoon and not a dulcian. In
simple terms, if the lowest note is a C it is a dulcian; if the lowest note is a B-flat it is a
bassoon, B-flat is still the lowest note on a modern bassoon without the addition of a low
a extension. The first solo written for the bassoon, which has a low b-flat in it, was
written in 1638 in Venice by Selma y Salaverde (Langwill 1941; Sadie and Levy 2001,
p.887). By 1650 the bassoon was starting to be used throughout Europe.

The early bassoon had three keys, was split into four joints, and had to be played across
the right side of the body. This early version of the bassoon was capable of playing a
chromatic scale even though it only had tone holes and keys to play a diatonic scale. The
chromatic notes were achieved by over-blowing a set fingering, by using a “forked”
fingerings (Jansen 1978a, p.21) or by using a half-holed fingering. The limited key work
available and no set bore size meant that intonation was extremely inconsistent.

Throughout the bassoon’s history, key work has been added to solidify intonation, limit
forked and over-blown fingerings, and aid in technical proficiency. The consistency of
intonation on the bassoon lagged behind the other instruments until Carl Almenraeder
(1786-1843) began working with Gottried Weber (1779-1839) (Sadie and Levy 2001).
Weber had written numerous articles about the acoustics of woodwind instruments and
Almenraeder worked on adapting these properties to modernize the bassoon. Opening a
factory in 1831, in Biebrich Germany, with J.A. Heckel, Almenraeder worked diligently
on improving the bassoon through the mid-1800s. His significant manuscript, completed in 1836, showed a 17-key bassoon that had a four octave range, almost the same as the instrument used today, and much more stable intonation (Langwill 1965). The factory that he started with Heckel is still in operation and has produced many of the finest bassoons in history.

With all of Almenraeder’s acoustical advancements, the tone quality of the bassoon had become harsh; it was Heckel that brought the tone quality of the bassoon back to a more singing quality (Sadie and Levy 2001). This rich tone quality is now synonymous with the Heckel name and Heckel bassoon. Advancement by Heckel also included the addition of a key to cover the bocal hole, now called the whisper key, developed in 1905. This is the last major change to the bassoon. All subsequent changes have been the addition of keys, such as trill keys, to aid technical proficiency. Heckel bassoons produced after 1910 (but before 1950 when the factory was bombed in the WWII) are still considered to be the very best, having all the technical necessities to play but also have the richest most beautiful tone color. J.A. Heckel’s descendents continue to run the factory today (Heckel 2008).

As discussed previously, there is no standard key work on the bassoon. Each performer can choose which trill keys and other “optional” keys they wish to have on their bassoon because there is no standard for the industry. Currently there are numerous makers of the bassoon: Heckel (Germany), Püchner (Germany), Moosmann (Europe), Bell (Canada), Fox (USA), Yamaha (Japan) are a few of the more popular manufactures.
The modern German bassoon is composed of six pieces: the bell joint, long/bass joint, boot joint, wing/tenor joint, bocal/crook, and reed (Figure 1). The bassoon stands 134 centimeters tall and has 254 centimeters of total bore length that flares from 4 millimeters at the top of the wing joint to 39 millimeters at the bell (Sadie and Levy 2001, p.873). A modern bassoon has between 23 and 29 keys, which brings its weight to between 3 and 4 kilograms. Another factor in the weight of the instrument is the type of wood used; maple is traditionally used and depending upon the variety of maple, such as black, sugar or sycamore, the weight of the instrument will vary slightly. Synthetic plastics are used for student model instruments but to date professional bassoons continue to be made of wood.
The common range of the modern day bassoon is from B-flat up three and a half octaves to g” (Figure 2). This wide range makes the bassoon “one of the most versatile and useful members of the orchestra” (Sadie and Levy 2001, p.873). The bassoon is not only important in an orchestral setting but also plays in operas, ballets, concert bands, military bands, chamber groups, and as a soloist.
The bassoon has not gone through any major changes for 150 years. Bassoonists are still dealing with: a large cumbersome instrument that was double backed on itself to make it easier to handle but is still unwieldy; a heavy instrument that was split into pieces to make it easier to transport but still puts load on the body when playing; an instrument that was initially played on either side of the body but is now positioned on the right side of the body therefore putting uneven stress on the body; key work that was designed to improve intonation but which increased technical requirements and the need to stretch the fingers unnaturally wide; the ongoing addition of keys has increased the distances that fingers have to travel in order to play the instrument; and forked fingers and half-holes are still in use, proving awkward and demanding. Considering all of these factors, the bassoon is a complicated antiquated instrument that has had a history of development that does not align with players’ physical abilities. This situation increases a bassoon player’s likelihood of experiencing PRMDs.
References:


APPENDIX B: ETHICS APPROVAL LETTER

23 June 2006

Associate Professor D Kenny
School of Behavioural and Community Health Sciences
Faculty of Health Sciences
Cumberland Campus – C/02
The University of Sydney

Dear Professor Kenny

Thank you for your correspondence dated 13 June 2006 addressing comments made to you by the Committee. After considering the additional information, the Executive Committee approved your protocol entitled "A study of perceptions, potential causes and treatments of boneoon-related pain and injury".

Details of the approval are as follows:

Ref No.: 06-2006/2/8885
Approval Period: June 2006 – June 2007
Authorised Personnel: Associate Professor D Kenny
                        Dr P Dunbar-Hall
                        Ms P C Bruzky

The approval of this project is conditional upon your continuing compliance with the National Statement on Ethical Conduct in Research Involving Humans. We draw to your attention the requirement that a report on this research must be submitted every 12 months from the date of the approval or on completion of the project, whichever occurs first. Failure to submit reports will result in withdrawal of consent for the project to proceed.

