Experience of Preshot Routines Among Professional Golfers: An Existential Phenomenological Investigation

Allison Kristina Yancey
Georgia Southern University

Follow this and additional works at: https://digitalcommons.georgiasouthern.edu/etd

Recommended Citation
https://digitalcommons.georgiasouthern.edu/etd/92
THE EXPERIENCE OF PRESHOT ROUTINES AMONG PROFESSIONAL GOLFERS- AN EXISTENTIAL PHENOMENOLOGICAL INVESTIGATION

by

ALLISON K. YANCEY

(Under the Direction of Daniel R. Czech)

ABSTRACT

One of the challenges in athletic performance is maintaining focus on relevant information. Focusing on irrelevant information can cause inconsistency during performance (Boutcher & Crews, 1987). Both cognitive and behavioral routines have shown to be beneficial to help achieve optimal concentration in the sport of golf (Cohn, Rotella & Lloyd, 1990). Although this is the case, little research has been found which has examined preshot routines from a qualitative perspective. The purpose of the current study was to gain an existential phenomenological understanding of preshot routines among elite professional golfers during performance. Eight professional golfers were interviewed for the study. The primary research question for this study was: What is the lived experience of elite professional golfers when they utilize a preshot routine? Following the interviews, transcriptions were made which were analyzed by the research team to draw conclusions about the experience of preshot routines among the participants. Major themes consisted of routines assisted with optimal focus, physical aspects of routine and various routines for the type of shot, which were then followed by subthemes under each major theme.

INDEX WORDS: Sport Psychology, Qualitative Inquiry, Existential Phenomenology, Preshot Routines, Golf, Professionals
THE EXPERIENCE OF PRESHOT Routines AMONG PROFESSIONAL
Golfers- An EXISTENTIAL PHENOMENOLOGICAL INVESTIGATION

by

ALLISON K. YANCEY

B.S., Radford University, 2005

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial
Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

STATESBORO, GEORGIA

2007
THE EXPERIENCE OF PRESHOT Routines AMONG PROFESSIONAL GOLFMEN- AN EXISTENTIAL PHENOMENOLOGICAL INVESTIGATION

by

ALLISON K. YANCEY

Major Professor: Daniel R. Czech
Committee: Barry Joyner
Drew Zwald

Electronic Version Approved: May 2007
ACKNOWLEDGEMENTS

I would like to acknowledge the faculty that guided me through the thesis process, Dr. Daniel Czech, Dr. Jon Metzler, Dr. Barry Joyner and Dr. Drew Zwald. Most of all I would like to acknowledge the graduate class of 2007 in sport psychology for helping each other through this long process of our thesis and masters degree, I found my second family here. We did it! I would also like to think my family for always pushing me to do better and allowing me this opportunity to live in Statesboro and meet so many wonderful people, I am greatly going to miss it.
# Table of Contents

## Acknowledgements

## List of Tables

## List of Figures

## Introduction

## Method

- Journal
- Pilot Study
- Bias Exploration
- Participants
- Procedure
- Interview Protocol
- Data Analysis
- Approaching the Interview
- Organize the Data
- Summarizing the Interviews
- Releasing Meanings

## Results

- Theme #1: Routines Assisted With Optimal Focus
- Theme #2: Physical Aspects of the Routine
- Theme #3: Using Routines for the Type of Shot Played
- Summary
DISCUSSION........................................................................................................................................36
Routines Assisted With Optimal Focus .................................................................................................36
Physical Aspects of the Routine .............................................................................................................38
Using Various Routines for the Type of Shot Played............................................................................41
Conclusions ........................................................................................................................................43
REFERENCES.....................................................................................................................................45
APPENDICES....................................................................................................................................49
  A LIMITATIONS, DELIMITATIONS, ASSUMPTIONS, AND DEFINITIONS....49
  B REVIEW OF LITERATURE .............................................................................................................52
  C DEMOGRAPHICS QUESTIONNAIRE ..............................................................................................64
  D IRB APPROVAL............................................................................................................................65
LIST OF TABLES

Table 1 Description of Participants .................................................................................. 16
LIST OF FIGURES

Figure 1 Themes Describing Professional Golfers Experience of Utilizing A Preshot Routine ................................................................. 24
INTRODUCTION

Crews and Boutcher (1986) have defined preshot routines as “a set pattern of cue thoughts, actions and images consistently carried out before the performance of a skill” (p. 291). To obtain an optimal physical and mental state prior to motor execution, a combination of cognitive and behavioral routines has been shown to be beneficial to performance (Cohn, 1990). Cognitive routines may consist of cue words, visualization and self talk. Behavioral routines can be characterized as physical rehearsal, including focused attention on the desired target (Cohn, 1990).

Researchers suggest that golf, as a closed motor skill, is a sport in which preshot routines can be beneficial to performance outcomes (Crews & Boutcher, 1986). For example, when examining his thoughts on preshot routines, PGA professional Mark Blakemore stated:

“my own experience is that developing a preshot routine helped me to improve noticeably as a player. It especially helped me with first tee jitters when I was younger. My preshot routine is very simple. It includes an alignment reference and a relaxed practice swing, some attention to detail in the alignment of my clubface and body, a look to the target to give my mind a clear and recent picture of my goal, and then I swing. It is always the same, fits my style and rhythm, and covers the points that are important to me, in terms of details” (Blakemore, 2007, p.1).

Several theories have been offered that explain how routines function to effectively enhance performance (Cohn, 1991). The schema theory implies that preshot routines recreate motor movements in a generalized thought format that can be retrieved and used as a template (Schmidt, 1988). The mental rehearsal theory suggests that positively imagining a skill before performance can transfer to the actual performance of the skill (Cohn, 1990). Lastly, the set hypothesis explains how warm-up decrements, which are defined as long wait periods that can debilitate performance, can be reduced by
utilizing routines (Cohn, 1991). According to the set hypothesis theory, preshot routines can help the performer increase performance by recreating the action before it is performed. Cohn (1991) concludes that utilizing a combination of these theories can be the most optimal explanation.

Preshot routines have been shown to increase concentration in golf, bowling, basketball, tennis and skiing (Cohn, Rotella & Loyd, 1990; Kirschenbaum, Ordman, Tomarken & Holtzbauer, 1982; Lobmeyer & Wasserman, 1986; McCann, Lavallee & Lavallee, 2001; Moore, 1986; Orlick, 1986; Weisberg & Pein, 1992). Although there is an abundant amount of quantitative support for preshot routines, research examining the lived experience of golfers using preshot routines from a qualitative perspective is sparse. Qualitative questions like: “What are professional golfer’s perceptions of preshot routines?;” “What do they think about as they describe their lived preshot experience?;” and “How important is the preshot routine to a professional golfer?” have yet to be examined in the field of sport psychology research. Answers to these questions have the potential to help sport scientists understand the lived experience of athletes using this type of technique as well as consultants helping athletes in the development of a routine.

One relevant qualitative model acceptable for gaining insight into golfers’ lived experience is the humanistic model, which involves treating a particular group of human beings as unique rather than as regular objects (Hill, 2001). The humanistic model is concerned with gaining an understanding of the person’s lived experience through their perspective (Hill, 2001). This model focuses on two tenets that are important to qualitative research: the person as a “whole” with all its complexities and different perspectives, and understanding athletes within particular contexts (Hill, 2001). From this
perspective, researchers want to gain an understanding based on the experience and the perceptions of each athlete as they shape the experience in their minds (Hill, 2001). A type of research methodology that supports the humanistic model is existential phenomenology. By using this type of methodology, phenomenological researchers try to gain a rich description from each individual on how they experienced a particular phenomenon.

As researchers in sport psychology have contended (Dale, 1994; Hanson & Newburg, 1992), qualitative procedures have the potential to bring another perspective to research in sport. The present study will be one of the first existential phenomenological investigations to examine preshot routines among male professional golfers. The main goal of the present study is to provide a “rich description” of professional golfer’s preshot routines.
METHOD

Triangulation integrates several methods or data to increase credibility and the quality of the study by countering the accusation that a study’s findings are simply due to the fact of a single method, single source or a single investigator’s blinders (Patton, 2002). Triangulation was achieved presently by incorporating a journal for continuous note taking, a pilot study, bias exploration, and the primary interviews.

Journal

The primary researcher kept a journal to reflect on thoughts throughout the study. The primary researcher recorded steps taken throughout the study including notes from the interview, data analysis, and self reflection. The researcher also recorded the procedures taken to increase credibility, and to ensure that the same steps were taken with each participant.

Pilot Study

Before initiating the present study, a pilot interview was conducted with two collegiate golfers. This experience helped to gain an understanding of the type of question to be used in the present study. The pilot study also helped to familiarize the primary researcher with the process of qualitative interviewing, audio taping, transcribing the interviews and forming themes. At the end of the interview, the participant was asked if there were any other questions that could be potentially important to the study. Neither participant gave suggestions. Four categories of themes were formed during the pilot study which included:

**When:** In competition they took preshot routines more seriously.

**Mind Set:** They both thought preshot routines were important/good.
- Helped you think less about what you are doing.
- Helped keep you focused on what you should be focusing on.
- Gets you in a repetitious routine so you do not think about your setup.
  1. helps with mental routine.
  2. uses more behavioral routines.

**Distractions:** They both started their routines over if a distraction occurred, but many times it depends on the distraction.

**Actual Routine:** They both used the same routines for each of their shots. Putting was different. The actual putting routines were somewhat similar for both participants.

