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Individual Difference Moderators of Interpersonal and Intrapsychic Reactions to Hostile-Controlling Coaching Behaviors

Erin Shelton Bullett

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Hostile-controlling coaching behaviors, which can include screaming obscenities and placing blame on the athletes, can lead to counterproductive responses such as withdrawal from sport and decreased performance. Research has shown individuals who perceive coaches to be blaming increase their own self-blame (Conroy & Coatsworth, 2007). Individual difference variables may moderate how athletes respond to hostile-controlling coaching behaviors. The purpose of the current research was to examine fear of failure, need for achievement, and self-esteem as individual difference moderators of interpersonal and intrapsychic reactions to hostile controlling coaching behaviors. After controlling for autonomy support, fear of failure and self-esteem were significant predictors of self-blame. Self-esteem significantly predicted differences in self-affirmation.
INDIVIDUAL DIFFERENCE MODERATORS OF INTERPERSONAL AND INTRAPSYCHIC REACTIONS TO HOSTILE-CONTROLLING COACHING BEHAVIORS

by

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B.A., Syracuse University, 2006

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DEDICATION

I would like to dedicate this project to my “Uncle” Gary White, whose strength and poise in life inspires me each day. His memory truly makes me a stronger person.
ACKNOWLEDGMENTS

I would like to acknowledge my thesis advisor, Dr. Jon Metzler for all his assistance and support through this process. Without his help, this project never would have gotten off the ground. He encouraged me to think critically throughout each step of the process. Not only are you my professor and advisor but you are also a great friend. Thank you Dr. Metzler.

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CHAPTER 1
INTRODUCTION

Research on coaching behavior has focused on several aspects of the coach-athlete relationship including athletes’ preferences (Sherman, Fuller, & Speed, 2000) and perceptions (Cumming, Smith, & Smoll, 2006), as well as behaviors that affect team cohesion (Turman, 2003). Recently, researchers have looked at five factor models of personality and how these factors relate to coach-athlete interactions (Conroy, Pincus, & Metzler, 2006). Hostile-controlling coaching behaviors can lead to negative responses from athletes. These responses can include increased anxiety and decreases in motivation. Conversely, supportive behaviors tend to elicit responses that will lead to continued participation in sport. An examination of individual characteristics that moderate athletes’ responses to hostile-controlling coaching behaviors may help researchers, consultants, and coaches understand why some athletes are better able to cope in environments where blaming behaviors are common. The goal of the current research is to shed light on whether certain personality characteristics, namely fear of failure, need for achievement and self-esteem, moderate how athletes react to hostile-controlling coaching behaviors.

Effect of Coaching Behaviors on Athletes

Coaching behavior may influence athletes’ motivation, emotions, and performance. Coaches have a large impact on the dynamic of a team and the players inevitably notice and react to coaches’ beliefs and attitudes. Coaches can implement positive or negative practices in order to motivate their athletes (Weinberg & Gould, 2007). These approaches have different methods and outcomes. Coaches can help athletes to become intrinsically motivated and set achievement goals rather than focusing
on winning and losing (Martens, 1997). These factors can help provide the athlete with optimal arousal states during competition and may reduce anxiety that may lead to increased experiences of flow or peak performances (Martens, 1997).

Conversely, coaches utilizing fear, threats, criticism and intimidation, can hinder athletic and personal development (Weinberg & Gould, 2007). While these behaviors may eliminate unwanted behavior, they can also produce a fear of failure. Fear of failure can cause decreases in athletic performance as the athlete strives to avoid failing so strongly that, he/she cannot perform at his/her best. Using punishment to motivate athletes also reduces the internal or intrinsic motivation to work hard to succeed (Weinberg & Gould, 2007).

Effect of Perceptions of Coaching Behaviors on Athletes

Research has also shown that individuals who perceive coaches to be blaming increase their own self-blame (Conroy & Coatsworth, 2007). This same study found that those who perceived their coaches to be more affiliative in nature displayed more need satisfaction. Communication styles can affect the social environment and the coach-athlete relationship. The athletic environment may influence specifically autonomy, competence, and relatedness. Athletes who perceive their coaches to be emancipating or encouraging of autonomy, experience greater personal autonomy (Reinboth, Duda, & Ntoumanis, 2004). The mastery focus of the coach can predict athletes' perceptions of competence (Reinboth, Duda, & Ntoumanis, 2004). Reinboth, Duda, & Ntoumanis (2004), also found that perceived assistance and emotional support from the coach increases the athlete’s sense of relatedness. Autonomy support in relation to sport involves the coach (person of authority) taking into account the athlete’s perspective and
providing appropriate and meaningful information, allowing the athlete to make choices and minimizing external pressures (Black & Deci, 2000). It is thought that if an athlete currently feels a great deal of autonomy support from their coach, witnessing a novel coach acting in a hostile-controlling manner may not cause as large of a reaction.

**Operationalizing Coaching Behaviors**

Researchers have categorized coaching behaviors using the Coaching Behavior Assessment System (CBAS; Smith, Smoll & Hunt, 1977), which categorizes coaching behaviors into reactive or spontaneous behaviors. Coaching behaviors according to this model generally fall into positive approaches and negative approaches. Coaches may respond to events with positive behaviors (e.g. encouragement, reinforcement, and instruction) or negative behaviors (e.g. nonreinforcement, punishment, and ignoring mistakes). Positive behaviors are thought to lead to increased performance, whereas negative behaviors are thought to deter from athletic performance. The limitations involved in this model included the fact that behaviors are either positive or negative but are not defined in relation to one another. This model does not utilize a scale on which behaviors are coded or defined but only looks at their overall disposition as positive or negative.

Another way we can define and operationally define coaching behaviors is through the use of the Structural Analysis of Social Behavior (SASB; Benjamin, 1974). The SASB is an interactional interpersonal circumplex (IPC) model that overcomes the limitations of the more categorical models by coding behaviors in relation to each other on two continuous dimensions. The horizontal axis of the SASB rates behaviors on levels of affiliation (hostile to friendly), while the vertical axis rates behaviors on levels of
interdependence (autonomy taking to autonomy granting; Benjamin, 1974, 1996). The SASB is a three-surface circumplex model formed by two axes. The first surface of the model relates to actions towards another person (Benjamin, 1994). The second surface focuses on behaviors that are in relation to another person (Benjamin, 1994). The third and last surface of the model relates to introject behaviors, those are behaviors towards oneself, and may also be termed self-talk (Benjamin, 1994).

Another way the SASB improves on the CBAS is it predictive principles for patterns of behavior between individuals. One such principle is complementarity, this principle states that the most probable behavior in response to an action leads to attraction between the acting parties and is followed if the interaction between individuals occurs in the same interpersonal space on each surface. The principle of complementarity, leads to consistent patterns of behavior. That is, an individual treated with protection, will react with trust towards the person acting towards them, and tend to engage in behaviors that protect himself or herself. In contrast, someone who perceives another person attacking them will recoil from the other person and react by attacking themselves intrapsychically (Benjamin, 1996). Conroy, Pincus, & Metzler (2006) found coaches to display a restricted range of behavior towards athletes. These behaviors included affirmation, protection, control, and blame. Blame consists of a combination of moderately hostile and moderately controlling behaviors. While several studies have shown the principle of complementarity, some researchers have found it to be less reliable (Orford, 1986).

Complementarity most often follows interactions that begin with friendly interpersonal behaviors. If a pattern of behavior “is hostile, complementarity would not be expected to lead to enduring and satisfying relationships,” (Conroy, Pincus, &
Metzler, 2006, p. 6). Therefore, consistent patterns of hostile-controlling behavior from coaches would seem to reduce the likelihood of continued athletic involvement of the athlete. Those patterns of interpersonal interaction that fall on the hostile side of the circumplex model would be likely to elicit negative outcomes in an athletic context. Athletes who engage in self-blame and self-attack may lose motivation and their negative outlooks could affect performance.

Role of Individual Differences in Reactions to Coaching Behavior

Individual differences may moderate how athletes respond to hostile-controlling coaching behaviors. When presented with hostile-controlling coaching behaviors athletes high in self-esteem, and need for achievement (nAch) may respond with more disclosure and self-affirmations than those lower in self-esteem and need for achievement. Conversely, individuals with high fear of failure (FF) may be more prone to sulking and self-blame. These three characteristics are especially relevant to sport given the fact that sport requires a great deal of performance feedback. Each of these types of dispositions will affect the way a person reacts to differing types of performance feedback.