The project is approved for an initial period of 12 months with approval for up to four (4) years following receipt of the appropriate report.

Your report will be due on 30 June 2007.

Conditions of Approval Applicable to all Projects

(1) Reporting of Serious Adverse Events

Researchers should immediately report anything to the Human Research Ethics Committee which might warrant review of ethical approval of the protocol, including:

* Serious or unexpected adverse effects on participants;
• Proposed changes in the protocol or any other material given to the participants in the study must be known prior to being actioned, including participant information and consent forms; and
• Unforeseen events that might affect continued ethical acceptability of the project.

(2) Modifications to the protocol cannot proceed until such approval is obtained in writing. (Refer to the website www.usyd.edu.au/ethics/human under ‘Forms and Guides’ for a Modification Form).

(3) The confidentiality and anonymity of all research subjects is maintained at all times, except as required by law.

(4) All research subjects are provided with a Participant Information Sheet and Consent Form, unless otherwise agreed by the Committee.

(5) The Participant Information Sheet and Consent Form are to be on University of Sydney letterhead and include the full title of the research project and telephone contacts for the researchers, unless otherwise agreed by the Committee.

(6) The following statement must appear on the bottom of the Participant Information Sheet. Any person with concerns or complaints about the conduct of a research study can contact the Senior Ethics Officer, University of Sydney, on (02) 9351 4811 (Telephone); (02) 9351 6708 (Facsimile) or abriody@uni.sydney.edu.au (Email).

(7) The standard University policy concerning storage of data and tapes should be followed. While temporary storage of data or tapes at the researcher’s home or an off-campus site is acceptable during the active transcription phase of the project, permanent storage should be at a secure, University controlled site for a minimum of seven years.

(8) A report and a copy of any published material should be provided at the completion of the Project.

Yours sincerely

[Signature]

Associate Professor J D Watson
Chairman
Human Research Ethics Committee

Encl.
Participant Information Sheet
“Dear ……” Letter
Questionnaire Pg 2 of Pg 9

cc Ms Paula Brusky, 403b, 9-15 Central Ave, Manly NSW 2095.
APPENDIX C: PAGES FROM WEBSITE

PAULABRUSKY.COM

Welcome to the site from Paula C. Brusky - Bassoonist and PhD Candidate at the University of Sydney Conservatorium of Music.

PHD RESEARCH

“A study of perceptions, potential causes and treatments of bassoon-related pain and injury.”

Information about my PhD, underway at the University of Sydney Conservatorium of Music, is posted here. Included in this section is more information about the survey that has taken place, information gained from the survey and direction of future studies.

RESOURCES

Projects created and/or compiled over the years that may be beneficial to others. This site aims to create a place where bassoonists can come to share information and ideas. We can all learn from each other, so please share and I’ll be sure to give appropriate credit to anyone who contributes!

Examples of resources:
- Spreadsheet of bassoon solo literature with call numbers
- Spreadsheet with chamber literature
- Spreadsheet of bassoon etudes
- Projects shared by members of the bassoon community

ABOUT

A section about me: including my biography, resume, pictures, and video/audio excerpts of me performing.

CONTACT

Contact me through the links here with comments, suggestions, things you would like to contribute to this site for the knowledge of others, or anything else on your mind.

all materials on this site are 2006 copyright of Paula Brusky. Page Design by Globetrotter Design
RESEARCH

“A study of perceptions, potential causes and treatments of bassoon-related pain and injury.”

There has been no study on risks for pain and injury suffered by bassoonists. This study will provide data on injury rate, potential causes, and available treatments for bassoonists. The aim of this study is to identify the extent and type of pain and injury suffered by bassoonists. The goal is to give bassoonists a chance to CONFIDENTIALLY compare their experiences to others in the field and to compile information on what methods are currently available to assist in the prevention and treatment of performance related musculoskeletal disorders in bassoonists.

The initial survey is now closed. The results are being analyzed. Thank you to the 212 bassoonists that participated in the study. Information will be posted soon regarding the findings of the survey. Additionally, another study is in the works - more to come!

Background for research

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REPERTOIRE SPREADSHEET:

Solo Literature Spreadsheet: Listing of solo literature for bassoon. It is in alphabetical order by Composer with the title, then the call number for the Indiana University Library.

Chamber Literature Spreadsheet: A very small compilation of chamber music that includes the bassoon.

Etude Literature Spreadsheet: A spreadsheet of etude books.

VIVALDI BASSOON CONCERTI TABLE:

Courtesy of Dr Jeffery Lyman, this table is taken directly from his website; it shows all the Vivaldi bassoon concerti with each numbering system used to classify them: Ryom, Rinaldi, Pincherle, Fanna, Malipiero/Tomo.

MAKING REEDS:

The steps that I follow when I make reeds. Every person as his/her own individual reed style, this is what I’ve found works best for me. Thanks to all my teachers, especially Dennis Michel, for helping me develop this style of reed making!

BOOKS:

A listing of books that may be an interesting read. Share comments on the books listed or add some of your favorites. Coming Soon!!!

LINKS:

Links on the Internet to other peoples’ website that I personally find helpful. If you have sites you love, please share - write to me and I’ll add them!
THANK YOU

THANK YOU for taking the time to fill out the International Survey for Bassoonists.

If you have any questions about the research or wish to contribute further information, please email me at paula.brusky@gmail.com. The analysis from the survey will be posted on this website under "PhD Research" as it becomes available, beginning in March 2007. This website will also post plans for future studies. For example, an EMG study on bassoonists is currently being discussed and we hope to conduct it in September 2007. If you have interest in participating in bassoon related studies in the future, please contact me: paula.brusky@gmail.com.

Thank you for participating in this study.