**Bias Exploration**

“Epoche means to refrain from judgment, or abstain from or stay away from the everyday, ordinary way of perceiving things” (Patton, 2002, p. 484). At no point during the study did the researcher guide the participant in any direction or lead them to answer in a particular way. When analyzing the data the researcher had an open mind and did not create answers or themes that were not present. There were no judgments placed on the participants prior to being interviewed.

In existential phenomenological research, the main instrument is the researcher; thus, as the primary researcher, it is important to have an understanding of my personal history as it relates to the use of preshot routines in golf. The following is a description of my history and interest in this topic.

Currently, I am a second year master’s student in sport psychology at Georgia Southern University. My two brothers and I have played sports our entire lives. I decided not to continue to play sports at the collegiate level because I saw how demanding it was
for my brother when he played golf at the University of Virginia. My brother’s involvement in intercollegiate golf has influenced me to pursue a degree in sport psychology. He graduated 6 years ago and is currently playing on tour as a professional. Even as a professional, he has had many struggles with consistency in his performance. He is not very motivated to work on the mental side of the game. My career goal is to educate athletes on the importance of working on their mental game and then help them improve performance. I believe that my brother’s lack of consistency comes from having a suboptimal mental game. I am interested in understanding how athletes may use preshot routines consistently to control unwanted thoughts. First, I wanted to determine whether or not each of the participants use preshot routines. Second, I intended to understand the lived experience of golfers uses of preshot routines. Uncovering consistencies in the uses of preshot routines by professionals may benefit other professionals, as well as amateurs, as they look to enhance their own mental preparation techniques. Given that consistency is important to golfers, understanding the lived experience of preshot routines is important.

Participants

Participants in this study were eight male professional golfers who were competing on one of the professional tours in the United States including: the PGA tour, Senior PGA, Nationwide, and the Hooters Tour. Goodrich (1988) states that the number of participants in a phenomenological study should not be a statistical issue. The athletes were chosen for this study as a purposeful elite sample (Patton, 2002). A concise description of each participant is provided in Table 1.
Table 1. Description of Participants

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sport</th>
<th>Race</th>
<th>Athletic Level</th>
<th>Turned Pro</th>
<th>Tour Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2004</td>
<td>Hooters Tour</td>
</tr>
<tr>
<td>2. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2003</td>
<td>PGA Tour</td>
</tr>
<tr>
<td>3. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2001</td>
<td>Hooters Tour</td>
</tr>
<tr>
<td>4. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2002</td>
<td>PGA Tour</td>
</tr>
<tr>
<td>5. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2001</td>
<td>Nationwide</td>
</tr>
<tr>
<td>6. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>1975</td>
<td>Senior PGA</td>
</tr>
<tr>
<td>7. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2000</td>
<td>PGA Tour</td>
</tr>
<tr>
<td>8. Male</td>
<td>Golf</td>
<td>Caucasian</td>
<td>Professional</td>
<td>2002</td>
<td>PGA Tour</td>
</tr>
</tbody>
</table>

Procedure

Each participant signed an informed consent form (See Appendix D). The primary researcher conducted phone interviews in a private setting to ensure anonymity of each participant. No part of the interview process should have been personally invasive to any of the participants in the study. Participants were advised before the study that: a.) interviews would be audio taped to ensure accuracy, b.) they could withdraw from the interview at anytime, c.) clarifications about the procedures would be given if needed, d.) no compensation would be given for participation, just the knowledge gained from the study, e.) once the interviews were transcribed, participants had the opportunity to read over them to ensure accuracy, f.) transcriptions would be kept in a confidential manner, g.) themes would be formed based on the collaboration of the primary researcher, research team and a computer software program called NVivo (Patton, 2002). To increase confidentiality, each participant was given a pseudonym.

Interview Protocol

The interview consisted of one main open-ended statement which branched off into many other probing questions. This primed participants to think about their preshot
routine experience while playing golf and to disclose their thoughts. The following statement was posed to each participant:

“Tell me about a specific time when you utilized a preshot routine during golf performance.”

The interview continued with probing questions in order to gain a full understanding of the experience (Patton, 2002). Some of the questions included: Can you please explain what you meant by that statement? Can you tell me another time in which you utilized a preshot routine? The interviews ranged anywhere from 10-25 minutes as well as the researcher used the same vernacular the participants utilized during the interview which helped avoid imposing biases on the participants (Thompson, Locander, and Pollio 1989).

Data Analysis

The procedures for analyzing were adapted more directly from those developed by Barrell (1988), Goodrich (1988), Hawthorne (1989), Ross (1987), and Henderson (1992) and Patton (2002) as outlined below.

A. Approaching the Interview

- Interviewing Process

- Interviews were transcribed by a professional transcriptionist

- Obtaining a grasp of the interview

B. Organizing the Data

- Eliminate from the data irrelevant, repetitive or overlapping statements

- Group the text into themes using the computer software program, NVivo

C. Summarizing the Interviews

- Preparing summaries
-Verifying themes

D. Releasing Meanings

-Finalize major themes and subthemes

-Explain the meaning as it relates to golf

Approaching the Interview

The Interviewing Process. The researcher provided a context in which participants felt comfortable enough to be open to describe their experience. The following outline by Kvale (1983) was followed to ensure participant comfortability:

1. Focus was on the experience of the respondent, the specific situation, and the action sequence.
2. Was person-oriented.
3. Kept the interview centered on a description and an understanding of the experience being investigated.
4. Encouraged descriptions that were precise and detailed.
5. Used probing for clarification of ambiguous statements.

Transcribing. All interviews were audio taped and then transcribed by a professional transcriptionist. The researcher and transcriber were the only individuals that were able to listen to the audio files. In addition, the audiotapes, transcripts, pseudonyms, contact information and informed consent statements were kept in a locked drawer.

Obtaining a grasp of the interview. After the transcriptions were complete, the researcher checked for errors throughout the interview. This allowed the researcher to obtain a sense of wholeness of the data. (Czech et al., 2004)
Organize the Data

Organize the actual interviews. Each interview was transcribed verbatim from the audio recorder (Patton, 2002). Once the transcriptions were formed, any irrelevant information was deleted from the participants experience (Patton, 2002). Irrelevant information involved repetitive words, overlapping data and utterances.

Grouping into text. Giorgi (1984) and Kruger (1979) suggest organizing the material into natural meaning units. The following steps were taken to group the text into meaning units:

- Increased punctuation (condensed run-on sentences as long as the meaning was not distorted. The researcher changed commas to periods where possible).
- De-emphasized the interviewer (the perspective of the participant was evident throughout the protocol).

Summarizing the Interviews

Preparation as summaries. The goal of this step was to create a shortened version of the interview that still retained the important information, words, and thoughts of the participant (Henderson, 1992). The following steps were used from Hawthone (1989) to create summaries:

- Identified topics – Examined the items that were cleared and marked the beginning and ending where each different topic was discussed.
- Gathered related statements – Organized material so that related themes were placed together. The related statements included specifics about the experience or more general comments related to the story.
While reorganizing the interviews using selection and reordering statements, the statements still maintained the integrity of the message. Henderson (1992) believes that from this, the researcher can still capture the basic meaning of the interview in a condensed version.

Verifying themes. First, the primary researcher reviewed the transcripts in order to form major themes and subthemes. Then, each transcript was placed into the computer software program NVivo in order to see what major themes and subthemes it formed. Lastly, major themes and subthemes were discussed with the research team in order to increase the credibility of themes.

Releasing Meanings

Forming categories. Thompson, Locander, and Pollio (1989) support the use of an interpretive group or research team. They suggest that the group can help the researcher by questioning whether interpretation takes into account relevant previous passages. A research team for this study was used in order to have many perspectives when studying the data, giving new ideas, and/or providing energy.

Each of the members of the research team had knowledge of the phenomenological research method through readings and actual experiences. This research team included two graduate students and a head advisor. The primary researcher, as well as the research team was involved in identifying themes based on transcriptions. Prior to the study, every member of the research team signed a form to ensure confidentiality (See Appendix D).

The researcher first viewed each transcript as a whole and found related themes that were relevant to the interviews. Then interviews were placed together that resembled
the particular main themes. The major themes were found within at least five of the eight interviews as well as subthemes were found within at least three of the eight interviews. Themes were grouped for each participant and then compared with each of the other participants. Once the data was organized into major themes and subthemes, the data in each category was evaluated to make sure that each of the themes were consistent with the headings. In forming major themes and subthemes, this lead to the thematic structure. Once all interview transcripts were analyzed, the primary researcher and the research team agreed upon a thematic structure. Themes were then placed into the Nvivo computer program to check the validity of the group’s findings. The results of the Nvivo analysis revealed similar themes within the transcripts.

Explaining the meaning. Given the large amount of data collected, it was necessary to omit some information in order to focus on the phenomenon of preshot routines in golf and present the results in a flowing fashion. Patton notes that "description and quotations are the essential ingredients of qualitative inquiry" (1990, p. 430). Therefore, a balance of description and interpretation were reported in the present results to present both straightforward and weak themes discovered in the protocols (Patton, 1990). The description and interpretation presented what was common across the participants' experiences.

Henderson (1992) states that throughout the process of a qualitative study, the researcher is required to make efforts to ensure the validity and reliability of the data.

Reliability. The extent to which a description was shown to be true to the experience provided reliability within this study. Examination of trustworthiness is paramount to ensure reliability in qualitative research. The following questions were
followed in order to determine the reliability of a study: Did the descriptions capture the experience? Did the structure match the participant's experience? Did the structure emerge from the data? Did others see the description? All of these questions will be taken into account during the course of the current study.