Fear of failure and nAch are achievement motives and are relatively stable characteristics. Achievement motives influence and lead towards achievement pursuits (Metzler, 2007). Both of these motives relate to competence evaluation. Within sport, evaluations of performance competence of athletes occurs constantly. Coaching behaviors may accentuate the impact of these dispositions (Conroy & Coatsworth, 2007). Those high in FF are motivated to avoid situations in which they may fail. Researchers have found that in sport, high FF is a source of distress, a reason for dropout of sport, and related to the use of performance enhancing drugs (Anshel, 1991; Conroy, 2001a; Gould,
Conroy and Coatsworth (2007) found coaching behaviors are associated with changes in FF over the course of a season. By contrast, individuals high in nAch seek out situations in which they may have chance to succeed. There is less research available regarding nAch, as there has been less attention regarding nAch in sport (Metzler, 2007).

Self-esteem may moderate reactions to coaching behaviors by acting as a buffer. Brown and Dutton (1995) research found that individuals with low self-esteem tend to respond positively to positive events and negatively to negative events, and by contrast, those with high self-esteem tend to disregard negative events and maintain positive psychological states. Therefore, athletes who are high in self-esteem may be better able to recover from the negative effects of hostile-coaching behaviors. Individuals high in self-regard may act towards themselves in a more friendly-autonomy supporting way. This may in turn lead toward less of a likelihood of quitting sport, more persistence, and greater enjoyment in sport.

Barnett, Smoll, & Smith, (1992) also found that players with low self-esteem who also have supportive and instructive coaches showed the greatest amount of attraction to the coaches. The same study found that players who exhibited low self-esteem and interacted with coaches who had less supportive and instructional approaches expressed the least amount of attraction to the coach. Additionally this study found that players with high self-esteem were not as affected by coaching behaviors. Therefore, those who have higher levels of self-esteem may be better able to deal with and recover from hostile-controlling coaching behaviors.
Purpose

The purpose of the current research is to examine fear of failure, need for achievement, and self-esteem as individual difference moderators of interpersonal and intrapsychic reactions to hostile-controlling coaching behaviors. This study hypothesizes that individuals, who have higher levels of fear of failure will respond with greater sulking and self-blame, while those high in need for achievement, and self-esteem, will respond with greater levels of disclosure, and self-affirmation.
CHAPTER 2
METHODS

Participants

Participants included NCAA division I and division II athletes (N=329) recruited from NCAA programs around the United States. The primary researcher sent an email to an individual within the athletic department of each school. The contact people included coaches, academic advisors, and NCAA CHAMPS/Life skills coordinators. Of the 329 participants, only 152 completed all of the measures (46.2%). Ten of which were found to have incorrectly answered the questions contained in the last two scales. This final sample consisted of 109 women (76.8%) and 33 men (23.2%). Participants ranged in age from 18-23 (M=20.12, SD=1.30). All school classifications were represented with 39 freshman (27.5%), 35 sophomores (24.6%), 38 juniors (26.8%), 23 traditional seniors (16.2%), 4 fifth-year seniors (2.8%), and 3 graduate students (2.1%). Of the 15 sports represented, track and field (24.6%), soccer (14.1%), swimming and diving (12.0%), and water polo (7.7%) were the most frequently reported sports. When the same participant reported two sports, only the sport they listed first was counted. The majority of the participants competed for Division I programs (123; 86.6%). Just over half (55.5%) of the sample consisted of individuals in team interactive sports.

Instruments

The reading ease of the measures was determined to be at a 4.4 grade level and thus it the researchers assume that the participants could understand the questions asked of them.
**Perceived autonomy support.** Participants completed the Sport Climate Questionnaire (SCQ), a 15-item measure that examines perceived autonomy support athletes feel from their current coaches. Choices range from *strongly disagree* (1) to *strongly agree* (7). While this measure was not specifically tested previous research has shown that alpha coefficients for the family of measures to be consistently around .90 (University of Rochester, 2006). For the current study Cronbach’s alpha was 0.96.

**Fear of failure.** Participants completed the Performance Failure Appraisal Inventory (PFAI), a 25-item measure that examines fear of failure as determined by the participants’ beliefs concerning the likelihood of aversive consequences to failure (Conroy, Willow, & Metzler, 2002). Choices range from *believe 0% of the time* (-2) to *believe 100% of the time* (+2). Previous research has found the PFAI to be reliable and have factorial and external validity (Conroy, 2001a; Conroy & Metzler, 2004; Conroy, Metzler, & Hofer, 2003; Conroy, Willow, & Metzler, 2002). For the current study the PFAI exhibited a Cronbach’s alpha of 0.93.

**Need for achievement.** The 10-item Need Achievement Pride Scale (NAPS; Metzler, 2007) provided scores for need for achievement operationalized as beliefs that competence evaluation affords opportunity to anticipate intrapersonal pride. Participants responded to items with scores ranging from *believe 0% of the time* (-2) to *believe 100% of the time* (+2). The NAPS displayed an α coefficient of 0.93 in the current study.

**Self-esteem.** The 10-item Rosenberg Self-esteem scale (SES; Rosenberg, 1989) will provide scores on the participant’s global self-esteem. Participants responded with scores ranging from *strongly disagree* (0) to *strongly agree* (3). Scale scores can range
from 0-30 points and the measure was viewed as a unidimensional construct. The current study found the α coefficient of the SES to be 0.88.

*Sulk, disclose, self-blame, self-affirm.* Benjamin’s (1974, 1996) Structural Analysis of Social Behavior (SASB), as used in this study, includes 32 items focused on the self as one relates to the other person acting in the event. The SASB also includes 16 items focused on self-talk or actions and/or feelings towards oneself in the given situation. Both scales asked participants to rate how well the statements related to them on a scale of *Never/Not at All* (0) to *Always/Perfectly* (100). Participants were asked to rate how the items relate to them in the situation they just viewed. Several studies have established both the internal and external validity of the model (Benjamin, 1994; Monsen, von der Lippe, Havik, Halvorsen & Eilertsen, 2007; Pincus, Newes, Dickinson, & Ruiz, 1998).

**Procedure**

The research used a web-based survey in order to collect a sample of participants from a geographically diverse area. This allowed for standardized administration without the added confound of having multiple administrators and reduced the likelihood of socially desirable answers (Reips, 2002). Web-based research has been shown to be reliable, valid and efficient (Meyerson & Tryon, 2003). An email sent to a contact person with access to athletes was used to recruit participants (e.g. coaches, or NCAA CHAMPS Life skills coordinators). The email provided all of the information contained in the informed consent as well as a copy of the IRB approval letter. Each participant had access to this information at the beginning of the study. Participants were required to indicate that they agreed to participate in the study by pressing a radio button before
answering any other questions. Informed consent included statements regarding athletes’ freedom to withdraw from the study at any time. It also included statements regarding the risk involved in the study including the fact that some individuals may find the language contained in the video clip offensive. The email contained a password in order to help deter from non-athletes participating in the study. The study allowed IP addresses to repeat due to the likelihood of participants completing the measures in a public lab. A page that asked demographic data followed the informed consent page. Participants did not identify their school to ensure anonymity of the results. Participants completed the SCQ to gather information of how they generally perceive autonomy support from their current coach. Then the PFAI, NAPS, and Rosenberg Self-esteem scales were completed.

Participants then watched a 41-second video, which depicted a high school football coach berating his athlete. The coach in the video yelled profanities at the athlete and acted in a manner that attempted to control the athlete’s actions. The athlete resisted the coach’s requests, which only prompted more anger and hostility from the coach. Participants watched a video on a separate web page and then continue to fill out the Intrex measures after watching the video. After watching the video the participants then continued to fill out the measures after watching the video. Then the participants were asked to fill out the Intrex surfaces 2 and 3 (See appendix D for directions).

Data Analysis

The Statistical Package for Social Science (SPSS) 15.0 was used to run the data. Specifically, four multiple regression analyses were run, one for each dependent variable: sulk, disclose, self-blame, and self-affirm. For each equation, the entry method was used to enter perceived autonomy support in step one. Step two used forward entry regression
to enter FF, nAch, and self-esteem. Forward regression was utilized in order to determine if additional variables explained significant variance in each of the four outcome variables.
CHAPTER 3

RESULTS

Table 1 contains the descriptive statistics for the independent and dependent variables. Scores on the NAPS were leptokurtic and attempts to transform the data were unsuccessful. Table two presents bivariate correlations between all variables. It is important to note that the NAPS and self-esteem scales shared a large amount of variance. All of the dependent variables met the assumption of normality with the exception of disclose which was significantly positively skewed.

Since the analysis consisted of four regression equations, the Bonferroni method was used to adjust the alpha level. Thus, the alpha level was set to $p < 0.012$ for each test. Perceived autonomy support contributed to 0.7% of the variance in sulk ($p > 0.012, \beta = 0.08$) and 0.2% of the variance in disclose ($p > 0.64, \beta = 0.04$). None of the variables in step two contributed significantly to the variance in the two interpersonal variables, sulk and disclose.