Please tell other bassoonists about the study and encourage them to participate.

THANK YOU
APPENDIX D: PAPER SURVEY FOR ETHICS APPROVAL

This paper version was used for Ethic approval only. The design and layout was rudimentary, as the web-based survey would have different constraints.
Bassoonist Questionnaire

This survey is anonymous.

**Demographic Information:**

Age: ____________________

Gender:
- Male
- Female

How many years have you played the bassoon? ______________

Do you play in a professional orchestra:
- Yes
- No

What is your highest music qualification?
- High School
- Bachelors (Undergrad)
- Master
- Postgraduate/Doctorate
- Other: ____________

Who were/are your main teachers:
________________________
________________________

What etudes or exercises do YOU practice on a daily basis:
____________________________________________________________

How many students do you have? ______________
Bassoon Injury Information:

Have you experienced any of the following while playing the bassoon? (Tick all that apply)
- Pain
- Weakness
- Numbness
- Tingling
- Loss of dexterity/flexibility
- Other - Please specify: ________________________________

Have you ever been diagnosed with a specific injury resulting from your bassoon playing? (examples: tendonitis, carpal tunnel, etc.)
- Yes
- No
If yes, what was the diagnosis? _______________________

Did/do you continue to play/perform while injured? Yes No
If not, how long did you take off?

Please indicate how often you suffer from a PRMD:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVER</td>
<td></td>
<td></td>
<td></td>
<td>CONSTANTLY</td>
</tr>
</tbody>
</table>

Please indicate the average severity of any PRMD that you suffer:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
<td>MAXIMALLY SEVERE</td>
</tr>
</tbody>
</table>

If you have never had a PRMD or injury please skip to page 6.
Please indicate on the body chart below where you have experienced pain related to playing the bassoon. Please use the following color codes:

Red for current pain, lasting less than a month
Green for current pain, lasting from 1-4 months
Blue for current pain, lasting over four months
Black for previous, significant, pain episodes
What do you feel contributed to your development of pain? Please rate each of the following factors on a scale of 1 – 5 where 1 is a minor contributor and 5 is a very significant contributor. Please mark NA – not applicable to me – for any factors that you believe did not contribute to your pain development.

_______ Long hours of regular practice
_______ Insufficient rest breaks
_______ Sudden increase in playing time
_______ Poor posture
_______ Poor physical condition/fitness
_______ Poor diet/eating habits
_______ Poor flexibility
_______ Insufficient warm-up
_______ Changed instrument set-up (ex: different bocal bend, seat strap, etc)
_______ Playing standing
_______ Playing sitting
_______ Alternating between playing sitting and standing
_______ Technique flaws
_______ New technique tried/implemented
_______ Ignoring increasing intensity of pain
_______ Inadequate chairs
_______ Travel strains/stress
_______ Performance anxiety
_______ Stress in life (not bassoon focused)
_______ Lack of sleep
_______ Injury from a non-music activity (ex: car accident, sports)
_______ Underlying medical condition (ex: rheumatoid arthritis, past surgery)
_______ Other, please specify: ________________________________
What do you do if you notice that you are suffering some kind of performance-related musculoskeletal disorder (ex: pain, numbness, tingling, etc)? (Check all that apply)

- Rest
- Reduce playing hours
- Increase playing hours
- Ice the sore part
- Take anti-inflammatory medication
- Take painkillers
- Use of braces/supports
- Heat
- Stretches
- Exercise
- Professional help, please specify:  
  ___ Physio/physical therapy
  ___ Medical practitioner
  ___ Massage therapist
  ___ Osteopath
  ___ Acupuncturist
  ___ Instrument teacher
  ___ Alexander practitioner
  ___ Pilates practitioner
  ___ Feldenkrais practitioner
  ___ Chiropractor
- Other - please specify ________________

Which single remedy do you believe helps you the most?

_____________________________________________________

Do you have health insurance? Yes  No
If yes, does it cover all of your recovery activities/strategies?  
Yes  No
If no, which do you pay for out of pocket? _________________________
For the remainder of this questionnaire, the term “pain/injury” will be used to describe all performance related musculoskeletal disorders (PRMD) like pain, as well as diagnosed conditions like Carpal Tunnel and Tendonitis.

Below is a list of statements. Please circle your opinion after reading each statement using the following scale:

- **SA** means you **Strongly Agree**
- **A** means you **Agree**
- **D** means you **Disagree**
- **SD** means you **Strongly Disagree**.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tension while playing leads to injury.</td>
<td>SA</td>
</tr>
<tr>
<td>Injury prevention should be addressed in lessons.</td>
<td>SA</td>
</tr>
<tr>
<td>Some people are prone to injury.</td>
<td>SA</td>
</tr>
<tr>
<td>Taking time off will solve most performing injuries.</td>
<td>SA</td>
</tr>
<tr>
<td>Once a player has an injury his/her career is over.</td>
<td>SA</td>
</tr>
<tr>
<td>The medical profession is knowledgeable on treating pain/injuries</td>
<td>SA</td>
</tr>
<tr>
<td>Thinking about injury may increase one’s chances of getting an injury.</td>
<td>SA</td>
</tr>
<tr>
<td>It is important for teachers and students to address pain/injury</td>
<td>SA</td>
</tr>
<tr>
<td>Playing with pain is part of being a musician.</td>
<td>SA</td>
</tr>
<tr>
<td>I hide my pain/injuries from my colleagues.</td>
<td>SA</td>
</tr>
<tr>
<td>I have enough information on injury prevention available to me</td>
<td>SA</td>
</tr>
<tr>
<td>I was taught injury prevention in my bassoon lessons</td>
<td>SA</td>
</tr>
<tr>
<td>A teacher can decrease a student’s likelihood of being injured.</td>
<td>SA</td>
</tr>
</tbody>
</table>
**If you are a teacher please answer the following:**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>My students feel comfortable talking to me if they are concerned about an injury.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>If a student has had an injury I am less likely to accept them to my studio.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>I am made aware of students’ pain soon enough to help prevent injuries.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>Students try to hide injuries from their teachers.</td>
<td>SA A D SD</td>
</tr>
</tbody>
</table>