Validity. Validity in qualitative research describes whether or not procedures, data, and interpretations of participant narratives are accurate, defensible, and revealing. Procedures should be easily followed and accepted by the reader so that the processes and conclusions are deemed valid. The following questions were used as anchors for validity (Czech et al., 2004).

- Did this description give an accurate picture of the common features and the structure that was evident in the examples collected?
- Did the interviewer influence the contents of the descriptions to the extent that the actual experience is not truly reflected?
- Are transcriptions accurate?
- Were conclusions other than those offered by the researcher possible in the analysis?
- Did the specific contents and connections in the transcripts provide evidence for structural description?
- Was the structural description specific to one situation, or does it hold for other situations?

The phenomenological method approaches a study with checks for reliability and validity throughout the process of finding thematic structures as a conclusion (Czech, 2002).
RESULTS

After conducting, transcribing, and forming themes, the description of the preshot routine experience for these eight elite athletes was developed. In this section, quotes from participants are used in order to describe the experience of using preshot routines that emerged from their interviews.

The investigation of the participants revealed three major themes regarding preshot routines including: (1) routines assisted with optimal focus – the participants described how the routines often helped with focus, (2) physical aspects of the routine – the participants described the actual physical experience of the routine, (3) using various routines for the type of shot played - routines were often described by which type of shot was performed. These three major themes formed the structure of the preshot routine experience for professional golfers.

Upon establishing three major themes, researchers identified subthemes within each major theme. For routines assisted with optimal focus, the subthemes included: (a) focusing on the specific target at hand, (b) internal visualization, and (c) maintaining consistency. For the major theme of physical aspects of the routine, the subthemes were: (a) where the participants described standing during the routine, (b) the varying amounts of practice swings, (c) using routines regularly, and (d) viewing the environment. The last theme, using various routines for the type of shot played, comprised three subthemes: (a) full swing shots, (b) chipping and (c) putting. Figure 1 illustrates the major themes, subthemes.
Figure 1.

*Themes Describing Professional Golfers Experience of Utilizing a Preshot Routine.*

- **Focus:**
  - Internal Visualization/
  - Target/
  - Maintain Consistency

- **Shot Type**
  - Full Swing Shots/
  - Chipping/
  - Putting

- **Physical**
  - Standing/
  - Practice Swing/
  - Using Routines Regularly/
  - Viewing the Environment
**Theme #1: Routines Assisted With Optimal Focus**

The first theme that emerged from the data involved the importance of utilizing a preshot routine to maintain focus.

“If you’re focused on one thing positive, you automatically can’t focus on something negative. So sometimes I will think I’m confident that I’m gonna hit a good shot, so I just step up and hit it. If you say something positive, like, “I am gonna hit my target,” or, “It is like me to hit solid,” or something like that, it kinda frees you up and almost relaxes you.

Several subthemes regarding focus emerged. Participants discussed their targets during performance, use of internal visualization to keep them focused during performance, and having a preshot routine to promote consistency and maintain focus during performance.

*Focusing on the specific target at hand. Most of the participants described having some type of target during every shot. A target kept them more focused on a specific area.

“I’ll stand behind the ball, take one practice swing, and then try and pick out an exact target that I’m aiming at. Maybe if there’s water right, I’ll be aiming 15 feet left of the pin, or if there’s trouble on the left, maybe aiming down the right side of the fairway. Yeah, that’s pretty much it, and they try and zone in on a very specific target.” (Participant #2)

One participant made the target as small as possible in order to reduce the margin of error for each shot.

“When you’re going through your preshot routine, you’ll try and pick out as small a target as possible. Therefore, if you do miss it a little bit, obviously it’s gonna be better than if you picked out a broad sort of target.” (Participant #2)

“In putting, you’ll pick a very, very small spot that you’re gonna try and roll the ball over that’s like maybe three or four feet in front of you and try and roll it over that. If you’re hitting it off the tee, you’ve got a little bit more room for error.” (Participant #2)
For other participants, rather than focus solely on a specific target, they described focus on a specific path that the ball would travel.

“I tee the ball up, and then I stand behind the ball and just take like a little practice swing and just I’m looking at my target. I’m trying to picture the shot like flying in the air right when I’m trying to hit it. Then I go to the ball, and I take five quick glances at my target, and then I go.” (Participant #8)

“I call it “burning a line” into the green from the ball to the hole that I want the ball to travel on. I try to focus so hard on a line, like the track that the ball’s gonna take. ‘Cause by doing that, by focusing hard on blades of grass that connect the ball to the hole, I think that occupies my mind so I can’t think of anything else.” (Participant #5)

An overall use of preshot routines was used to keep golfers away from distractions or bring them back when distractions transpire.

“When a distraction occurred, “instead of just going ahead and putting there, I decided to back off and go through my preshot routine again just to stay focused and concentrate and I ended up making the putt and making birdie. But that was definitely a point that having a preshot routine really helped.” (Participant #4)

*Internal Visualization.* Participants obtained focus in preshot routines by visualizing successful performance in the hopes that it would carry over to actual performance. Many times they visualized how some skill should occur in a positive manner.

“You definitely want to visualize how your stroke should feel kinda in your mind. You’re kinda feeling it out visually.” (Participant #3)

The golfers in this investigation commented on having so many different shots that they need to determine which one to use at that point in time; using visualization was a great way to determine which kind of shot to use prior to execution.

“I believe that you need to sort of visualize what you know, so many times you hit so many fades in your life and then so many draws. You’ve got to sort of visualize one of those coming off.” (Participant #7)
Many times the golfers in this study were trying to visualize the technical aspect of how the green is shaped and how this affects the ball. For example participant #1 stated:

“I’m visualizing and I’m walking around the hole. I’ll walk all the way around the hole and read the put from every angle. While I’m doing that, I’m visualizing where I think the ball’s gonna go when I’m seeing it.” (Participant #1)

“If I have the ball below my feet or something like that I can visualize how it’s gonna react off the turf.” (Participant #1)

Consistency. The third subtheme under focus included having a preshot routine to promote consistency. They liked having a routine that is consistent every time, which kept them from having to think about things.

“I think the consistency of it is, you know, I think that’s pretty much the biggest thing, and it brings you back to the golf zone. I mean, a preshot routine is something that you can let your mind go when you’re not in your shot, when you’re walking, but then as soon as you get the club back in, you have to be really focused on what you’re gonna do if you’re gonna pull something off.” (Participant #7)

“I know if you looked at a lot of guys and you start timing them when they start the preshot routine, they usually hit the ball within one or two seconds every single time. If it’s like 45 seconds, maybe one time they’ll be 46 or 44, but it’s really consistent, and it’s amazing that it actually ends up being like that because you know you’re doing everything exactly the same. It’s taking the same amount of time. I think that guys that have really good preshot routines have that timing involved in that. They’re just not thinking about what they’re doing. It just all happens at the same time every time.” (Participant #8)

In summary, the focus theme included of focusing on the specific target at hand, using internal visualization and maintaining consistency among preshot routines which seem to help the golfers the most during their description. All of these behaviors seemed to help participants focus which in turn appeared to enhance performance.
Theme #2: Physical Aspects of the Routine

Participants described physical actions that occurred during their preshot routine. The physical characteristics indirectly emerged while participants discussed the structure of their preshot routine during the interviews.

“I think having a simple, quick routine, for me, helps keep my body relaxed and keeps everything kinda flowing and moving.” (Participant #1)

Standing. The majority of the participants described standing during their routine. Three of the golfers described where they stood during certain shots, as well as how standing affected them during performance.

“I’ll stand behind it. When I’m standing behind the ball, I have no certain amount of time.” (Participant #1)

This participant felt like he could take his time before every single shot. He took his time until he felt like he was ready to execute the shot.

“For a full swing, I stand behind the ball, looking down at my target.” (Participant #5)

“I used to do the same read. I read back, side and then behind the ball, and then I used to stand behind the ball, make one practice stroke with my head down, and then make three smooth practice strokes looking at the hole, so I’m perpendicular to the ball.” (Participant #7)

Some golfers had a fairly quick routine as to not be standing in the same spot for too long a period. Time was an important issue to the participants. Golfers in this study liked having something that preoccupied them but did not take up too much time, they liked a routine that is quick and to the point.

Using routines regularly. This theme came about when the participants described how they used their preshot routine consistently. Whether they thought they used it for every shot, every performance and if they did same routine every time.
“I try to do it every time I go play.” (Participant #1)

“That’s the goal is to try and use the same preshot routine for every shot.” (Participant #2)

“I use it every shot. I use it with full shots, putting, chipping, everything you should have a preshot routine” (Participant #3)

“You try to do the same thing every time to kinda keep the same routine so nothing changes, it’s always the same and you’re not changing anything.” (Participant #3)

“I’ve had people tell me that that never really watched me play before they think it’s funny that I do the exact same thing every time or every shot, so I think my preshot routine is pretty solid.” (Participant #8)

For some players, having a routine keeps them on an equal pace during competition as to not speed up more then they should or go slower then they should.

“Just try not to get ahead of myself. If I’m behind or if I’m trying to be a little bit slower, I try to just do the same thing every time no matter what it is between shots. When it’s time to hit the shot, I make my preshot routine the same no matter if I’ve been waiting for a long time or I’m rushing. I try to do the same thing, regardless.” (Participant #3)

“I don’t actually ever really think about it while I’m doing it, but I just know that I do that exact same thing every time.” (Participant #8)

Many of the participants believed that the purpose of a routine was to train your body to do the correct thing at the right time so you do not have to think about the skill when the time comes.