Autonomy support did not significantly predict self-blame ($R^2 = 0.01, p > 0.012, \beta = -0.09$). Self-esteem and FF contributed significantly to the variance in self-blame. Self-esteem contributed an additional 20.5% of the variance in self-blame ($R^2 = 0.21, p < 0.012, \beta = -0.47$). Individuals high in self-esteem reported low self-blame whereas individuals low in self-esteem reported high self-blame. Fear of failure also contributed significantly to the model ($R^2 = 0.25, \Delta R^2 = 0.04, p < 0.012, \beta = 0.24$). Individuals higher in fear of failure tend to treat themselves with more self-blame more than those with lower fear of failure.
Autonomy support also did not significantly predict self-affirm ($R^2 = 0.00, p > 0.012, \beta = -0.02$). Self-esteem was the only significant predictor of self-affirmation in step two ($R^2 = 0.05, \Delta R^2 = 0.05, p < 0.012, \beta = 0.23$). Compared to individuals low in self-esteem, individuals high in self-esteem tend to self-affirm when confronted with hostile-controlling coaching behaviors.

To determine if levels of self-blame and self-affirm were similar in this study to levels found when thinking about success and failure post-hoc tests were run. One sample t-tests revealed that self-blame ($M = 31.39, SD = 26.24$) was significantly higher in the current study than when thinking about success ($M = 17.00, SD = 20.84; t = -4.14, p < 0.01$; Conroy & Coatsworth, 2007). The levels of self-blame in the current study was significantly lower than when thinking about a time failure occurred ($M = 40.50, SD = 25.98; t = 6.54, p < 0.01$; Conroy & Coatsworth, 2007). One sample t-tests also reveal that levels of self-affirmations ($M = 52.82, SD = 27.34$) significantly differed than when individuals were asked to think about a time they succeeded ($M = 70.64, SD = 22.60; t = -7.77, p = 0.01$; Conroy & Coatsworth, 2007). Levels of self-affirmations did not differ significantly than previous research that asked individuals to think about a time they failed ($M = 54.65, SD = 23.25; t = -0.80, p = 0.426$; Conroy & Coatsworth, 2007).
CHAPTER 4

DISCUSSION

Two out of four hypotheses were supported in this study. Contrary to expectations, the interpersonal responses, sulk and disclose were not predicted by FF, nAch, and self-esteem. The results do however support the hypotheses that FF and self-esteem moderate how athletes react intrapsychically.

While the use of video to prime did not elicit the hypothesized interpersonal reactions it did create enough stimuli to elicit intrapsychic responses. The athletes may not have reacted fully to the video clip for several reasons. Previous research has found that athletes in new coaching environments are not likely to engage in hostile patterns of behavior (Conroy, Pincus, & Metzler, 2006). The athletes in this study may have tended not to react with interpersonally complementary responses toward the coach because those types of behaviors would not create a lasting relationship.

Another possible reason for the lack of interpersonal results could be due to the resistance to change of the athlete’s internal working model of a coach. Bretherton and Munholland (1999) postulate that since individuals’ internal working models are involved in attachment interactions and are relatively stable that when one person’s behavior changes there is resistance or misinterpretation from the other partner in the relationship. This resistance could take the form of continuing past patterns of behavior (Bretherton & Munholland, 1999). They base these conclusions on the work of John Bowlby. Bowlby has also speculated that the defensive processes within individual’s working models ward off thoughts and feelings that would cause anxiety (Bretherton & Munholland, 1999). These defensive processes may cause the athlete to divert their feelings toward the coach.
inward on themselves (Bretherton & Munholland, 1999). The internal working model of the self may have been more readily accessible than the internal working model of the coach. The fact that the participants did not react on an interpersonal level, but did so on an intrapsychic level may indicate the presence of the defense mechanisms as proposed by Bowlby.

Fear of failure significantly predicted self-blame. These results support the hypothesis that individuals higher in FF would respond to hostile-controlling coaching behaviors with greater self-blame and those higher in self-esteem would respond with less self-blame. Since those high in FF are motivated to avoid situations in which they may fail, it is plausible that they would also respond more with self-blame than those lower in fear of failure. High FF has been found to be related to negative outcomes (Anshel, 1991; Gould, Horn, & Spreeman, 1983; Conroy, 2001a) and coaching behaviors have been shown to be associated with changes in FF over the course of a season (Conroy & Coatsworth, 2007). Due to the nature of these relationships, how athletes respond to coaching behaviors can be extremely important to the athletes’ psychological and physiological health. Research has found links between perceived blame and FF in adolescent and young adult athletes and non-athletes (Conroy, 2003). Those athletes higher in FF tended to perceive the coaching behavior as more blaming based on their reacting with self-blame (Conroy, 2003).

Self-esteem predicted both self-blame and self-affirm. While the researcher hypothesized that self-esteem would moderate self-affirmations, the hypotheses did not include self-esteem significantly influencing self-blame. This may indicate the importance of self-esteem within the sporting context. Those individuals higher in self-
esteem reported higher levels of self-affirmations. This conclusion is consistent with the research conducted by Brown and Dutton (1995), which found that individuals with high self-esteem are more likely to disregard negative events or evaluations and maintain positive psychological states. Self-blame, a negative form of self-talk can lead to reductions in performance as evidenced by previous research that has examined the self-talk-performance relationship (Van Raalte, Brewer, Lewis & Linder, 1995).

This conclusion is seemingly in contrast to previous research that has suggested the instructional style of the coach influences levels of self-esteem (Smoll, Smith, Barnett, & Everett, 1993). It is likely that the relationship between coaching behaviors and self-esteem is more complex than either of these explanations. Individuals high in self-regard did tend to act towards themselves in a more friendly-autonomy supporting way. This is important as increased levels of self-affirmations and lower levels of self-blame may in fact lead to greater persistence, fewer dropouts, and more enjoyment in sports.

Individuals higher in FF and lower in self-esteem may want to avoid particularly hostile-controlling coaches when choosing a coach for their collegiate career. Coaches, who tend to engage in hostile-controlling behaviors, may want to choose athletes who are particularly high in self-esteem and low in fear of failure. Coaches may also want to tailor their behaviors based on the individual characteristics of each athlete. This conclusion supports past research, which found that if a coach changes his/her behavior to the athlete’s preferred behaviors, the athlete might respond in a more positive manner (Chelladurai & Carron, 1978). Since self-talk influences performance and persistence, the findings of the current study are useful to coaches and athletes. Since research has found
that we can teach coaching behaviors, that coaching behaviors can influence FF and self-esteem, and that these behaviors can predict self-talk, more coaching education may be beneficial.

The role of self-affirming versus self-blaming self-talk can be important, as previous research has found that individuals engaging in negative self-talk during a dart-throwing task performed less well than those engaged in positive self-talk (Van Raalte, Brewer, Lewis, & Linder, 1995). Research has shown that self-talk is influenced by thinking about a time when success or failure occurred (Conroy & Metzler, 2004). Individuals in the succeeding condition described using more self-affirming self-talk and less self-blaming self-talk. Research examining the links between FF, self-talk, and anxiety indicated, that high FF predicted lower levels of self-affirmation and higher levels of self-blame (Conroy & Metzler, 2004). The current study supported these results.

Consistent with previous research individuals higher in FF and lower in self-esteem may need to consider these personality characteristics when choosing a coach for their collegiate career. If an individual is higher in self-esteem, specifically he/she may be better able to persist in the face of adversity and difficulty. It appears these individuals will be able to handle hostile-controlling coaching behaviors in a more adaptive way on the intrapsychic level. While there were no significant results for the interpersonal reactions in the current study, the influence of self-talk on performance and persistence makes the results of the current study still useful to athletes and coaches alike. Since sport requires a great deal of performance feedback the fact that athletes self-talk could be influenced by watching a coach act in a hostile-controlling manner this has many implications for coach-athlete interactions and relationships.
There is not a large body of empirical research utilizing videos to prime. This lack of evidence supporting its use may signify that researchers struggle to successfully prime individuals with video. The research that is present, utilizes priming to change future behaviors (Schreibman, Whalen, & Stahmer, 2000). The current study assumed that if individuals could be primed with instructions to be in a failing condition (Conroy & Metzler, 2004; Van Raalte, Brewer, Lewis, & Linder, 1995) that use of a video would serve as a strong prime in that it provided a more life like stimulus that contained both visual and auditory stimuli for the athletes to respond. This does not seem to be the case in this study.

Based on comparisons to past research the video was able to prime the participants to a state between success and failure. The levels of self-blame were significantly lower than when asked to think about a time when failing but also significantly higher than when asked to think about a time success occurred. Self-affirmations in the current study were significantly lower than when asked to think about a successful event. Self-affirmations were not significantly different than when asked to think about a time when failure occurred. Thus it may be concluded that while the video did not strongly prime for a failing condition it did at least partially prime for it.