On a monthly basis (four lessons) with a student how often do you discuss injury prevention? (circle one)

- a. Only if it comes up
- b. At one lesson out of the four
- c. At 2-3 lessons
- d. At every lesson, every week

**If you are a student please answer the following:**

<table>
<thead>
<tr>
<th>Questions</th>
<th>Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel comfortable talking to my teacher about injury concerns.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>My teacher is prepared to offer assistance if I have a bassoon playing injury.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>I know the difference between healthy and unsafe tension while playing.</td>
<td>SA A D SD</td>
</tr>
<tr>
<td>Students hide injuries from their teachers.</td>
<td>SA A D SD</td>
</tr>
</tbody>
</table>
Open Response Questions for Everyone: Please write as much as you like. We appreciate your contributions!!!

What do you recommend to other bassoonists to prevent injuries and performance related musculoskeletal disorders?

What information would you like to have on bassoon related pain and injury?

General Fitness and Health Information:

How often in a week do you exercise, physically?

- Rarely
- 1-2 times a week
- 3-5 times a week
- More than 5 times per week

What types of exercise do you do? (tick all that apply)

- Weights training
- Cycle/bike
- Swim laps
- Activity related (tennis, soccer, golf, etc) which: ______________
- Run/jog/walk
- Yoga/Pilates
- Circuit Classes
- Gym classes (step, aerobics, etc)
- Other: ______________________________
If you are willing to give an interview please fill out the following information.
Giving an interview is completely optional. Interviews will only be conducted if
needed after the questionnaire is completed. People willing to give an
interview will be contacted before the interview with questions that will be
asked and they can withdraw their consent to give an interview at any time.

Contact information*:
Name: ___________________________
Address: _________________________
City: _____________________________
State: ____________________________
Postal Code: ______________________
Country: _________________________
Email: ___________________________

* Please note that by providing your contact information your survey answers will no longer be anonymous to the researchers conducting the study, however, will remain anonymous in all publications.
APPENDIX E: *INTERNATIONAL BASSOONIST QUESTIONNAIRE*

The *International Bassoonist Questionnaire* was a web survey comprised of 17 web pages. In the paper version, some of the web pages are on multiple pages due to the difference in formatting.
Bassoonists Questionnaire

1. Welcome

Welcome to the International Survey for Bassoonists. Thank you for taking the time to fill out the survey. You do not need to complete the survey in one sitting, you may save your answers and return at a later time. Your confidentiality will be protected at all times.

The survey will take approximately 20 minutes of your time. Please use the "prev" and "next" buttons on the survey to navigate through the survey instead of those on your web browser.

You can save and exit the survey through the link in the top right corner. To re-enter your saved survey, click on the survey link at www.paulbrusky.com from the same computer you originally used and any data entered previously will reappear.

Next >>
Bassoonists Questionnaire

2. Demographic Information

1. What is your gender?
   - Male
   - Female

2. What is your age?__

3. What is your highest music qualification? (obtained or enrolled)
   - High School
   - Music Diploma (eg AMusA, LMusA, ATCL, LTCL, DSCM)
   - Bachelor degree
   - Master degree
   - Doctor of Musical Arts (DMA)
   - PhD
   - Other (please specify)__

4. For how long have you played the bassoon?__
Bassoonists Questionnaire

3. Demographic Information 2

5. Do you earn money from playing the bassoon?
   - NO, skip to Q 7
   - YES

6. If YES, what percentage of your income is from playing?

7. Do you teach the bassoon?
   - NO, skip to the next page of the questionnaire
   - YES

8. If YES, how many students do you have?

<< Prev       Next >>
Bassoonists Questionnaire

4. Injury Information

9. Have you ever been diagnosed with a specific injury resulting from your bassoon playing? (examples: tendonitis, carpal tunnel, facial dystonia, etc.)
   - NO, skip to the next page of the questionnaire
   - YES

10. If YES, what was the diagnosis?

11. Did/do you continue to play and perform while injured?
   - NO
   - YES, skip to the next page of the questionnaire

12. If NO, for how much time did you stop playing?

<< Prev    Next >>
Bassoonists Questionnaire

5. PRMD definition

Performance Related Musculoskeletal Disorders (PRMDs) may be defined as any pain, weakness, numbness, tingling or any other symptom that interferes with your ability to play your instrument at the level to which you are accustomed. This definition includes areas with recurring symptoms but does not includeoland transient areas of pain.

13. Below is a list of common PRMD symptoms. For each of the symptoms please use the first drop down menu to indicate how often you experience the severity of your last symptom. Click on the blue boxes for drop down menus.

<table>
<thead>
<tr>
<th>How Often?</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
</tr>
</tbody>
</table>

Pain
Weakness
Numbness
Tingling
Loss of Dexterity (grasping control)
Loss of Flexibility (range of motion)

16. For each of the PRMD symptoms below, please list the body locations where this has been experienced. (Example: pain - right wrist, left shoulder, embouchure, etc.)

<table>
<thead>
<tr>
<th>Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Numbness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tingling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loss of Dexterity (grasping control)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loss of Flexibility (range of motion)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
Bassoonists Questionnaire

Performance Related Musculoskeletal Disorders (PRMDs) may be defined as any pain, weakness, numbness, tingling or any other symptom that interferes with your ability to play your instrument at the level to which you are accustomed. This definition includes aches with recurring symptoms but does not include intermittent aches or pains.