“I just think it’s important, because it’s almost like you have to train your body to just do the same thing every time no matter what the circumstances are. I mean if you really have a preshot routine, then your timings gonna be all screwed up.” (Participant #8)

*Practice Swings.* Participants described practice swings which consisted of any shot that took place before the participants hit the actual ball. Many of the golfers
described how the amount of practice swings would vary between different shots during performance.

“When I’m standing behind the ball, I have no certain amount of time. I could take ten practice swings, I could take two practice swings. It just depends on what type of shot I’m trying to hit and whether I can really visualize it.” (Participant #1)

“Usually one practice swing and then I hit it.” (Participant #3)

“I started over back behind the ball and we got into it and took my two or three practice strokes and then got over the ball and make it like normal.” (Participant #4)

“The practice swing for a drive or an iron shot, it’s usually behind the ball, a couple paces behind the ball. But if I take a practice stroke from the putting green it’s right by the ball.” (Participant #4)

“Then once I’ve read the putt, I get behind it and usually or three steps into the ball and take two or three practice strokes and then step up to the ball and hit it.”(Participant #4)

Some of the golfers also discussed how they used these practice swings in order to get the desired swing for a shot or the right feeling before hitting a shot.

“On really long putts, I might take a couple practice strokes behind the ball to get a feel for the speed.” (Participant #1)

“The key for me where I thought it really worked well for me was I focused on visualizing the target and my practice swings getting the feel for the technical part of it, probably like ten feet or so behind the ball.” (Participant #1)

“If I’m behind the ball and I’m trying to hit a draw around a bunker to a dog leg left hole, if I stand there and make a couple more practice swings to really get that feel before I go in, as opposed to making a certain number of practice swings.” (Participant #1)

“Once I’ve decided what kinda shot I wanna hit, I get behind the ball and make a practice swing that would be similar to the swing I’d make to curve it either way I wanted to curve it. After two of those practice swings, I’d take the steps up to the ball and a couple waggles and would hit it.” (Participant #4)
The final subtheme within the physical descriptions theme was what the participants would see during performance.

*Viewing the environment.* Participants frequently described seeing aspects of the shot. They tended to focus on many different aspects when playing in order to execute the shot correctly during performance.

“With putting, I’ll walk around the hole, read the putt from all angles, and then I’ll stand behind the ball and I’ll plum it, which is just to see an extra view for which way I think the putts gonna break.” (Participant #1)

“Like I said, once I get behind the ball, I’ll plum it one more time to see which way I think it’s gonna break, and then right before I walk towards the ball, I’ll really see the ball. It’s almost like I’m putting to a picture. I just see my putter head coming back and see it striking the ball; see it rolling on the line that I want, and turning in.” (Participant #1)

Some of the participants spent much of their focus trying to see as much detail in the environment as possible in order to increase their performance.

“Well, I generally look at the put from both sides of the hole. Sometimes when I’m reading greens well; I can definitely see kind of a line that my ball should roll on to go in the hole and looks like a little pathway sometimes.” (Participant #4)

“Then I walk from the side of the hole and find my speed. The back of the hole, I see my line, and then sideways, at 90 degrees, I see the speed, so I can get into the middle of the putt and back off a little bit and see actually if the putt’s uphill or downhill, and I can also see some break in it. And then I get behind my ball, and then this is my final deal, then from there I trace a line. I usually trace a line from the hole.” (Participant #7)

“I think when I see that line in the green that I’m a little more focused than normal.” (Participant #8)

In summary, there were many things that golfers do physically during performance and more specifically during their preshot routine. Though there were many physical aspects to it, the four subthemes of stand, practice swings, consistency of use and external visualization were themes that were prevalent.
Theme #3: Using Various Routines for the Type of Shot Played

In describing their routines, participants frequently distinguished between shot types. Full swings, chipping and putting subthemes emerged under the shot type major theme.

*Full swing shots.* Full swing shots is the unleashing of their swing during their performance with no stops from point a to c.

“Then for a full swing, I stand behind the ball, looking down at my target. I would say this year I need to do a better job of actually picturing the shot and kinda picturing the flight of the ball and imagining it landing next to the hole and all that stuff. ‘Cause a lotta times I just pick a target, line up my feet, and pull the trigger, and not really spend enough time picturing the shot.” (Participant #5)

“I would say when I’m behind a full shot and I’ll put my club up to pick my intermediate target. I put a club up, let’s see, you gotta plum it.” (Participant #5)

“If I’m gonna hit a draw, I try to make a little preliminary swing that incorporates what I do to hit the draw, and then if I want to hit a fade, I make a little swing behind the ball, not a full swing, but a swing that gets the muscles firing.” (Participant #7)

*Chipping.* According to the participants, chipping was very similar to full swing shots but they had much more control over the swing and could stop it anytime between point a and c. For chipping, the routine involved more practice swings as well as more distance determination.

“A preshot routine is going to differ a little bit because with chipping and putting you’re going to figure out a distance. But I got to have a certain yardage for certain clubs to figure out what club I’m going to use.” (Participant #3)

“So my preshot routine with my irons would be figuring out my distance, figuring out the wind, and then hit the shot.” (Participant #3)
The participants described how their chipping routine consisted of different amounts of practice swings prior to execution.

“Chipping, I’d probably take more practice swings and visualize the shot more for chips than I do for, say, full swings.” (Participant #5)

“Chipping is just kinda, like I said, I’ll just kinda take a bunch of practice strokes, five to seven little practice strokes, some looking down, and then a log with my head up to kinda visualize how much of a swing I need to make to land it where I need to land it. Then I kinda try to watch the ball nestle up next to the hole. It’s probably within one or two each time, but it just kinda depends on how long it takes me to see the shot.” (Participant #5)

**Putting.** For the majority of the participants, it seemed as if they could more readily describe the specific steps taken during their preshot routine for putting than other shot types. Most of these routines did not seem to change from hole to hole and was much more set in stone and descriptive.

“Well, with my putting I do the exact same thing every single time.” (Participant #1)

“You know, I pretty much have a ritual on the putting green that I do the same number of strokes every time.” (Participant #7)

Three of the participants described in detail the putting routine. They revealed the process that many golfers have taken during their putting preshot routine.

“So for putting basically I read the putt from behind the ball and then I go behind the hole, read it from there. I do that kind of quickly, just because in golf, you can’t spend all day looking at your putt. I do that a lot just to kind of feel like walking to the hole, it allows my feet to kinda feel the terrain a little bit and gives me time to think about the putt.” (Participant #5)

“I think the time it takes me to walk to the hole and then back around almost allows my brain to kinda get ready to hit the putt. I think it helps me to do that as much as it helps me to get different perspectives on the putt visually.” (Participant #5)
“On really long putts, I might take a couple practice strokes behind the ball to get a feel for the speed. But most of the time I just go up to the ball, take two practice strokes looking at the hole. I’m actually changing it a little bit now. This year I might take one practice stroke with my head down, then one practice stroke with my head looking at the hole and then just pull the trigger basically.” (Participant #5)

“While I’m over my putts, I try to really, I call it “burning a line” into the green from the ball to the hole that I want the ball to travel on. I try to focus so hard on a line, like the track that the ball’s gonna take. “Cause by doing that, by focusing hard on blades of grass that connect the ball to the hole, I think that occupies my mind so I can’t think of anything else.” (Participant #5)

“So putting, you also read the putt. You analyze the speed against the green, fast, slow, how much break speed, being the priority, know what speed. The speed will dictate the line that the ball takes, so you concentrate on your speed. You’re trying to analyze and visualize. Your eyes are like a movie camera seeing the ball take off and then, where it slows down and then where it drops into the cup, and then you go into your preshot routine of setting up the putter blade. You know, my hand is on my left side as I’m doing that, and then with my right hand I’m setting up the putter face to my intended starting point, aiming that and then getting the shaft angle correct, and then I step into it from there, widening my stance then lastly taking my left hand and putting it on the grip. When I was kind of growing up and seeing Norman putt a lot, Greg Norman, it’s kind of a copy of his.” (Participant #6)

“Another golfer described that “with putting, I’ll walk around the hold, read the putt from all angles, and then I’ll stand behind the ball and I’ll plum it, which is just to see an extra view of which way I think the putt’s gonna break. Once I get all that done, I’ll walk towards the ball and I’ll address like a practice shot, a practice putt.” (Participant #1)

“I’m visualizing and I’m walking around the hole. I’ll walk all the way around the hole and read the putt from every angle. While I’m doing that, I’m visualizing where I think the ball’s gonna go when I’m seeing it. Then, like I said, once I get behind the ball, I’ll plum it one more time to see which way I think it’s gonna break, and then right before I walk towards the ball, I’ll really see the ball. It’s almost like I’m putting to a picture. I just see my putter head coming back and see it striking the ball; see it rolling on the line that I want, and turning in.” (Participant #1)

As many of the participants expressed that putting is a much narrower focus, this explains the specific detail when talking about their putting routine.
Summary

Most of the athletes in this investigation had similar routines that were relatively brief and simplistic. Chipping and putting routines seemed to have a more definite structure than that of a full swing shot which was highly flexible.

“I think the main thing for me with putting and short game shots, little shots, where I’m trying to be more exact, I think having a simple, quick routine for me helps keep my body relaxed and keeps everything kinda flowing and moving.” (Participant #1)

Many of the participants enjoyed describing, discussing and analyzing their routines with the researcher. Several of the participants enjoyed reflecting on the past and realizing how important their preshot routines have been to their performance. One participant even expressed how his putting was better than his full swing shots and observed that a possible reason for this was that unlike his putting, he had no definite routine for his full swing. He contemplated working on establishing a routine for his full swing shots.