In the future, researchers should prime interpersonal reactions utilizing multiple mediums and methods to determine which exert the most influence. The use of video to prime the athletes’ reactions could also have lead to a reduction in the validity of the results as well as it may not be powerful enough to create a change. The stimulus may need to be more salient such as listening to a coach yelling at an athlete specific to the sport of the participant.
The fact that the video displayed a high school football coach may have also reduced the significance of the results. Athletes may have not been able to relate to the video clip and may have dismissed the interaction as being due to the culture of football. Only three (2.1%) of the participants reported being football players. Future research may want to use sport specific video primes in order to determine if results would be specific to the sport present in the video watched. Another reason the video may have not resonated largely, is that the majority of the sample was women (76.8%). Research has shown conflicting conclusions with regard to the preferred coaching behaviors of male and female athletes (Sherman, Fuller, & Speed, 2000; Terry, 1984). The gender of the sample may or may not have affected the results. In the future researchers may want to test men and women separately. The coach in the video was also male this may have caused some differences in the results as research has found that female athletes perceived differences between the communication styles of male and female coaches (Haselwood, et. al., 2005). The coach in the clip also mentioned the player wanting to play division I football. Since the athletes in the sample are already at the collegiate level, the mention of the athlete wanting to get into a collegiate program may have caused the participants to see less application to their own lives.

Since the study did not collect the racial identity of the participants, it is possible that many of the participants did not identify with the coach due to the coach being African-American. Simply viewing a face of an individual of African-American decent can activate racial stereotypes (Sartore & Cunningham, 2006). One of the most pervasive stereotypes toward African-American individuals regards their temperament (Bargh, Chen, & Burrows, 1996; Quillian & Pager, 2001). This past research indicates that the
race of the coach may be important in the athletes’ evaluations of the behavior. In the future researchers could use racially neutral primes or prime with different coach ethnicities and examine the data to see if there is a difference among races.

The fact that the NAPS failed to adhere to the assumptions of normality could be because athletes competing at such high levels are more likely to be higher in need for achievement. Researchers have suggested that individuals high in need for achievement may be more likely to persist in the face of failure and more likely to engage in adaptive behaviors such as learning strategies (Metzler, 2007). This tendency for the majority of the athletes to score highly on NAPS could also be due to a form of natural selection. That is that most of the athletes who are lower in nAch may not reach this level of performance. Researchers suggest that individuals high in need for achievement persist longer on tasks, choose more difficult tasks, and perform at a higher level than low need achievers (Metzler, 2007).

The discussion above mentions several limitations. One limitation of the current study not previously mentioned is the low completion rate. Only 46.2% of those who began the study actually completed all of the measures. This could indicate that certain types of individuals were more likely to finish the study. Those high in need for achievement may have been more likely to finish the study as those high in nAch persist longer on tasks of moderate difficulty (Metzler, 2007). The primary researcher noticed that certain individuals began the study multiple times but never completed all of the measures. The specificity of the sport in the video is a limitation worth repeating. This most likely reduced both the internal and external validity of the study.
Future research should examine priming different types of coaching behaviors, utilizing different sports and different mediums to prime responses. Athletes were instructed to watch the video, after watching the video they were asked to code the response items based on how they would act in that situation. It may be more useful in future research to give more thorough instructions before watching the video. This change in instructions may lead to a greater ability of the video to prime. It may also be beneficial for future research to embed the video within the survey pages. The video was not posted directly onto the website due to the limitations of the site used to administer the study. By embedding the video and reducing the difficulty in watching the video may positively influence the completion rate. Future research should also examine real life situations. Researchers could code reactions to manipulated coaching behaviors and ask the athletes to self-report introjected responses. Future research may also examine the different subscales of the PFAI to examine if any one scale contributes more to differences in levels on the intrapsychic variables. Future research should test all of the cluster scores of the SASB surfaces to see if FF, nAch, and self-esteem contribute significantly to the variance among other intransitive and intrapsychic subscales on the model. Research should also attempt to examine further the relationship between coaching behaviors and self-esteem to find a direction of the relationship.
### Table 1

Descriptive statistics for independent and dependent variables ($N = 142$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>$M$</th>
<th>$SD$</th>
<th>Skewness (SE)</th>
<th>Kurtosis (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived autonomy</td>
<td>1.27</td>
<td>7</td>
<td>4.52</td>
<td>1.49</td>
<td>-.16 (.20)</td>
<td>-.81 (.40)</td>
</tr>
<tr>
<td>Fear of failure</td>
<td>-1.90</td>
<td>1.67</td>
<td>-0.36</td>
<td>0.73</td>
<td>-.00 (.20)</td>
<td>-.42 (.40)</td>
</tr>
<tr>
<td>Need for achievement</td>
<td>-2.00</td>
<td>2</td>
<td>0.65</td>
<td>0.96</td>
<td>-.51 (.20)</td>
<td>-.12 (.40)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>11</td>
<td>30</td>
<td>22.58</td>
<td>5.02</td>
<td>-.38 (.20)</td>
<td>-.66 (.40)</td>
</tr>
<tr>
<td>Sulk</td>
<td>0</td>
<td>100</td>
<td>46.18</td>
<td>26.60</td>
<td>.16 (.20)</td>
<td>-.91 (.40)</td>
</tr>
<tr>
<td>Disclose</td>
<td>0</td>
<td>100</td>
<td>32.27</td>
<td>27.76</td>
<td>.73 (.20)</td>
<td>-.36 (.40)</td>
</tr>
<tr>
<td>Self-blame</td>
<td>0</td>
<td>100</td>
<td>31.39</td>
<td>26.24</td>
<td>.56 (.20)</td>
<td>-.63 (.40)</td>
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<tr>
<td>Self-affirm</td>
<td>0</td>
<td>100</td>
<td>52.82</td>
<td>27.34</td>
<td>-.27 (.20)</td>
<td>-.79 (.40)</td>
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</tbody>
</table>
Table 2

Pearson’s r, Correlation Matrix of All Variables ($N = 142$)

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<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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<tr>
<td>1. Autonomy</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Fear of failure</td>
<td>-.26*</td>
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<td></td>
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<td>3. Need for achievement</td>
<td>-.05</td>
<td>-.10</td>
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<td>4. Self-esteem</td>
<td>.27*</td>
<td>-.60*</td>
<td>.30*</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Sulk</td>
<td>.08</td>
<td>.10</td>
<td>-.02</td>
<td>-.08</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Disclose</td>
<td>.04</td>
<td>.08</td>
<td>.08</td>
<td>.03</td>
<td>-.19*</td>
<td>--</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Self-blame</td>
<td>-.09</td>
<td>.43*</td>
<td>-.02</td>
<td>-.46*</td>
<td>.35*</td>
<td>-.06</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>8. Self-affirm</td>
<td>-.02</td>
<td>-.13</td>
<td>.07</td>
<td>.20*</td>
<td>.09</td>
<td>.19*</td>
<td>-.18*</td>
<td>--</td>
</tr>
</tbody>
</table>

* $p < .05$
REFERENCES


APPENDIX A

HYPOTHESES
Research Hypotheses include:

After controlling for perceived autonomy support:

I. When faced with hostile-controlling coaching behaviors, athletes high in fear of failure will respond with greater levels of sulk and self-blame.

II. When faced with hostile-controlling coaching behaviors athletes high in need for achievement will respond with greater levels of disclosure and self-affirmation.

III. When faced with hostile-controlling coaching behaviors athletes high in self-esteem will respond with greater levels of disclosure and self-affirmation.

Purpose:

The purpose of the current research is to examine fear of failure, need for achievement, and self-esteem as individual difference moderators of interpersonal and intrapsychic reactions to hostile-controlling coaching behaviors. The aim of the research study is to allow athletes and coaches to determine if their personality and coaching styles will provide an optimal environment for future work together.

Delimitations

Delimitations for the present study include:

1. Participants will consist of NCAA Division I and Division II athletes from schools around the country.

2. All participation will be through the Internet.

Limitations

Limitations include:

1. Completion rate of those who began the study was 46.2%.

2. Some individuals began the survey multiple times without completing it.
3. There is not a large body of empirical research to support use of video as a prime; this may be due to a lack of ability for video to prime individuals.

4. Participants had to open a new webpage to see the video, if they did not open a new webpage and tried to view the video they lost their progress on the measures.

5. The fact that the video was sport, gender, and race specific may have reduced the validity of responses.

6. The coach mentions making it to a division I program, most of the athletes who participated in the study were already at the division I level, this might have reduced the strength of the video to prime athletes.

**Assumptions**

It is assumed that:

1. Since confidentiality will be explained to participants before, filling out any information the participants will answer the item questions openly and honestly.

2. Participants will answer each item.

3. Participants will understand what each item is asking of them.

4. Athletes, who react with self-blame and sulking, given long-term exposure to this type of coaching behavior, perform less optimally than those who respond with disclosure and self-affirmation.