13. Below is a list of common PRMD symptoms. For each of the symptoms please use the first drop down menu to indicate how often you experience the symptom. Click on the blue boxes for drop down menus.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>How Often</th>
<th>How Severe?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Rarely (less than three times per year)</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Weakness</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Numbness</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Tingling</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Loss of Dexterity (grasping control)</td>
<td>Rarely (less than three times per year)</td>
<td>1 - 2</td>
</tr>
<tr>
<td>Loss of Flexibility (range of motion)</td>
<td>Never</td>
<td>0 - No</td>
</tr>
</tbody>
</table>

16. For each of the PRMD symptoms below, please list the body locations where this had been experienced. (example: pain - right wrist, left shoulder, entwined, etc.)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td></td>
</tr>
<tr>
<td>Weakness</td>
<td></td>
</tr>
<tr>
<td>Numbness</td>
<td></td>
</tr>
<tr>
<td>Tingling</td>
<td></td>
</tr>
<tr>
<td>Loss of Dexterity (grasping control)</td>
<td></td>
</tr>
<tr>
<td>Loss of Flexibility (range of motion)</td>
<td></td>
</tr>
</tbody>
</table>
Bassoonists Questionnaire

6. Head

15. Have you experienced any PRMD or injury to your head and neck?

☐ NO, skip to the next page of the questionnaire
☐ YES, go to Q 16 on this page

16. Referring to the diagrams, please indicate the length of time you have experienced a PRMD or injury in EACH of the color areas. If for any color area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

<table>
<thead>
<tr>
<th>Color Area</th>
<th>Never Experienced PRMD/injury here</th>
<th>Current PRMD/injury - lasting less than a month</th>
<th>Current PRMD/injury - lasting 1 - 4 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right Jaw - Blue</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Embouchure - Yellow</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Left Jaw - Purple</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Front Neck - Green</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Front Neck - Pink</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Back Neck - Grey</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Back Neck - Red</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting more than 4 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting less than 3 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting longer than 3 months</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. Have you experienced any PRMD or injury to your back, chest, or shoulders?

☐ NO, skip to the next page of the questionnaire

☐ YES, go to Q 18 and 19 on this page

18. Referring to the diagram, please indicate the length of time you have experienced a PRMD or injury in EACH of the color areas. If for any color area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

- Never experienced PRMD/injury here
- Current PRMD/injury - lasting less than a month
- Current PRMD/injury - lasting 1–4 months
- Current PRMD/injury - lasting more than 4 months
- Previous, significant PRMD/injury, lasting less than 3 months
- Previous, significant PRMD/injury, lasting longer than 3 months
19. Referring to the diagram, please indicate the length of time you have experienced a PRMD or injury in EACH of the color areas. If for any color area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

- Never experienced PRMD/injury here
- Current PRMD/injury - lasting less than a month
- Current PRMD/injury - lasting 1 - 4 months
- Current PRMD/injury - lasting more than 4 months
- Previous, significant PRMD/injury, lasting less than 3 months
- Previous, significant PRMD/injury, lasting longer than 3 months
8. Arms

20. Have you experienced any PRMD or injury to your arms or wrists?
   - NO, skip to the next page of the questionnaire
   - YES, go to Q 21 and Q 22 on this page

21. For your RIGHT arm, please indicate the length of time you have had a PRMD or injury for each area. If for any area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

<table>
<thead>
<tr>
<th>Upper Arm</th>
<th>Elbow</th>
<th>Thumb side of forearm</th>
<th>Little finger side of forearm</th>
<th>Wrist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never experienced PRMD/injury here</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting less than a month</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting 1 - 4 months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting more than 4 months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting less than 3 months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting longer than 3 months</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

22. For your LEFT arm, please indicate the length of time you have had a PRMD or injury for each area. If for any area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

<table>
<thead>
<tr>
<th>Upper Arm</th>
<th>Elbow</th>
<th>Thumb side of forearm</th>
<th>Little finger side of forearm</th>
<th>Wrist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never experienced PRMD/injury here</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting less than a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current PRMD/injury - lasting 1 - 4 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current PRMD/injury - lasting more than 4 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting less than 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting longer than 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<< Prev     Next >>
23. Have you experienced any PRMD or injury to your hands?
   - NO, skip to the next page of the questionnaire
   - YES, go to Q 24 and Q 25 on this page

24. For your RIGHT hand, please indicate the length of time you have had a PRMD or injury for each area. If for any area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

<table>
<thead>
<tr>
<th></th>
<th>Thumb</th>
<th>Index Finger</th>
<th>Middle Finger</th>
<th>Ring Finger</th>
<th>Little Finger</th>
<th>Thumb side of Palm</th>
<th>Little finger side of Palm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never experienced PRMD/injury here</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting less than a month</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting 1 - 4 months</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Current PRMD/injury - lasting more than 4 months</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting less than 3 months</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting longer than 3 months</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
25. For your LEFT hand, please indicate the length of time you have had a PRMD or injury for each area. If for any area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

<table>
<thead>
<tr>
<th></th>
<th>Thumb</th>
<th>Index Finger</th>
<th>Middle Finger</th>
<th>Ring Finger</th>
<th>Little Finger</th>
<th>Thumb side of Palm</th>
<th>Little finger side of Palm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never experienced PRMD/injury here</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current PRMD/injury - lasting less than a month</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current PRMD/injury - lasting 1 - 4 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current PRMD/injury - lasting more than 4 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting less than 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous, significant PRMD/injury, lasting longer than 3 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bassoonists Questionnaire

10. Legs/Hips

26. Have you experienced any PRMD or injury to your legs or hips?
   - NO, skip to the next page of the questionnaire
   - YES, go to Q 27 on this page

27. Referring to the diagrams, please indicate the length of time you have experienced a PRMD or injury in EACH of the color areas. If for any color area you have experienced both a current PRMD/injury and a previous PRMD/injury, please mark both.