“I can’t remember not having a routine putting. But like I said, with my long stuff I guess I don’t really have a routine, I have a general routine with how I stand behind the ball and visualize and things like that, but not exactly a number of looks or waggles, which maybe I should try to do.” (Participant #1)

The importance of athletes having a structured routine during performance for focus and comfort was paramount for the peak performance levels of the participants in this study.
DISCUSSION

The majority of research on preperformance routines has used quantitative methods; therefore, the present qualitative study allowed for a unique, rich description of the lived experiences of preshot routines described by professional golfers. Several themes and subthemes emerged that converge with previous research. Therefore, the purpose of this section is to incorporate the results of this study with prior research in the field of preshot routines in sport. Each segment begins with a summary of the current study and proceeds to a discussion of linked research. These sections are followed by conclusions and suggestions for future research among professional golfers.

Routines Assisted With Optimal Focus

Focus was a major theme described by participants in this study. In fact, most of the participants in the study described the role focus has on their performance. Research has shown that implementing routines can help focus attention, reduce anxiety, eliminate distractions, enhance confidence, and help with mental preparation for a future performance (Czech, Ploszay & Burke, 2004). The participants knew they needed to control focus by adhering to all relevant information and this was achieved by adhering to their preshot routine. Many athletes have been able to reach an ideal performance state by concentrating on implementing routines (Schmid & Pepper, 1998). In turn, concentration has also been enhanced using preshot routines in sports like golf, bowling, basketball, tennis & skiing (Cohn, Rotella, & Lloyd, 1990).

Target. Researchers suggest that a closed skill action like the golf swing is an action in which preshot routines could be beneficial to performance outcomes (Crews & Boutcher, 1986). Consistent with this suggestion, the participants described many
instances where focusing on a target was very important for the desired swing. Many times the participants tried to pick out a target as specific as possible in order to reduce the margin of error in their shot. This action coincides with many sport psychology consultants teachings of a narrow attentional focus needed before a shot (Cohen, 2005, Rotella, 2002). Since golf and especially putting need such a narrow focus, having a preshot routine may help to keep golfers at this level of focus. This seemed like an important task to each of the participants before executing every shot.

*Internal visualization.* Mental rehearsal/visualization has shown to improve athletic performance for ski racers, basketball players, gymnasts, dart throwers and many other athletes (Epstein, 1980). “Prior to every shot, your preshot routine sets the stage for you to make your best swing. The consistency of it is key. When you have a simple visualization strategy to center and focus your mind you will play far better golf” (Pearse, 2006, p.1). Many of the golfers in the current study tried to implement internal visualization into their routine, but most were not very advanced or had not practiced it. This may be because they do not fully understand the power of internal visualization and how they can manipulate it for various aspects of performance.

The professional golfers in this study utilized visualization in order to reach their optimal level. In many instances it seemed that the participants used visualization in order to see a shot prior to it happening and view the path the ball should travel along. They may visualize their stance, the feel of the ground, the type of swing needed or even the flight of the ball. Although this was the case, none of the participants expressed working to improve their visualization skills. Consultants should take note of this and realize that
increasing imagery vividness and controllability can be an avenue that may enhance performance at this level.

Consistency. In order to maintain consistency, professionals try to master skill automaticity (Cohn, 1990). Preshot routines in this investigation may have promoted consistency within the participant’s performance. Participants felt that a preshot routine helped them stay in an optimal concentration state and/or bring them back to an optimal concentration state if they lost focus. It appeared that the more they were in their optimal concentration zone, the more consistent they became with their performance.

Participants expressed that time can be a golfers’ worst enemy when too much analysis takes place during the warm up. Preshot routines can fill the time where warm-up decrement can distract performance. The set hypothesis states that warm-up decrement can debilitate performance (Cohn, 1991). Filling any spare time with a routine may keep participants focused, which breeds consistency in performance (Cohn, 1991). A preshot routine is good for eliminating extraneous thoughts prior to hitting a golf shot and “grounding” a player, getting them to focus more exclusively on the shot at hand (Blakemore, 2007). Combining focus and visualization to maintain consistency may help the golfer achieve their optimal skill level during performance. They may also feel more relaxed and comfortable having a routine that keeps behavior consistent throughout performance.

Physical Aspects of the Routine

This theme consisted of subthemes in which the participants often described the physical experience of their routine.
Standing. The participants would describe where they would stand during certain parts of their preshot routine. Moreover, a majority of the participants discussed how they stood behind the ball in order to focus on their shot and line up to a target. Schmidt states that a preshot routine may help to trigger relevant physiological and mental states before a shot, which may enhance performance. (1982) Some of the participants also described taking practice swings behind the ball or beside the ball. This small detail, which was seldom compromised, seemed to be of great importance to each of the participants descriptions. Even when a distraction occurred, participants took a step back behind the ball and focused on the target again. Much of this theme came about in trying to gain rich description using a qualitative method of interviewing. Through probing the athletes, this paved the way for physical descriptions to easily come out.

Practice swings. Many of the participants used practice swings in order to experience a preshot “feeling” of being comfortable as opposed to doing a certain number of swings. Golfers can use a routine to remain on a normal pace; taking too long or too little time can hurt performance (Gallacher, 1986). The participants may have felt that longer type shots were more about the feel of the shot. A longer shot could easily be missed by improper technique; thus practice swings were used to bring a sense of comfortability with their technique. This subtheme may have come about because participants expressed that the amount of practice swings could vary, especially for full swing shots and chipping. A reoccurring description was the notion of a “feeling” in their swing before a shot. This theme came about as an important aspect of qualitative research; many participants will vary on their descriptions but they are allowed to describe in detail their perspectives.
Using routines regularly. Some of the participants in this study discussed certain reoccurring actions experienced during performance. One of the more important aspects discussed was the utilization of the same preshot routine every time. A rationale for the reoccurrence phenomenon is again comfort. The golfers in this study did not want any inconsistencies in the comfort. Thus, by doing the same thing every time, they were more able to feel comfortable. Another description was keeping the “routine simple and to the point.” Blakemore (2007) stated that “my own experience is that developing a preshot routine helped me improve noticeably as a player. It especially helped me with first tee jitters when I was younger. My pre-shot routine is very simple.” (p. 1) The participants seem to not want anything which mentally distracted them from their performance. A “simple” routine may have kept the participants from any debilitative over analysis as it seemed through their descriptions.

Viewing the environment. This subtheme was formed based on the discussion of what the participants described during the process of their preshot routine. The participants described specific things they would need to see during their preshot routine in order to hit their shot to the best of their ability. One of the golfers expressed that he walked around the ball in order to see all the extra angles that he could. By seeing all these angles he may have felt like he would perform the shot better. Many of the participants really focused on seeing the ball and all of it’s detail. Pearse (2006) suggests to literally "see" the ball flight or pace of the putt as it enters the hole. Lastly, the participants tried to see the positive aspects of their shot, for example instead of seeing trees or water to the left, they wanted to see only the positive targets. This theme may have come about because golfers find it important to focus on relevancy during
performance. They seem to realize that they should focus on the positive aspects as opposed to any negative visuals.

*Using Various Routines for the Type of Shot Played*

*Full swing shots.* This was previously described as when the participants unleashed their swing from point a to c. It seemed as though for full swing shots the routines were less succinct and organized. Some of the participants even felt like they did not have much of a routine when it came to full swing shots. The rationale may be that for full swing shots, the margin of error was larger as opposed to other types of shots. Since the participants shot did not need to be quite as accurate, they may have kept their preshot routine on a more general basis. Some of the participants even expressed having a routine that promoted a comfortable feeling.

*Chipping.* Chipping is more of a controlled swing where the participants may stop their swing at anytime between point a and c. As previously discussed, many of the participants described increasing the amount of practice swings for optimal performance in chipping. The rationale for this action may be that the swing for chipping is much more controlled. Since more control is needed, participants may have felt the need to take more practice swings until they are comfortable with that specific shot. *Putting.* Participants seemed to utilize a more detailed preshot routine for putting. Rotella and Cullen, (2001) support the notion of how putting preshot routines enhance concentration and relaxation which can facilitate performance.

Research shows that golfer’s utilize preputt routines in order to keep performance consistent during such a concentrated skill (Cohn, Rotella, & Lloyd, 1990). A rationale may be that putting is a more narrow focus type of shot. Having a routine during putting
may promote a higher level of concentration as opposed to having a more general routine which could bring about less concentration. Specifically for putting, golfers need to focus their attention on relevant information, stop negative thoughts, keep from thinking about their well-learned skill and get in the right physical and mental state of mind (Cohn, 1990). They can empty their minds by following their preshot routine diligently as well as believing in themselves in order to improve putting (Rotella & Cullen, 2001). In summary, Gallacher states that a routine, “is a way of giving your conscious mind something to think about and leaving it to your subconscious mind to hit the ball” (1986, p. 42).

Research suggests that preperformance routines have shown to help athletes focus attention, reduce anxiety, eliminate distractions, enhance confidence, and help with mental preparation for a future performance (Czech, et al, 2004). As cited in Czech et al. (2004), closed skill sports like free throw shooting in basketball, serving in tennis and volleyball, punting and place kicking in football, are all areas where preperformance routines can be implemented for an athlete’s best performance (Wrisberg & Pein, 1992). During performance, athletes want to feel they have made the right decisions and a routine can promote positive decision making which will in turn increase performance (Gallacher, 1986).