**Definitions:**

1. Fear of Failure: A form of performance anxiety that includes the motive to avoid failure.

2. Self-esteem: an overall evaluation of one's self-worth or value.
3. NCAA Division I/II Athlete: A student who competes in a sport that is sanctioned as division I or division II by the National Collegiate Athletic Association.

4. Hostile-Controlling (Blaming) Behavior: “Criticizing, condemning, or condescending toward another person…could also involve manipulating or deceiving someone to gain the upper hand” (Humphrey & Benjamin, 1989, p. 46).


6. Disclosing: “Warm and open sharing of ideas, feelings, and activities with someone else. The communication is characterized as friendly, enthusiastic, and frank” (Humphrey & Benjamin, 1989, p. 47).

7. Self-Accepting/Self-Affirming: “Liking and accepting oneself as is, with full awareness of both strengths and weaknesses. It implies feeling solid and integrated” (Humphrey & Benjamin, 1989, p. 47).

8. Self-Blaming/Self-Indicting: “Guilt, shame, self-criticism, and feelings of inadequacy…could even include deceiving or punishing oneself” (Humphrey & Benjamin, 1989, p. 48).


10. Anticomplementary/Antithesis/Antithetical Relations: The opposite reaction to antecedent behaviors, least likely reactions to occur (Benjamin, 1974; Carson, 1969; Conroy, Pincus, & Metzler, 2006; Kiesler, 1983).
APPENDIX B

EXTENDED LITERATURE REVIEW
In recent years, many aspects of coaching behaviors have been researched (Cumming, Smith, & Smoll, 2006; Koivula, Hassmén, & Fallby, 2002; Sherman, Fuller, & Speed, 2000; Turman, 2003). Some research has focused on how coaching behaviors influence athlete self-talk and fear of failure (Conroy & Metzler, 2004; Conroy & Coatsworth, 2007). Conroy, Pincus, and Metzler (2006) examined how five factor models of personality related to coach-athlete interactions. This single study does not explain fully how personality factors contribute to interactions between coaches and athletes.

In today’s collegiate sports, some coaches have reputation for screaming at their players in public. These particularly harsh coaches include Geno Auriemma and the newly retired Bobby Knight. While these coaches are undeniably successful year after year, mainstream media has questioned their methods. Yelling profanities and throwing objects are tactics some coaches engage in. These behaviors are both hostile and controlling. Turman (2003) found that embarrassing, ridiculing, or using abusive language towards athletes deters from team cohesion and athletes reported that these behaviors caused them to lose respect for the coach. While research has found these results, certain coaches, including Knight and Auriemma, find athletes who thrive in this type of environment. Athletes who excel in this type of environment are presumed to be low in fear of failure as they are being critically judged on many occasions and yet do not seem to shy away from situations and activities where there is the possibility of failing. Brown and Dutton (1995) found that these athletes high in self-esteem, would be buffered from the negative coaching behaviors their coaches’ display.

Differing coaching behaviors may result in different outcomes as related to athlete performance, emotions, cognitions, and interpersonal relationships. Coaching behaviors
that focus on rewards and punishments may decrease intrinsic motivation to participate in the specified sport. Intrinsic motivation increases when verbal feedback and material rewards convey positive competence information as long as participants did not feel pressured or controlled to perform in a specific manner (Ryan, 1982). These results lead to the conclusion that autonomy supportive behaviors are more likely to increase intrinsic motivation. Increases in intrinsic motivation can lead to improved persistence in activities as well as improved attitude. Vallerand, Deci, and Ryan (1987) state that increased feelings of competence lead to increased intrinsic motivation. Allowing athletes to control their own behaviors may lead to increased intrinsic motivation while controlling forces tend to decrease intrinsic motivation (Vallerand, Deci, and Ryan, 1987). Decreases in motivation may lead to decreases in positive attitudes and performance. Behaviors such as blaming from coaches can lead to increase self-blame in athletes (Conroy & Coatsworth, 2007). Conversely, behaviors that are more affiliative in nature tend to elicit more need satisfaction.

*Interpersonal Circumplex Models*

Since the 1950’s, clinical psychologists have studied interpersonal behavior utilizing circumplex models (Wiggins, 1982). Interpersonal circle (IPC) models present interpersonal variables in a circular formation often utilizing two perpendicular dimensions. Of the original IPC models, Leary (1957), Schaefer (1957), Schutz (1958), and Stern (1958) created the most popular and best developed. The version Leary developed had underlying components ranging from “hate” to “love” on the horizontal axis and from “submission” to “dominance” on the vertical axis (Benjamin, 1996). Schaefer’s model is similar to the IPC on the horizontal axis but it designates autonomy...
giving as the opposite of control rather than submission (Benjamin, 1996). Leary’s (1957) system and many others focused on one level of measurement and then applied responses on this surface to other aspects of interpersonal behavior.

*Structural Analysis of Social Behavior*

Wiggins (1982) described the Structural Analysis of Social Behavior circumplex model (SASB; Benjamin, 1974, 1984) as “the most detailed, clinically rich, ambitious, and conceptually demanding of all contemporary models,” (p. 193). The SASB includes features of both Leary’s and Schaefer’s versions of the IPC. While the Benjamin modeled the SASB after theories that focused on traits influencing interpersonal behavior, the SASB is an interactional model and focuses on state variability. The SASB is a three-surface circumplex model formed by two axes. For each surface, the horizontal axis ranges from Hate to Love (Benjamin, 1994). By contrast, the vertical axis assigns different labels to each of the poles on the three surfaces, but all range from an aspect of Enmeshment to an aspect of Differentiation (Benjamin, 1994). The first surface of the model relates to “behaviors that are directed outward toward another individual,” (Benjamin, 1994, p. 279). Surface 2 (underlined print in Figure 1) is devoted to “behaviors that are interpersonal but that are given in reaction to the initiations…of another individual,” (Benjamin, 1994, p. 279). The athletes will fill out Intrex B to address these interpersonal behaviors. The last surface of the model (italicized print in Figure 1) relates to introject behaviors, those are behaviors towards oneself, and will be measured using Intrex C.
Unique to Benjamin’s model is that control is the opposite of autonomy and dominance is the complement of submission. This is because a person reacting to a dominant action is expected to react by submitting, a complimentary action. By contrast, controlling behaviors are the opposite of granting autonomy and thus represent opposite actions. Also unique to Benjamin’s original model is the fact that she utilized three surfaces that represented actions and their opposites, and reactions and their opposites, and an intrapersonal plane. The third plane in the system is termed the introject and is said to portray what happens when behavior from the first plane is turned inward on oneself. This behavior is also termed self-talk. The basic proposal behind the introject is that beliefs about the self are influenced by the way one is treated by significant others (Wiggins, 1982).
Predictive Principles

The principle of complementarity, if followed, leads to consistent patterns of behavior. That is, an individual treated with protection, will react with trust towards the person acting toward them, and tend to engage in behaviors that protect himself or herself. In contrast, someone who perceives another person attacking them will recoil from the other person and react by attacking themselves intrapsychically (Benjamin, 1996). The principle of complementarity is followed if a given interaction between individuals occurs in the same interpersonal space on each surface. Conroy, Pincus, & Metzler (2006) found coaches to display a restricted range of behavior towards athletes. These behaviors included affirmation, protection, control, and blame. Blame consists of a combination of moderately hostile and moderately controlling behaviors. While several studies have shown the principle of complementarity, some researchers have found it to be less reliable (Orford, 1986). Complementarity most often follows interactions that begin with friendly interpersonal behaviors. If a pattern of behavior “is hostile, complementarity would not be expected to lead to enduring and satisfying relationships,” (Conroy, Pincus, & Metzler, 2006, p. 6). Therefore, consistent patterns of hostile-controlling behavior from coaches would seem to reduce the likelihood of continued athletic involvement of the athlete. Those patterns of interpersonal interaction that fall on the hostile side of the circumplex model would be likely to elicit negative outcomes in an athletic context. Athletes who engage in self-blame and self-attack may lose motivation and their negative outlooks could affect performance.
Individual Differences

Individual differences may moderate how athletes respond to coaching behaviors. Threats to status in sport are easily noticeable. A coach berating and blaming an athlete for a poor performance or loss can threaten the way the athlete feels about him/herself in an athletic context. Such threats to status are “critical to how we feel about ourselves and how we deal with such threats is essential to how we get along with others,” (Santor & Zuroff, 1997, p. 522). Reacting to such threats in a manner which contests the occurrence may lead to further conflict and decrease the quality of interpersonal reactions; in contrast reacting with submissiveness may reduce conflict and increase the possibility of experiencing depressive feelings (Brown, Harris & Hepworth, 1995). Dependent individuals may be more likely than self-critical individuals to increase the quality of interpersonal relationships in the face of threats to status rather than engage in behaviors that increase respect from others. Conroy, Pincus and Metzler (2006) looked at five factor model traits in relation to coach-athlete interactions they found that learner conscientiousness had the greatest impact on the complementary of coach-athlete interactions. They found that those high in conscientiousness tended to react with acomplementary reactions to their coaches behaviors. These researchers posited these learners’ high need for understanding may have affected these responses. They also found those differences in levels of openness to experience may affect the stability of complementary interactions.