- Front Upper Leg - Pink
- Knees - Purple
- Feet - Red
- Left Hip - Green
- Right Hip - Orange
- Back Upper Leg - Blue
- Bottom Leg - Yellow

- Never experienced PRMD/injury here
- Current PRMD/injury - lasting less than a month
- Current PRMD/injury - lasting 1 - 4 months
- Current PRMD/injury - lasting more than 4 months
- Previous, significant PRMD/injury, lasting less than 3 months
- Previous, significant PRMD/injury, lasting longer than 3
28. If you have had a PRMD or injury in any area of your body NOT covered yet in this questionnaire, please write where it was located below.
**Bassoonists Questionnaire**

12. Contributions to development of pain

29. What do you think contributed to your PRMD or injury? Please rate each of the following factors.

<table>
<thead>
<tr>
<th>Factor</th>
<th>N/A</th>
<th>Minor contributor</th>
<th>Significant contributor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long hours of regular practice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient rest breaks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudden increase in playing time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor posture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor physical condition/fitness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor diet/eating habits</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor flexibility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficient warm-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed instrument set-up (example: different local bend, seat strap, etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing standing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing sitting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternating between playing sitting and standing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technique flaws</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New technique tried/implemented</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ignoring increasing intensity of pain</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inadequate chairs
Travel strains/stress
Performance anxiety
Stress in life (not bassoon focused)
Lack of sleep
Injury from a non-music activity (example: car accident, sports)
Underlying medical condition (example: rheumatoid arthritis, past surgery)

30. Do you think anything else contributed to your PRMD or injury?
Bassoonists Questionnaire

13. Treatment Options

31. What do you do if you are suffering a PRMD or injury? Please check all that apply.
- Rest
- Reduce playing hours
- Increase playing hours
- Ice the painful part
- Apply heat to the painful part
- Take anti-inflammatory medication
- Take painkillers
- Use braces/supports
- Stretch
- Exercise
- Seek professional help
- Other (please specify)

32. Which practitioners have you consulted for management of your PRMD or injury? Please check all that apply.
- Physio/physical therapy
- Medical practitioner
- Massage therapist
- Osteopath
- Acupuncturist
- Instrument teacher
- Alexander technique practitioner
- Pilates practitioner
- Feldenkrais practitioner
- Chiropractor
- Other (please specify)
33. From the previous two questions, which remedy, or combination of remedies, do you believe helped you the most?
Bassoonists Questionnaire

14. Your Injury/PRMD Prevention Methods

34. If you have been successful in reducing or eliminating the occurrence of PRMD or injury in relation to your bassoon playing, please explain the actions you take.

For example: “I had lower back pain while sitting playing. I found that using a raised chair cushion lessens that pain.”
“Using left hand fatigue. Now I squeeze a ball for five minutes before I play and have eliminated the fatigue.”
“I had horrible left shoulder pain. I now do a specific Pilates move ______ and the pain is gone.” etc.
Bassoonists Questionnaire

15. Perceptions

35. Please indicate your level of disagreement or agreement for each statement given below.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tension while playing leads to injury.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Some people are more prone to PRMD/injury than others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taking time off will solve most performing PRMD/injuries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Once a player has an injury his/her career is over.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical professionals know how to treat PRMD/injuries associated with bassoon playing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worring about injury increases one's chances of becoming injured.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important for teachers to address PRMD/injury prevention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing with pain is part of being a musician.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I hide my PRMD/injuries from my colleagues/piers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have enough information on PRMD/injury prevention available to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was taught injury prevention in my bassoon lessons.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A teacher can decrease a student's likelihood of being injured.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt/feel comfortable talking to my teacher about injury concerns.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My teacher is/was prepared to offer assistance if I have/had a bassoon related PRMD or injury.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Page 15a of 17
I know the difference between healthy and unsafe tension.
Students hide injuries from their teachers.
Bassoonists Questionnaire

16. General Fitness and Health Information

36. How often in a week do you exercise, physically?
   - Rarely
   - 1-2 times a week
   - 3-5 times a week
   - More than 5 times per week

37. What types of exercise do you do? Check all that apply
   - Weight training
   - Cycle/bike
   - Swim laps
   - Sport (tennis, soccer, golf, etc)
   - Run/jog/walk
   - Yoga/Pilates
   - Circuit Classes
   - Gym Classes (step, aerobics, etc)
   - Other (please specify)

<< Prev    Next >>
Bassoonists Questionnaire

17. Interview Option

If you are willing to give an interview please fill out the following information.

Giving an interview is optional. Interviews will only be conducted if needed after the questionnaire is completed and results are analyzed. People willing to give an interview will be contacted before the interview with a list of questions that will be asked and they can withdraw their consent to give an interview at any time.

*To this point, the information you have supplied is completely confidential. If you supply your name in order to contribute an interview the researchers conducting the study will know who you are; however, your identity will not be shared with any individual or group and you will remain anonymous in all publications.

38. Name

________________________

39. Address: (including city, state, post code, country)

________________________

40. Email address

________________________

<< Prev  Submit>>
Attention Bassoonists!!!!!

A study is currently being conducted at the University of Sydney investigating pain and injury on the bassoon.