Based on this knowledge, this study was conducted in order to help other golfers as well as sport psychology consultants have the opportunity to learn how professional golfers utilize a preshot routine during performance. By understanding what professionals do, other golfers may have the opportunity to improve their performance. Also, few studies have examined professional golfers and their experience with preshot routines. In
order to understand this elite group, it was felt that descriptive interviews would gain the most information.

Conclusions

• Based on the results of this study, the following conclusions that can be drawn are:
  
• Professional golfers in this investigation felt that a preshot routine should be utilized with every shot.
  
• Professional golfers in this investigation felt that a preshot routine keeps their minds occupied so that irrelevant thoughts did not interfere with their performance.
  
• Professional golfers in this investigation felt that preshot routines for putting need to be more detailed and specific to increase narrow focus.
  
• Professional golfers in this investigation did not have the exact same routines but were very similar in content.
  
• Professional golfers in this investigation utilized a preshot routine to block distractions and focus on relevant information.
  
• Professional golfers in this investigation utilized a preshot routine in order to gain a comfortable feeling for every shot.
  
• Professional golfers in this investigation utilized a preshot routine in order to implement visualization.
  
• Professional golfers in this investigation utilized a preshot routine in order to maintain consistency in performance.
Recommendations for Coaches, Sport Psychology Consultants, and Sport Researchers

Based on the results of this study, the following recommendations for coaches, sport psychology consultants, and sport researchers are suggested.

1) While teaching the technical aspects of golf, coaches can also include teaching preshot routine skills during practice.

2) Coaches can have their golfers describe their preshot routine to enhance their performance awareness.

3) Sport Psychology consultants can enhance a golfer’s preshot routine by improving visualization skills through training.

4) Sport Psychology consultants can help golfers come up with que words in order to remind themselves to use their preshot routine before every shot.

5) Sport Psychology consultants can encourage coaches to work with their players on the detail of each individual’s preshot routine.

6) Further research should be conducted on preshot routines using a qualitative method for various levels of golfers.

   a. Specific themes could be studied qualitatively.

   b. A questionnaire/checklist could be created.

   c. A mixed methodological investigation could be beneficial in understanding professional routines more fully.

   d. Longitudinal studying professionals
REFERENCES


   www.pgaprofessional.com


*Developing a golf pre-shot routine that works for you*, (2005).

http://www.aspiringgolfer.com/mgm-alt.asp


APPENDIX A

LIMITATIONS, DELIMITATIONS, ASSUMPTIONS, AND DEFINITIONS

The purpose of the present study is to explore professional golfer’s experience of using preshot routines from an existential phenomenological perspective. This was accomplished in two ways: a.) by having golfers answer a question about using preshot routines in their own language and b.) by attempting to understand the experience of using preshot routines free of judgment and biases. The primary research question for this study was: What is the lived experience of professional golfer’s usage of preshot routines during golf performance?

Limitations of the study

1. Participants were not randomly selected for the study.
2. A sample of 8 professional golfers may not be transferable to all of the professional population.
3. Interviewing the golfers on preshot routines and later forming a conclusion on how they really feel could be misconstrued through the interview process.
4. Not being able to interview the golfer’s on a longitudinal basis could limit further research because changes are unaccounted.
5. The participants may answer the questions in a socially desirable fashion during the interview.

Delimitations of the study

1. The participants will be of the same gender and ethnicity.
2. Most of the participants will be at different professional levels as well as years of experience.
Assumptions of the study

The following assumptions were made in reference to this study:

1. The participants will describe their preshot routines.
2. The interview question will be answered honestly and to the best of the participants’ memory and not what they think the researcher wants to hear or what’s socially acceptable.
3. Participants will understand the question they are being asked during the interview.
4. Each participant will be able to articulately describe their experience of using preshot routines.
5. Using a phenomenological interview method is a valid form of gathering in depth descriptions of preshot routines in golf.

Definition of Terms

1. Preshot Routines: a set pattern of cue thoughts, actions and images consistently carried out before performance of the skill. (Crews & Boutcher, 1986)
2. Existential Phenomenology: As cited in Czech et al. (2004), a philosophical discipline that seeks to understand the events of human existence in a way that is as free as possible from the presuppositions of our cultural heritage, philosophical dualism, technologism, and other similar background considerations (Valle & Halling, 1986). Existential phenomenology advocates a return to the things themselves with the central focus being embodied consciousness, or a return to awareness of embodied being (Husserl, 1954).
3. Goal of Phenomenology: The primary goal of phenomenology is to derive the essence, structure, or form of human experience and/or behavior through the use of descriptive
techniques such as reflection, interviews, and the analysis of written statements. The phenomenologist focuses on the unity of the individual and his/her world (Henderson, 1992).

4. **Inductive Analysis** - A process of qualitative data analysis involving immersion in the details and specifics of the data to discover important categories, dimensions, and interrelationships; begins with the exploration of genuinely open questions rather than the testing of theoretically derived hypotheses (Patton, 1990).

5. **Phenomenological Interview** - As cited in Czech et al. (2004), a type of interview that attempts to capture the perceived experience of the person in his/her own words. The aim of a phenomenological interview is to arrive at a first person account of a specific domain of experience (Thompson, Locander, & Pollio, 1989). In the present study, the specific domain was sport.

6. **Qualitative Data** - Direct quotations capturing people’s perspectives and experiences. Qualitative data include detailed thick description and are the result of inquiry in depth (Patton, 1990).

7. **Qualitative Inquiry** - A method of research that focuses on the things that create an experience; obtained by inductive analysis (Patton, 1990).

8. **Professional Golfer** - participating on one of the professional tours in the U.S.

9. **Humanistic Framework** - Examines the world in which a human lives in order to fully understand the experience of some phenomenon. There cannot be a separation of the world and the person’s experience (Hill, 2001).

10. **Research Team** - Those people that are experienced in qualitative research that will help analyze the data in order to form themes.
APPENDIX B

REVIEW OF LITERATURE

A combination of cognitive and behavioral routines has shown to help the athlete become relaxed and keep their focus on relevant information during any type of athletic performance (Cohn, 1990).

*Cognitive routines*

Mental rehearsal has shown to improve athletic performance for ski racers, basketball players, gymnasts, dart throwers and many other athletes (Epstein, 1980). Mental practice has been defined as “symbolic rehearsal of a physical activity in the absence of any gross muscular movement” (Epstein, 1980, p.211). Even though not all elite athletes use mental rehearsal as a routine, it has been shown to help with maintaining skilled motor behavior (Epstein, 1980).

Whether or not a person uses external or internal imagery may be the deciding factor on whether the technique of imagery will have an impact on performance. One study showed that with elite gymnasts, better performers used the internal practices while external practices were used by those performers that were not as good (Epstein, 1980). External imagery is usually related to negative thoughts about self-consciousness and nervousness while internal imagery is not associated with negative situations (Epstein, 1980). These external factors are what can be distracting to athletes during performance.

One study suggests that psyching-up techniques which include attentional focus, imagery, and preparatory arousal are important to performance (Gould, Weinberg & Jackson, 1980). They observed weight lifters who either were in the psyching up group or counting backwards, both dealing with cognitive strategies. The study supports the idea
that cognitive strategies are important to muscular strength tasks when participants are using a strength test (Gould, Weinberg & Jackson, 1980). Imagery instructions were seen as most helpful in one of the experiments in the study but not the other, these results on cognitive strategies are not solely reliable (Gould et al., 1980). This information is important in examining different areas of routines and whether they are beneficial to athletes. Practicing routines are also important and not just doing a routine once and hoping for increased performance, it needs to become very automatic.

*Importance of routines*

Closed skill sports like: free throw shooting in basketball, serving in tennis and volleyball, punting and place kicking in football, are all areas where preperformance routines can be implemented for an athlete’s best performance (Wrisberg & Pein, 1992). Findings suggest that a five step preperformance routine can be helpful in performing a self-paced task (Pena, 2002). This research would be beneficial to athletes in understanding that a preperformance routine would be beneficial to their personal performance. Little research shows exactly what actions athletes take during these preperformance routines. For example, does a basketball player follow the same preperformance routine at the beginning of each free throw (Czech, Ploszay & Burke, 2004).

Many athletes have been able to reach an ideal performance state by concentrating through using specific performance routines (Schmid & Pepper, 1998). Concentration has also been enhanced using preshot routines in sports like golf, bowling, basketball, tennis and skiing (Cohn, Rotella & Loyd, 1990; Kirschenbaum, Ordman, Tomarken & Holtzbauer, 1982; Lobmeyer & Wasserman, 1986; McCann, Lavallee & Lavallee, 2001;
Moore, 1986; Orlick, 1986; Weisberg & Pein, 1992). Weinberg & Gould (2003) state that routines are helpful for before performance and between performances so athletes are mentally prepared.

**Theories that support preshot routines**

Some of the theories that help explain preshot routine effectiveness include: Schema Theory, Set Hypothesis, Stages of Motor Learning, and Mental Rehearsal. The Schema Theory provides support for preshot routines (Cohn, 1990). This theory implies that every motor movement exists in a generalized format that can be retrieved and used as more of a template to performance (Cohn, 1990). The golfer’s body quickly chooses a general motor movement for the needed action without a lot of extra thought which tends to break concentration.