Individual differences in self-esteem need for achievement, and fear of failure may moderate reactions to coaching behavior as well. As these factors are related to motivation and sport outcomes, they are important to study in depth.
Achievement Motives

To understand what motivates athletes researchers need to focus on individual differences that moderate achievement motives (Metzler, 2007). Fear of failure and need for achievement are two popular achievement motives that have been researched. Both FF and nAch are related to evaluations of competence levels. Coaches, fans, parents and other athletes assess athletes’ competence levels often. Conroy and Coatsworth (2007) state that these factors may influence the way athletes perceive coaching behaviors. Understanding what it is that athletes fear about failure or what they think they will gain from success is important in that it can increase understanding of responses to feedback (Metzler, 2007). High FF correlates with several negative outcomes (Conroy, 2001b). These outcomes include FF being a related to performance enhancing drug use, distress among athletes, and a reason for dropout in sport (Anshel, 1991; Gould, Horn, & Spreeman, 1983; Conroy, 2001b). All of these behaviors are detrimental to athletic performance and may affect an athlete psychologically as well as physiologically.

Coaching behaviors influence levels of FF over the course of a season (Conroy & Coatsworth, 2007). Specifically research has found links between perceived blame and FF in adolescent and young adult athletes and non-athletes (Conroy, 2003). Conroy and Coatsworth (2007) call for further investigations that manipulate coaches’ behavior and intervening variables that can help to draw causal inferences into these phenomena. While FF can change based on athletes perceptions of coaching behaviors throughout the season (Conroy & Coatsworth, 2007), there have been no studies found to date that have examined whether fear of failure moderates reactions to such behaviors. While drawing from a different line of questioning this study moved toward that direction as it is
utilizing a specific coaching behavior and is investigating moderating variables, which
may moderate such reactions. Thus, this research examined if it is possible that
differences in FF will affect the way athletes react to coaches on an interpersonal level.
Individuals high in nAch actually seek out challenging situations in which they may show
their competence and gain success. Unlike the research regarding FF there are not nearly
as many studies examining nAch in sport (Metzler, 2007).

Research has found that self-talk and FF are as measured by the SASB model’s
intrapsychic scores (Conroy & Metzler, 2004). This research found that self-talk scores
when prompted for failure strongly predicted FF scores, $R^2 = .38$ feared self-talk scores,
and self-talk while succeeding scores both moderately predicted scores, $R^2 = .14$ and $R^2 = .09$ respectively, scores for how participants wished they treated themselves only weakly
predicted scores, $R^2 = .05$ (Conroy & Metzler, 2004). Those high in FF also showed high
levels of self-blame, self-attack, and self-neglect while in the failing condition.

**Self-Esteem**

The Rosenberg Self-Esteem Scale (SES) has been shown to be related to the
Revised NEO Personality Inventory (NEO-PI-R; Aluja, Rolland, Garcia, & Rossier,
found relationships, when they found the French version of the SES to be strongly related
to Neuroticism, moderately related to Extroversion and Conscientiousness, and weakly
related to Openness and Agreeableness. The factors which have already been evaluated
are trait factors and do not look into situational variables. While an athlete may tend to
react in a given manner based on their NEO-5 profile, they may react differently than
expected in certain situations. Self-esteem may act as a buffer from negative reactions
associated with hostile-controlling coaching behaviors. Individuals high in self-esteem may perceive themselves to have more control over their lives (Kerr & Goss, 1997). This perceived control may act to lessen the effect of controlling behavior from coaches. Similarly, Brown and Dutton (1995) found that individuals with high self-esteem tend to disregard negative events and maintain positive psychological states. Athletes with higher levels of self-esteem may be better able to recover from the negative effects of hostile-controlling coaching behaviors than those with lower self-esteem. Individuals high in self-regard may therefore act towards themselves in a more friendly-autonomy supporting way than those with lower self-regard.

It should be noted that there may in fact be shared variance between self-esteem and need for achievement. Those high in need for achievement that are also high in self-esteem may exhibit similar patterns of perceiving behavior, as both traits would seem to predispose an individual to continue motivation. While it would appear at the surface that need for achievement and self-esteem are very similar concepts, nAch focuses on self-evaluations that result specifically to competence strivings. Metzler (2007) postulated that individuals may be high in nAch regardless of their level of self-esteem. Thus while there may be shared variance between the two constructs they are likely tapping into two separate characteristics of the individual.

**Priming**

Priming is a continuous process that influences behaviors, judgments and perceptions (Fahmy & Wanta, 2005). Over the last 50 years researchers have studied how to priming. Priming been utilized for decades to manipulate antecedent events and/or social cognitions. This research has shown a variety of priming effects. Recently
researchers have begun to explore whether priming effects are controllable, and how the same prime can have multiple effects (Bargh, 2006). While much of the priming research uses language or objects, there has been little research found using video priming as a method for influencing social and emotional reactions. One study that does examine the utility of video priming examined it in hopes to reduce disruptive behavior among children with autism (Schreibman, Whalen, & Stahmer, 2000). The results found in this study were positive for the effects of video priming’s utility. While this research is undoubtedly in a different area, the authors suggest that the use of video priming may be more beneficial to those who rely on more visual-spatial stimuli. The use of a video prime that also has audio feature may increase the effect as the prime contains both audio and visual stimuli.

Summary

The current study hopes to aid athletes and coaches in their decisions to work together based on athlete factors which may moderate athlete reactions to certain coaching behaviors. As athletes have the ability to witness coaching behaviors before making their decision to sign on to work with a coach for 4 or more years, an investigation such as the current one could give the athlete more power to determine whether characteristics of their own personality would work in their favor when working with certain coaches. While this study is not exhaustive it will begin a body of research into the area which when fully explored may lead to better coach-athlete interactions. Another benefit of the study is that coaches may be able to choose the athletes they want on their teams based on characteristics within the athlete.
EXTENDED LITERATURE REVIEW REFERENCES


APPENDIX C

INSTRUMENTATION
Demographics Questionnaire

Please indicate your:

SEX:

    MALE
    FEMALE

AGE: _____

REDSHIRT: YES NO

ATHLETIC STATUS:

    FRESHMAN
    SOPHOMORE
    JUNIOR
    SENIOR
    5\textsuperscript{th} YEAR SENIOR
    GRADUATE STUDENT-ATHLETE

DIVISION:

    DIVISION I
    DIVISION II

SPORT: ____________________
Sport Climate Questionnaire

This questionnaire contains items that are related to your experience with your coach (trainer). Coaches have different styles in dealing with athletes, and we would like to know more about how you have felt about your encounters with your coach. Your responses are confidential. Please be honest and candid.

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree | neutral | Strongly Agree |

A1. I feel that my coach provides me choices and options.

A2. I feel understood by my coach.

A3. I am able to be open with my coach while engaged in athletics.

A4. My coach conveyed confidence in my ability to do well at athletics.

A5. I feel that my coach accepts me.

A6. My coach made sure I really understood the goals of my athletic involvement and what I need to do.

A7. My coach encouraged me to ask questions.

A8. I feel a lot of trust in my coach.

A9. My coach answers my questions fully and carefully.

A10. My coach listens to how I would like to do things.

A11. My coach handles people's emotions very well.

A12. I feel that my coach cares about me as a person.

A13. I don't feel very good about the way my coach talks to me.

A14. My coach tries to understand how I see things before suggesting a new way to do things.
A15. I feel able to share my feelings with my coach.