Fill out a survey at: www.paulabrusky.com

To learn more contact:
Paula C. Brusky
0416-325-670 (mobile)
pbru7836@usyd.edu.au (email)

Attention Bassoonists!!!!!
Bassoon-Related Pain and Injury: A Proposed Study

Dianna T. Kenny, PhD; and Paula C. Brusky, Sydney, Australia

As a musician, you will know that yours is a hazardous profession. Musicians, as result of practicing their art, are likely to suffer some form of pain and injury during their careers. Risks vary depending on the instrument; for example:

- Pianists - carpel tunnel;
- Trumpeters - facial dystonia;
- Flautists - ulnar nerve entrapments;
- Violinists - hand, arm and shoulders disorders;
- String players - focal hand dystonia

There has been no study on risks for pain and injury suffered by bassoonists. This study, conducted by Paula Brusky, PhD candidate at The University of Sydney’s Australian Centre for Applied Research in Music Performance under the supervision of the Director of the Centre, A/Professor Dianna Kenny, will provide data on injury rate, potential causes, and available treatments for bassoonists.

The aim of this study is to identify the extent and type of pain and injury suffered by bassoonists. The goal is to give bassoonists a chance to CONFIDENTIALLY compare their experiences to others in the field and to compile information on what methods are currently available to assist in the prevention and treatment of performance related musculoskeletal disorders in bassoonists.

Specific questions to be addressed by this study include:

- What is the prevalence of performance related musculoskeletal disorders among bassoonists?
- Are there areas of the body where bassoonists typically experience pain?
- Do bassoonists suffer common patterns of injuries?
- Do bassoonists agree on possible causes for pain?
- Do bassoonists actively seek relief from pain, and are there specific treatments that are frequently used?
- How is pain and injury perceived by bassoonists?

You can participate in this study anonymously and confidentially in three ways:

1. By going to www.paulabruskycom and completing the on line survey.
2. By obtaining an electronic or paper copy of the survey by emailing Paula at phb7836@usyd.edu.au or
3. By writing to Paula Brusky, ACARM, SCM, University of Sydney, C41, Sydney NSW 2000, Australia.

After completion, an article will be submitted to The Double Reed and results will be posted on www.paulabrusky.com.

Thank you in anticipation of your support for this study.
Dear Fellow Bassoonist,

The Australian Centre for Applied Research in Music Performance is currently conducting a study on pain and injury rates suffered by bassoonists. This study is part of my PhD dissertation and we are anticipating it will provide useful information for the bassoon community. I'm writing to ask that you participate by filling out an anonymous survey at http://www.surveymonkey.com/s.asp?u=184702441776

The survey should take about 20 minutes; more information about the study and survey can be found at www.paulabrusky.com.

If you have already filled out the survey (which we don’t know since it’s anonymous), thank you very much. You can help further by forwarding this email to any of your bassoon colleagues and encouraging your present and/or past students to fill out the survey.

All information gained through this study will be shared with the bassoon community.

Thank you so much for participating!

Sincerely,
Paula C. Brusky
PhD Candidate in Bassoon Performance
Conservatorium of Music at The University of Sydney
APPENDIX I: CODEBOOK SAMPLE

Below are the first few pages from the codebook used to decipher the data in SPSS.

The complete codebook was 18 pages.

<table>
<thead>
<tr>
<th>Question</th>
<th>SPSS Variable Name</th>
<th>Coding Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent ID</td>
<td>RespondentID</td>
<td>Number assigned to each questionnaire</td>
</tr>
<tr>
<td>IP Address</td>
<td>IPAddress</td>
<td>Computer that sent survey</td>
</tr>
</tbody>
</table>
| Gender | GENDER | 1 = Male  
2 = Female |
| Age | AGE | Numerical value for years alive |
| What is your highest qualification or schooling | QUALIFICATION | 1 = High School  
2 = Music Diploma  
3 = Bachelor’s Degree  
4 = Master’s Degree  
5 = Doctor Of Music  
6 = PhD  
7 = Other |
| How long have played | LongPlaying | Numerical value for years having played bassoon |
| Do you earn money playing bassoon | MONEY | 1 = No  
2 = Yes |
| Do you teach bassoon | TEACH | 1 = No  
2 = Yes |
| Have you been diagnosed with an injury | DIAGNOSED | 1 = No  
2 = Yes |
| Did you continue to play while injured | ContinueToPlay | 1 = No  
2 = Yes |
| Frequency of PRMD - Pain | PainOften | 1 = Never  
2 = Rarely (less then 3x per year)  
3 = 2  
4 = 3  
5 = 4  
6 = Constantly (more 4x a week) |
| Severity of PRMD – Pain | PainSevere | 1 = No Symptoms  
2 = 1  
3 = 2  
4 = 3  
5 = 4  
6 = 5  
7 = 6  
8 = 7  
9 = 8  
10 = 9  
11 = 10 (most severe imaginable) |
| Frequency of PRMD – Weakness | WeaknessOften | 1 = Never  
2 = Rarely (less then 3x per year) |
| Frequency of PRMD – Numbness | NumbnessOften | 1 = Never
2 = Rarely (less then 3x per year)
3 = 2
4 = 3
5 = 4
6 = Constantly (more 4x a week)
11 = 10 (most severe imaginable) |
| --- | --- | --- |
| Severity of PRMD – Numbness | NumbnessSevere | 1 = No Symptoms
2 = 1
3 = 2
4 = 3
5 = 4
6 = 5
7 = 6
8 = 7
9 = 8
10 = 9
11 = 10 (most severe imaginable) |
| Frequency of PRMD – Tingling | TinglingOften | 1 = Never
2 = Rarely (less then 3x per year)
3 = 2
4 = 3
5 = 4
6 = Constantly (more 4x a week) |
| Severity of PRMD – Tingling | TinglingSevere | 1 = No Symptoms
2 = 1
3 = 2
4 = 3
5 = 4
6 = 5
7 = 6
8 = 7
9 = 8
10 = 9
11 = 10 (most severe imaginable) |
| Frequency of PRMD – Loss of Dexterity | DexterityOften | 1 = Never
2 = Rarely (less then 3x per year)
3 = 2 |
<table>
<thead>
<tr>
<th>PRMD Type</th>
<th>Severity Score</th>
<th>Notes</th>
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</thead>
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<td>Severity of PRMD – Loss of Dexterity</td>
<td></td>
<td>4 = 3, 5 = 4, 6 = Constantly (more 4x a week)</td>
</tr>
<tr>
<td>Frequency of PRMD – Loss of Flexibility</td>
<td></td>
<td>1 = Never, 2 = Rarely (less than 3x per year), 3 = 2, 4 = 3, 5 = 4, 6 = Constantly (more 4x a week)</td>
</tr>
<tr>
<td>Severity of PRMD – Loss of Flexibility</td>
<td></td>
<td>1 = No Symptoms, 2 = 1, 3 = 2, 4 = 3, 5 = 4, 6 = 5, 7 = 6, 8 = 7, 9 = 8, 10 = 9, 11 = 10 (most severe imaginable)</td>
</tr>
</tbody>
</table>