The Stages of Motor Learning also support the use of preshot routines with the cognitive phase, associative phase and the autonomous phase (Cohn, 1990). The cognitive phase is learning a new skill, associative phase is perfecting by making tiny changes and the autonomous phase is when the process becomes automatic. By making a skill automatic, the skill becomes part of their automatic routine which in turn allows for the performance to be automatic with little to no distractions which can break concentration. Lastly, Mental Rehearsal theories have shown to be important to preshot routines. In some situations, imagining a skill in positive form has shown to actually transfer during performance of a skill (Cohn, 1990). Also, important to preshot routines is the Set Hypothesis Theory. This theory explains the concept of warm-up decrement and how preshot routines can help reduce this effect. Warm-up decrement is long periods of waiting which frequently happens in golf, this waiting can debilitate performance (Cohn,
A preshot routine is then formed to help maintain focus while waiting and in turn decrease warm-up decrement or losing focus while waiting. Findings have shown to be inconsistent on whether each of these theories alone will enhance athletic performance but a combination of the theories is important (Cohn, 1991). Every athlete wants easy, automatic performance when participating in sports. Automatic performance also deals with concentration and confidence of decision making during golf (Cohn, 1990).

**Preshot routines in golf**

Gallacher notes that preparation is important for improving athletic performance. Routines being developed should be mechanical, which can help skills become more automatic (Gallacher, 1986). Developing a personal performance routine can keep golfers and other athlete’s from “freezing” in competition (Gallacher, 1986). Golfers can use a routine to remain on a normal pace. Most importantly, Gallacher states that a routine, “is a way of giving your conscious mind something to think about and leaving it to your subconscious mind to hit the ball” (p. 42). The conscious mind seems to distract the subconscious mind therefore causing a bad shot (Gallacher, 1986). During performance, many athletes want to feel they have made the right decisions and a routine can promote positive decision making which will in turn increase performance (Gallacher, 1986). At the level of professional golfer, understanding the experience of using preshot routines can be beneficial to the applied practice in sport psychology as well as research. Rotella does not feel that mechanics are as important as attitude when it comes to putting. Golfers need to be able to empty their minds and only think about making their putts during performance. They can empty their minds by following their preshot routine diligently as well as believing in themselves in order to improve putting (Rotella & Cullen, 2001).
Perceived pressure and anxiety may hinder concentration and in turn performance is less than optimal (Burke & Brown, 2003). Since concentration effects performance, a preshot routine is needed to keep concentration focused on relevant information. Schmidt (1982) states that preshot routines may help to trigger relevant physiological and mental states before a shot, which may enhance performance. These routines help the athlete to get ready for each task.

A preshot routine can help athletes stay focused on a series of well-rehearsed cues instead of thoughts that can hurt performance, like focusing on the outcome, negative thoughts or physical actions in performance (Boutcher & Crews, 1987). Gayton, Cielinski, Kenistone, & Hears (1989) have experimented with basketball players who use and do not use preshot routines in free throw shooting. His results have shown that those who did use a routine had higher percentages of free throw shooting. Other studies have shown that basketball players who use the same preshot routines may reduce movement in shots which can increase performance (Czech, 2004). Wrisberg & Pein (1992) talk about those athletes whose free throw percentages are higher seem to engage in preshot routines more than those who’s percentages are lower. Based on numerous research studies, preshot routines have shown to be beneficial to performance among athletes.

Theoretical framework

The theoretical framework for phenomenology is based on the Humanistic Model (Hill, 2001). “Heuristics is concerned with meanings, not measurements; with essence, not appearance; with quality, not quantity; with experience, not behavior” (Patton, 1990, p. 107). This movement has a belief that humans are unique individuals and not just
objects (Hill, 2001). This framework really focuses on people’s personal stories that advance knowledge by reporting rich descriptions of the experiences. The framework shows its main focus on phenomenology which emphasizes studying the person as a whole and in certain contexts (Hill, 2001). You cannot fully understand an experience by only learning about bits and pieces of the person in a situation. In using existential phenomenology, this method allows the researcher to study an athlete and their world, these do not exist a part from each other (Hill, 2001). Without one or the other the experience cannot be fully understood in its entirety and knowledge cannot be used for other individuals.

**Phenomenology as a method**

The importance of phenomenology is that it describes the experience exactly how it was developed. This method is based around a qualitative experience of humans. Using a qualitative approach with phenomenology leaves the researcher to allow the information to come out naturally and not force the participant in any direction (Patton, 2002). The importance of Phenomenology is how people make sense of an experience and then transform it into their personal consciousness (Patton, 2002). Researchers use this in order to gain a deeper understanding of an everyday experience (Patton, 2002). Phenomenology can also determine a certain essence by understanding the experience of humans. Once categories have been formed then an understanding of meanings can be formed based on a certain group of people who have experienced a phenomenon (Patton, 2002).

Edmund Husserl who is the father of phenomenology has described it as a philosophy, methodology, and a method (Byrne, 2001). This particular method involves
transcribing material, forming data into themes, and drawing conclusions around the phenomena based on themes formed from interviews (Byrne, 2001). By interviewing on these experiences you begin to learn the truths about their particular experience. Understanding the basis for a qualitative method, while using phenomenology is based around the Humanistic Model.
Review of Literature- Additional References


APPENDIX C

DEMOGRAPHICS QUESTIONNAIRE

Please answer the following questions.

The year you turned professional: ______

Are you currently on tour: ______

What tour are you involved in: ______
APPENDIX D
IRB APPROVAL

GEORGIA SOUTHERN UNIVERSITY INSTITUTIONAL REVIEW BOARD
INSTRUCTIONS FOR PREPARATION OF PROPOSAL NARRATIVE

For electronic submission: First complete the proposal narrative in entirety and “Save As” a word document to your computer or disk named “propnarr_Year_Month_Date_lastname, First initial.doc”. Then open and complete Cover page.

Please respond to the following as briefly as possible, but keep in mind that your responses will affect the actions of the Board. Clearly label your responses in sections that correspond to the specific information requested. You may insert your responses in each section on this page, leaving a space between the question and your answers. Narrative should not exceed 4 pages.

The application should be submitted electronically or 2 duplicate copies sent to the Office of Research Services and Sponsored Programs, at P. O. Box 8005, Statesboro, GA 30460, and should contain, in this order: a signed cover page, the informed consent checklist page, the project proposal narrative, and the informed consent that you will use in your project. Additional information, such as copies of survey instruments, advertisements, or any instruments used to interact with participants should be attached at the end of the proposal clearly designated as an Appendix.

Personnel. Please list any individuals who will be participating in the research beyond the PI and advisor. Also please detail the experience, level of involvement in the process and the access to information that each may have.

Principal Investigator: Allison Yancey
2nd Year Graduate Student under Sport Psychology
Involvement in all phases of the study

Co-Investigator: Dr. Dan Czech
Advisor under sport psychology
Involvement in all phases of the study
Experienced Qualitative Researcher

Research Team: Thesis committee and fellow graduate students: Lacey Sorenson, and Crissy Rapp (All members of the committee have completed the IRB Training)
Involvement in helping with finding themes after interviews
Fellow graduate students have some experience with the qualitative process

Purpose. 1. Briefly describe in one or two sentences the purpose of your research. 2. What questions are you trying to answer in this experiment? Please include your hypothesis in this section. The jurisdiction of the IRB requires that we ensure the appropriateness of research. It is unethical to put participants at risk without the possibility of sound scientific result. For this reason, you should be very clear on how participants and others will benefit from knowledge gained in this project. 3. What current literature have you reviewed regarding this topic of research? How does it help you to frame the hypothesis and research you will be doing?
“Pre-shot routines are a set pattern of cue thoughts, actions and images consistently carried out before performance of the skill.” (Crews & Boucher, 1986, p.291) Research has supported the notion that the sport of golf, with its closed skill emphasis, is a sport in which pre-shot routines would be beneficial (Boutcher & Crews, 1987). What appears to be lacking in sport psychology literature is the examination of professional golfers and the “lived” experience of using pre-shot routines in golf. The present study was designed to examine the phenomenon by obtaining it from the first-person perspective of professional golfers themselves, using existential phenomenology. Each participant will be interviewed on their experience in order to gain an understanding from their perspective. The knowledge from this study will hopefully be beneficial for professionals as well as amateur golfers trying to gain improvements on their game. Other golfers can use the pre-shot routines talked about in the study in order to tailor them to their personal golf game to hopefully improve performance.

Describe your subjects. Give number of participants, approximate ages, gender requirements (if any). Describe how they will be recruited, how data will be collected (i.e., will names or social security numbers be collected, or will there be any other identification process used that might jeopardize confidentiality?), and/or describe any inducement (payment, etc.) that will be used to recruit subjects. Please use this section to justify how limits and inclusions to the population are going to be used and how they might affect the result (in general).

Participants
Golfers: 8 professional golfers will be interviewed for the study
Age: Approximately 20-60
Gender Requirements: Male

Recruitment: A purposeful sampling procedure will be used. Purposeful sampling seeks information rich cases, which can be studied in depth (Patton, 1990). The participants will be 10-12 male professional golfers who play on tour.
Data Collection: The purpose of the data collection will be to collect in-depth descriptive information from the golfers on the experience of using pre shot routines in golf. Information will be collected by interviewing the participants on their experience with pre shot routines. The interview will take place over the phone but will be done in a private place as to respect confidentiality for all participants. Each interview should last approximately 30 minutes with one main interview question along with probing questions. “Tell me about your experience of using pre shot routines during golf performance”. Real names and other identifying information will not be collected or used. There is a possibility that the identity of the participant will be visible through the reporting of their interview data. To address this issue numerous qualitative trustworthiness issues will be employed such as member checking, whereby each participant is given the opportunity to review the transcripts for accuracy and clarity. No inducements will be used in this study. As is standard for qualitative research, a small purposeful sample will be studied (statistical power and generalizability issues do not apply to qualitative research).