Scoring:

After reverse scoring question 13 average all scores.
Performance Failure Appraisal Inventory

Response Scale

<table>
<thead>
<tr>
<th>-2</th>
<th>0</th>
<th>+1</th>
<th>+2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Believe 0% of the time</td>
<td>Believe 50% of the Time</td>
<td>Believe 100% of the Time</td>
<td></td>
</tr>
</tbody>
</table>

B1. When I am failing, it is often because I am not smart enough to perform successfully.
B2. When I am failing, my future seems uncertain.
B3. When I am failing, it upsets important others.
B4. When I am failing, I blame my lack of talent.
B5. When I am failing, I believe that my future plans will change.
B6. When I am failing, I expect to be criticized by important others.
B7. When I am failing, I am afraid that I might not have enough talent.
B8. When I am failing, it upsets my “plan” for the future.
B9. When I am failing, I lose the trust of people who are important to me.
B10. When I am not succeeding, I am less valuable than when I succeed.
B11. When I am not succeeding, people are less interested in me.
B12. When I am failing, I am worried about it affecting my future plans.
B13. When I am not succeeding, people seem to want to help me less.
B14. When I am failing, important others are not happy.
B15. When I am not succeeding, I get down on myself easily.
B16. When I am failing, I hate the fact that I am not in control of the outcome.
B17. When I am not succeeding, people tend to leave me alone.
B18. When I am failing, it is embarrassing if others are there to see it.
B19. When I am failing, important others are disappointed.
B20. When I am failing, I believe that everyone knows I am failing.
B21. When I am not succeeding, some people are not interested in me anymore.
B22. When I am failing, I believe that my doubters feel they were right about me.
B23. When I am not succeeding, my value decreases for some people.
B24. When I am failing, I worry about what others think about me.
B25. When I am failing, I worry that others may think I am not trying.

Scoring:
Fear of Experiencing Shame & Embarrassment (FSE)

\[ \frac{10 + 15 + 18 + 20 + 22 + 24 + 25}{7} = \_\_\_ \]

Item # 10 15 18 20 22 24 25

Fear of Devaluing One’s Self-Estimate (FDSE)

\[ \frac{1 + 4 + 7 + 16}{4} = \_\_\_ \]

Item # 1 4 7 16
Fear of Having an Uncertain Future (FUF)
\[(\_ + \_ + \_ + \_) = \_ / \_ = \_\]
Item #  2  5  8  12

Fear of Important Others Losing Interest (FIOLI)
\[(\_ + \_ + \_ + \_ + \_) = \_ / \_ = \_\]
Item # 11  13  17  21  23

Fear of Upsetting Important Others (FUIO)
\[(\_ + \_ + \_ + \_ + \_) = \_ / \_ = \_\]
Item # 3  6  9  14  19

General Fear of Failure
\[(\_ + \_ + \_ + \_ + \_) = \_ / \_ = \_\]
Scale  FSE  FDSE  FUF  FIOLI  FUIO
Intrapersonal Pride

D1. When I am challenged to demonstrate my ability, I am very pleased with the opportunity to increase my view of myself.

D2. When I am presented with achieving something new, I am excited by the chance to enhance my opinion of myself.

D3. When I am asked to display my ability, I am excited with the opportunity to think more highly of myself.

D4. When my talent is about to be evaluated, I feel good knowing I have the opportunity to add to my self-worth.

D5. When I am asked to display my talent, I am enthusiastic about the possibility of increasing my opinion of myself.

Scoring:

Average the scores from each item to gain scale score.
Rosenberg Self-Esteem Scale

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

C1. I feel that I am a person of worth, at least on an equal plane with others.
C2. I feel that I have a number of good qualities.
C3. All in all, I am inclined to feel that I am a failure.
C4. I am able to do things as well as most people.
C5. I feel I do not have much to be proud of.
C6. I take a positive attitude toward myself.
C7. On the whole, I am satisfied with myself.
C8. I wish I could have more respect for myself.
C9. I certainly feel useless at times.
C10. At times I think I am no good at all.

Scoring:

Items 3, 5, 8, 9, and 10 are reverse scored (0=3, 1=2, 2=1, 3=0). Items 1, 2, 4, 6, and 7 are scored directly. After adjusting for reverse scoring, add scores to get measure score.
SASB

Think about the coach you just witnessed. Rate on a scale from 0 (Never, Not at all) to 100 (Always/Perfectly) how each statement describes how you would REACT AS AN ATHLETE IN THE SITUATION YOU JUST WATCHED.

<table>
<thead>
<tr>
<th>Rating Scale</th>
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<tbody>
<tr>
<td>Never Not at All</td>
</tr>
</tbody>
</table>

____ E1. I let her/him speak freely, and warmly tried to understand her/him even if we disagreed.
____ E2. I walled myself off from her/him and didn’t react much.
____ E3. I put her/him down, blamed her/him, punished her/him.
____ E4. Without giving it much thought, I uncaringly ignored, neglected, abandoned her/him.
____ E5. I learned from her/him, relied upon her/him, accepted what s/he offered.
____ E6. I happily, gently, very lovingly approached her/him, and warmly invited her/him to be as close as s/he liked.
____ E7. With much sulking and fuming, I scurried to do what s/he wanted.
____ E8. I clearly and comfortably expressed my own thoughts and feelings to her/him.
____ E9. To keep things in good order, I took charge of everything and made her/him follow my rules.
____ E10. I thought, did, became whatever s/he wanted.
____ E11. I knew my own mind and “did my own thing” separately from her/him.
____ E13. With much kindness, I taught, protected, and took care of her/him.
____ E14. Without much worry, I left her/him free to do and be whatever s/he wanted.
____ E15. I relaxed, freely played, and enjoyed being with her/him as often as possible.
____ E16. With much fear and hate, I tried to hide from or get away from her/him.
____ E17. I liked her/him and tried to see her/his point of view even if we disagreed.
____ E18. I was closed off from her/him and mostly stayed alone in my own world.
E19. I told her/him her/his ways were wrong and s/he deserved to be punished.
E20. Without giving it a thought, I carelessly forgot her/him, left her/him out of important things.
E21. I trustingly depended on her/him, willingly took in what s/he offered.
E22. With much love and caring, I tenderly approached if s/he seemed to want it.
E23. I bitterly, resentfully gave in, and hurried to do what s/he wanted.
E24. I peacefully and plainly stated my own thoughts and feelings to her/him.
E25. To make sure things turned out right, I told her/him exactly what to do and how to do it.
E26. I deferred to her/him and conformed to her/his wishes.
E27. I had a clear sense of what I thought, and chose my own separate ways.
E28. Without caring what happened to her/him, I murderously attacked her/him in the worst way possible.
E29. In a very loving way, I helped, guided, showed her/him how to do things.
E30. Without much concern, I gave her/him the freedom to do things on her/his own.
E31. I was joyful and comfortable, altogether delighted to be with her/him.
E32. Filled with disgust and fear, I tried to disappear, to break loose from her/him.
Think about the situation you just watched. Rate on a scale from 0 (Never, Not at all) to 100 (Always/Perfectly) how each statement describes how you would TREAT YOURSELF AFTER INTERACTING WITH THIS COACH.

<table>
<thead>
<tr>
<th>Rating Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Never</strong></td>
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<td></td>
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</tbody>
</table>

___ F1. Without concern or thought, I let myself do and be whatever I feel like.

___ F2. Without considering what might happen, I hatefully reject and destroy myself.

___ F3. I tenderly, lovingly cherish myself.

___ F4. I put energy into providing for, looking after, developing myself.

___ F5. I punish myself by blaming myself and putting myself down.

___ F6. Aware of my personal shortcomings as well as my good points, I comfortably let myself be “as is.”

___ F7. I am recklessly neglectful of myself, sometimes completely “spacing out.”

___ F8. To make sure I do things right, I tightly control and watch over myself.

___ F9. I let myself do whatever I feel like and don’t worry about tomorrow.

___ F10. Without thought about what might happen, I recklessly attack myself and angrily reject myself.

___ F11. I very tenderly and lovingly appreciate and value myself.

___ F12. I take good care of myself and work hard on making the most of myself.

___ F13. I accuse and blame myself for being wrong or inferior.

___ F14. With awareness of weaknesses as well as strengths, I like and accept myself “as is.”

___ F15. I carelessly let go of myself, and often get lost in an unrealistic dream world.

___ F16. To become perfect, I force myself to do things correctly.
APPENDIX D

WEBSITE MATERIALS
Hi,

My name is Erin Bullett and I am a Master's student in Sport Psychology at the Georgia Southern University. I am currently working on my thesis and I am examining individual differences as moderators to athletes reactions to coaching behaviors. You are receiving this email because you have contact with collegiate athletes and may be willing to help me. To complete this project I need as many student-athletes as possible to complete a short, 15-20-minute web-based survey. I would really appreciate it if you could help me out by sending a short email and the link to the online survey to the student-athletes enrolled in your school. IRB approval has been gained from Georgia Southern University. A copy of the IRB approval is attached to this email.

If you are willing to help me, please delete this portion of the email (through "SUBJECT LINE: Complete this survey..."), change the subject of the email line (the new subject line is included below), and send this email to your student-athletes. Student email addresses are not collected as part of the study. If the student-athlete has in depth questions about their results and you do not feel comfortable answering the questions please instruct them contact the principle researcher at (erin_s_bullett@georgiasouthern.edu) or Dr. Jon Metzler (jmetzler@georgiasouthern.edu). Thank you in advance for your assistance. I really appreciate any help you can give me. Please let me know if you have any questions.