**Experience PRMD/Injury in Head or Neck**

<table>
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<th>PRMD Type</th>
<th>Severity Score</th>
<th>Notes</th>
</tr>
</thead>
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<td>Experience PRMD/Injury in Head or Neck</td>
<td></td>
<td>1 = No, 2 = Yes</td>
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<td>Current, &lt;1, Right Jaw</td>
<td>q16LRJB</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, &lt;1, Left Jaw</td>
<td>q16LLJP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, &lt;1, Front Neck Right</td>
<td>q16LFNRG</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, &lt;1, Front Neck Left</td>
<td>q16LFNLP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, &lt;1, Back Neck Left</td>
<td>q16LBNLG</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, &lt;1, Back Neck Right</td>
<td>q16LBNNR</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, 1-4, Right Jaw</td>
<td>q161RJB</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, 1-4, Embouchure</td>
<td>q161YE</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, 1-4, Left Jaw</td>
<td>q161LJP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td>Current, 1-4, Front Neck Right</td>
<td>q161FNRG</td>
<td>Blank = No response</td>
</tr>
<tr>
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<td>q161FNLP</td>
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</tr>
<tr>
<td>Current, 1-4, Back Neck Left</td>
<td>q161BNLG</td>
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<tr>
<td>Current, 1-4, Back Neck Right</td>
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<tr>
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<tr>
<td>Previous, &lt;3, Back Neck Right</td>
<td>q16PBNLG</td>
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<tr>
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<td>q16SRJB</td>
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</tr>
<tr>
<td>Previous, &gt;3, Embouchure</td>
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<td>Previous, &gt;3, Left Jaw</td>
<td>q16SLJP</td>
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<td>q16SFNLP</td>
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<tr>
<td>Previous, &gt;3, Back Neck Left</td>
<td>q16SBNLG</td>
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<td>q16SBNRR</td>
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<tr>
<td>Experienced PRMD/Injury in Back, Chest or Shoulders</td>
<td>BackChestShoulders</td>
<td>1 = No</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>--------------------</td>
<td>-------</td>
</tr>
<tr>
<td>2 = Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current, &lt;1, Back Left Shoulder</td>
<td>q18BLSP</td>
<td></td>
</tr>
<tr>
<td>Current, &lt;1, Between Shoulders</td>
<td>q18BSO</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, &lt;1, Back Right Shoulder</td>
<td>q18BRSY</td>
<td>1 = Have had</td>
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<tr>
<td></td>
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<td>Blank = No response</td>
</tr>
<tr>
<td>Current, &lt;1, Upper Back</td>
<td>q18UBG</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, &lt;1, Middle Back</td>
<td>q18MBB</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, &lt;1, Lower Back</td>
<td>q18LLBP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Back Left Shoulder</td>
<td>q181BLSP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Between Shoulders</td>
<td>q181BSO</td>
<td>1 = Have had</td>
</tr>
<tr>
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<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Back Right Shoulder</td>
<td>q181BRSY</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Upper Back</td>
<td>q181UBG</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Middle Back</td>
<td>q181MBB</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, 1-4, Lower Back</td>
<td>q181LBP</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
<tr>
<td>Current, &gt;4, Back Left Shoulder</td>
<td>q18CBLSP</td>
<td>1 = Have had</td>
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<td>Blank = No response</td>
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<tr>
<td>Current, &gt;4, Between Shoulders</td>
<td>q18CBSO</td>
<td>1 = Have had</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blank = No response</td>
</tr>
</tbody>
</table>
APPENDIX J: SPECIFIC LOCATIONS COMPRISING BODY REGIONS

Head and Neck Region:
- Back neck left
- Back neck right
- Embouchure
- Front neck left
- Front neck right
- Left jaw
- Right jaw

Back, Chest, Shoulders Region
- Back left shoulder
- Back right shoulder
- Between shoulders
- Front left shoulder
- Front right shoulder
- Left chest
- Lower back
- Middle back
- Right chest
- Upper back

Arm Region (for both right and left)
- Elbow
- Little-side forearm
- Thumb-side forearm
- Upper arm
- Wrist

Hand Region (for both right and left)
- Index finger
- Little finger
- Little-side palm
- Middle finger
- Ring finger
- Thumb
- Thumb-side palm

Legs, Hips, and Feet Region
- Back upper leg
- Bottom leg
- Feet
- Knees
- Left hip
- Right hip
- Upper leg front