Methodology (Procedures). Enumerate specifically what will you be doing in this study, what kind of experimental manipulations you will use, what kinds of questions or recording of
behavior you will use. If appropriate, attach a questionnaire to each submitted copy of this
proposal. Describe in detail any physical procedures you may be performing.

This study will employ Existential Phenomenology as the qualitative interview methodology. The
principal investigator will be conducting all the interviews as well as a research team who will
help in the data analysis process. Each member of the research team will sign a confidentiality
form. For the interview process each of the participants will sign an informed consent explaining
the process and for them to agree to participate in the study. The interviews will be audio
recorded, transcribed verbatim and analyzed qualitatively using a content analysis procedure
recommended by several experts in qualitative research (e.g., Flick, 2006; Patton, 2002). The
interviews will take place over the phone during the best time for the golfers. There is one overall
question that will be asked and then probing questions will be employed. Once all data is
collected an interpretive group will be used in order to form themes from the interviews. Each of
the members will sign a confidentiality form in order to keep all info between the members
involved in the research process.

**Research involving minors.** Describe how the details of your study will be communicated to
parents/guardians. If part of an in-school study (elementary, middle, or high school), describe
how permission will be obtained from school officials/teachers, and indicate whether the study
will be a part of the normal curriculum/school process. Please provide both parental consent
letters and child assent letters (or processes for children too young to read).

N/A

**Deception.** Describe the deception and how the subject will be debriefed. Briefly address the
rationale for using deception. Be sure to review the deception disclaimer language required in the
informed consent. Note: All research in which deception will be used is required to be reviewed
by the full Board.

N/A

**Medical procedures.** Describe your procedures, including safeguards. If appropriate, briefly
describe the necessity for employing a medical procedure in this study. Be sure to review the
medical disclaimer language required in the informed consent.

N/A

**Risk.** Is there greater than minimal risk from physical, mental or social discomfort? Describe the
risks and the steps taken to minimize them. Justify the risk undertaken by outlining any benefits
that might result from the study, both on a
participant and societal level. Even minor discomfort in answering questions on a survey may
pose some risk to subjects.

After careful consideration, I really don’t think there are any real risks. Hopefully while being
interviewed on pre-shot routines, none of the golfers will begin to question their pre-shot routines.
I am hoping that they are all comfortable with their routines and will not decide to change them
after being interviewed. Still, there are no real risks to any of the participants included in the
study.

Carefully consider how the subjects will react and address ANY potential risks. Do not simply
state that no risk exists, until you have carefully examined possible subject reactions.
**Cover page checklist.** Please provide additional information concerning these risk elements. If none, please state "none of the items listed on the cover page checklist apply." [Click here](#) to go to cover page for completion.
INFORMED CONSENT

Hello. You are being asked to participate in a study being conducted by Allison Yancey and Advisor Dr. Dan Czech from Georgia Southern University. I am currently a 2nd year graduate student getting my Master’s in Sport Psychology. Dr. Czech is the Associate Professor in the Sport Psychology department. I am interested in studying the lived experience of using pre-shot routines among male professional golfers from an existential phenomenological qualitative approach.

The purpose of this research study is to interview male professional golfers (n=10-12) to understand the personal experience they have had in using pre-shot routines. Participation in this research will include the completion of a phone interview with the principal investigator. The interview will be transcribed verbatim and you will be given the opportunity to review the transcripts and make changes to your comments. The audio tapes will be stored in a locked file in the researcher’s office as well as the names that go along with each of the interviews. The tapes will be destroyed one year after the completion of the study. The researchers will be the only people with access to the tapes. The interview will take approximately 30 minutes and will be conducted through a phone interview. The results of this study may help other professionals as well as amateurs to improve their golf game.

There are no anticipated risks. There are no direct benefits to you for participating in this research study.

The information that you give in the study will be handled confidentially. Your information will be assigned a code number. The list connecting your name to this code will be kept in a locked file. When the study is completed and the data have been analyzed, this list will be destroyed. Your name will not be used in any report.

You have the right to withdraw from the study at any time without penalty. You may decline to answer certain questions. If you wish to withdraw from the study then tell the researcher who will immediately stop the interview. If you decide to withdraw after data
has been collected then contact the researcher who will destroy the data collected. You will receive no payment for participating in the study.

Participants have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above. To contact the Office of Research Services and Sponsored Programs for answers to questions about the rights of research participants please email oversight@georgiasouthern.edu or call (912) 486-7758.

You must be 18 years of age or older to consent to participate in this research study. If you consent to participate in this research study and to the terms above, please sign your name and indicate the date below. Your participation in the study is completely voluntary. You will be given a copy of this consent form to keep for your records.

Title of Project: The Experience of Pre-shot Routines Among Professional Golfers- An Existential Phenomenological Investigation

Principal Investigator: Allison Yancey, PO Box 8076 Statesboro GA 30460, 912-486-7397, allison_k_yancey@georgiasouthern.edu

Other Investigator(s): Dr. Dan Czech, PO Box 8076 Statesboro GA 30460, 912-681-5267, drczech@georgiasouthern.edu

_________________________________________  __________________
Participant Signature                  Date

I, the undersigned, verify that the above informed consent procedure has been followed.

_________________________________________  __________________
Investigator Signature                 Date
CERTIFICATION OF INVESTIGATOR RESPONSIBILITIES

By signing below I agree/certify that:

1. I have reviewed this protocol submission in its entirety and I state that I am fully cognizant of, and in agreement with, all submitted statements and that all statements are truthful.

2. This application, if funded by an extramural source, accurately reflects all procedures involving human participants described in the proposal to the funding agency previously noted.

3. I will conduct this research study in strict accordance with all submitted statements except where a change may be necessary to eliminate an apparent immediate hazard to a given research subject.
   a. I will notify the IRB promptly of any change in the research procedures necessitated in the interest of the safety of a given research subject.
   b. I will request and obtain IRB approval of any proposed modification to the research protocol or informed consent document(s) prior to implementing such modifications.

4. I will ensure that all co-investigators, and other personnel assisting in the conduct of this research study have been provided a copy of the entire current version of the research protocol and are fully informed of the current (a) study procedures (including procedure modifications); (b) informed consent requirements and process; (c) anonymity and/or confidentiality assurances promised when securing informed consent (d) potential risks associated with the study participation and the steps to be taken to prevent or minimize these potential risks; (e) adverse event reporting requirements; (f) data and record-keeping requirements; and (g) the current IRB approval status of the research study.

5. I will not enroll any individual into this research study: (a) until such time that the conduct of the study has been approved in writing by the IRB; (b) during any period wherein IRB renewal approval of this research study has lapsed; (c) during any period wherein IRB approval of the research study or research study enrollment has been suspended, or wherein the sponsor has suspended research study enrollment; or (d) following termination of IRB approval of the research study or following sponsor/principal investigator termination of research study enrollment.

6. I will respond promptly to all requests for information or materials solicited by the IRB or IRB Office.

7. I will submit the research study in a timely manner for IRB renewal approval.

8. I will not enroll any individual into this research study until such time that I obtain his/her written informed consent, or, if applicable, the written informed consent of his/her authorized representative (i.e., unless the IRB has granted a waiver of the requirement to obtain written informed consent).

9. I will employ and oversee an informed consent process that ensures that potential research subjects understand fully the purpose of the research study, the nature of the research procedures they are being asked to undergo, the potential risks of these research procedures, and their rights as a research study volunteer.

10. I will ensure that research subjects are kept fully informed of any new information that may affect their willingness to continue to participate in the research study.

11. I will maintain adequate, current, and accurate records of research data, outcomes, and adverse events to permit an ongoing assessment of the risks/benefit ratio of research study participation.

12. I am cognizant of, and will comply with, current federal regulations and IRB requirements governing human subject research including adverse event reporting requirements.

13. I will notify the IRB within 24 hours regarding any unexpected study results or adverse events that injure or cause harm to human participants.

14. I will make a reasonable effort to ensure that subjects who have suffered an adverse event associated with research participation receive adequate care to correct or alleviate the consequences of the adverse event to the extent possible.

15. I will notify the IRB prior to any change made to this protocol or consent form (if applicable).

16. I will notify the IRB office within 30 days of a change in the PI or the closure of the study.
<table>
<thead>
<tr>
<th>Principal Investigator Name (typed)</th>
<th>Principal Investigator Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allison Yancey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Faculty Advisor Name (typed)</th>
<th>Faculty Advisor Signature*</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Dan Czech</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Faculty signature indicates that he/she has reviewed the application and attests to its completeness and accuracy.
Georgia Southern University  
College of Health and Human Sciences  
Sport Psychology

The Experience of Preshot Routines Among Professional Golfers- An Existential Phenomenological Investigation.

Research Confidentiality Agreement

I, ______________________ (print name) will be taking part in the study on the Experience of Preshot Routines among Golfers.

I understand that as part of the research process, I am expected to maintain the confidentiality of the participants in the study to the best of my ability. I will have access to personal and private information in the course of this project. I agree to treat this information in the way that I would want personal information about myself treated.

I will treat all information about the participants I review as confidential. I will not discuss the information given by the participants with anyone other than the research team. I will keep the identities of the participants strictly confidential, unless they have consented to have their names used in the report.

This issue of confidentiality has been discussed with me and I agree to the terms of this agreement.

Signed ______________________

Date ______________________

Approved ____________________

Date ______________________