Sincerely,

Erin Bullett

Erin Bullett
Associate Director
Southern Performance Clinic
Georgia Southern University
912-478-1994

SUBJECT LINE: Complete a short survey research survey!

Hi,

My name is Erin Bullett and I am a graduate student in sport psychology at the Georgia Southern University. I want to learn more about how athletes react to different coaching behaviors.

There are a few surveys that I would like you to fill out online as well as a video clip that I would like you to watch.

Any information you provide will be completely anonymous and your email address will not be linked to anything. This is completely voluntary and you may stop at any time. Also if you choose to participate you are giving your consent that you did so voluntarily.

If you are interested please click the link below. The password for your school is 021585

http://www.surveymonkey.com/s.aspx?sm=waq6tpHssqGRs7LnlE6XZq_3d_3d

If you have any questions feel free to email me at erin_s_bullett@georgiasouthern.edu

Sincerely,

Erin

Erin Bullett
Associate Director
Southern Performance Clinic
Georgia Southern University
912-478-1994
Title of Project: Individual Difference Moderators of Interpersonal Reactions to Coaching Behaviors

Principal Investigator: Erin S. Bullett, B.A., Kinesiology Master’s Student, Department of Health & Kinesiology, 1022 Woodland Dr., Statesboro, GA 30458, (607) 738-3644, erin_s_bullett@georgiasouthern.edu.

1. Purpose of the Study: The purpose of the current research is to examine how individual differences moderate athletes’ responses to certain coaching behaviors.

2. Procedures to be followed: You will be asked to fill out 110 questions from several surveys and watch a short video clip.

3. Discomforts and Risks: There is minimal risk for physical or emotional harm due to participation. You may experience some minor embarrassment or discomfort while watching the video or completing the questionnaires. Some people may find the language used in the video clip offensive. There are no other known risks.

4. Benefits: You may benefit by learning more about your achievement motives and self-esteem from participation in this study. This research may benefit the athletic community as coaches and athletes may be better able to predict how athletes will react to certain coaching behaviors. With further research, athletes may be better able to choose a coach whose style fits with their characteristics.

5. Duration: Participating in this study should take no more than 25 minutes.

6. Statement of Confidentiality: Only the person in charge, her thesis advisor, will have access to any identifying information. If this research is published, no information that would identify you will be written.

7. Right to Ask Questions: You can ask questions about the research. The person in charge will answer your questions. Contact Erin S. Bullett at (607) 738-3644 with questions. If you have questions about your rights as a research participant, contact the Office of Research.
Services and Sponsored Programs by email at oversight@georgiasouthern.edu or phone at (912) 681-7758.

8. **Compensation:** There is no compensation for participation in this study.

9. **Voluntary Participation:** You are not required to participate in this study. You also are not required to finish any questions that you may find uncomfortable.

10. **Penalty:** There is no penalty for deciding not to participate in this study. You may decide at any time you don’t want to participate further and may simply not fill out the remaining questionnaires.

11. You must be 18 years of age or older to consent to participate in this research study. Completion and return of the questionnaire materials implies that you have read the information in this form and consent to participate in the research.

**Please keep this form for your records or future reference.**

By checking this box I am agreeing to participate in this study. I have read and understand the informed consent above and know that I can withdraw from the study at any point without penalty (link to next page).
APPENDIX E
IRB DOCUMENTATION
For electronic submission: Your proposal narrative should already be completed and saved. Next complete cover page and “Save As” a word document to your computer or disk named “Coverpage_Year_Month_Date_lastname, First initial.doc”. Then open and complete Informed Consent Checklist.

Application for Research Approval

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</thead>
<tbody>
<tr>
<td>Name of Principal Investigator:</td>
<td>Protocol ID:</td>
</tr>
<tr>
<td>Erin S. Bullett</td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td>Date Received:</td>
</tr>
<tr>
<td><a href="mailto:Erin_s_bullett@georgiasouthern.edu">Erin_s_bullett@georgiasouthern.edu</a></td>
<td></td>
</tr>
<tr>
<td>Phone: 607-738-3644</td>
<td></td>
</tr>
<tr>
<td>Address: 1022 Woodland Dr. Statesboro, GA 30458</td>
<td></td>
</tr>
<tr>
<td>Department: Health and Kinesiology</td>
<td></td>
</tr>
<tr>
<td>Name(s) of Co-Investigators:</td>
<td></td>
</tr>
<tr>
<td>Title of Co-Investigator(s):</td>
<td></td>
</tr>
<tr>
<td>Personnel and/or Institutions Outside of Georgia Southern University involved in this research:</td>
<td>N/A</td>
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Project Information:

Title: Individual Difference Moderators of Interpersonal Reactions to Coaching Behaviors

Brief (less than 50 words) Project Summary: The aim of this research is to determine if achievement motives and self-esteem moderate athletes’ interpersonal reactions to hostile-controlling coaching behaviors. It will be web based and consist of several measures and a short video clip.

Compliance Information:

Please indicate which of the following will be used in your research:

- [x] Human Subjects (Complete Section A: Human Subjects below)
- [ ] Care and Use of Vertebrate Animals (Complete Section B: Care and Use of Vertebrate Animals below)
- [ ] Biohazards (Complete Section C: Biohazards below)

Section A: Human Subjects
Number of Subjects: 239  
Project Start Date: ASAP  
Project End Date: 04/09/2008 (no more than 1 year)

*Date of IRB education completion: 8/17/2006 (attach copy of completion certificate)

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<td>☑ Informed Consent Document</td>
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<tr>
<td>☐ Completion of a class project</td>
<td>☐ Greater than minimal risk</td>
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<tr>
<td>☐ Publication (journal, book, etc.)</td>
<td>☐ Research Involving Minors</td>
</tr>
<tr>
<td>☐ Poster/presentation to a scientific audience</td>
<td>☐ Deception</td>
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<tr>
<td>☐ Results will not be published</td>
<td>☑ Generalizable knowledge (results are intended to be published)</td>
</tr>
<tr>
<td>☐ Other</td>
<td>☑ Survey Research</td>
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Check one: ☑ Student  
☐ Faculty/Staff  
If student project please complete advisor’s information below:

<table>
<thead>
<tr>
<th>Advisor’s Name: Jonathan N. Metzler, Ph.D.</th>
<th>Advisor’s E-mail: <a href="mailto:jmetzler@GeorgiaSouthern.edu">jmetzler@GeorgiaSouthern.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor’s Phone: (912) 681-5378</td>
<td>Advisor’s Department: Health and Kinesiology</td>
</tr>
<tr>
<td></td>
<td>P.O. Box: 8076</td>
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</table>

Signature of Applicant: Date: X

Signature of Advisor (if student): Date: X

Section B: Care and Use of Vertebrate Animals

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<th>Purpose of use/care of animals:</th>
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<td>☐ Physical intervention with vertebrate animals</td>
</tr>
<tr>
<td>☐ Teaching</td>
<td>☐ Housing of vertebrate animals</td>
</tr>
<tr>
<td>☐ Exhibition</td>
<td>☐ Euthanasia of vertebrate animals</td>
</tr>
<tr>
<td>☐ Display</td>
<td>☐ Use of sedation, analgesia, or anesthesia</td>
</tr>
<tr>
<td></td>
<td>☐ Surgery</td>
</tr>
<tr>
<td></td>
<td>☐ Farm animals for biomedical research (e.g., diseases, organs, etc.)</td>
</tr>
<tr>
<td></td>
<td>☐ Farm animals for agricultural research (e.g., food/fiber production, etc.)</td>
</tr>
<tr>
<td></td>
<td>☐ Observation of vertebrate animals in their natural setting</td>
</tr>
</tbody>
</table>
Check one: □ Student □ Faculty/Staff  

*If student project please complete advisor’s information below:*

<table>
<thead>
<tr>
<th>Advisor’s Name:</th>
<th>Advisor’s E-mail:</th>
</tr>
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<tbody>
<tr>
<td>Advisor’s Phone:</td>
<td>Advisor’s Department:</td>
</tr>
<tr>
<td></td>
<td>P.O. Box:</td>
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Signature of Applicant: Date:

X

Signature of Advisor(if student)/Dept. Chair(if faculty): Date:

X

**Section C: Biohazards**

<table>
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<tr>
<th>Project Start Date:</th>
<th>Project End Date:</th>
<th>(no more than 3 years)</th>
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<td>□ Use of rDNA</td>
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<tr>
<td>□ BSL 2</td>
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Signature of Applicant (*Faculty ONLY*): Date:

X

Please submit this protocol electronically to the Georgia Southern University Compliance Office, c/o The Office of Research Services & Sponsored Programs, P.O. Box 8005. The application should contain all required documents specific to the committee to which you are applying. Questions or comments can be directed to (912)681-0843 or oversight@georgiasouthern.edu
Georgia Southern University Institutional Review Board

Proposal Narrative

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.

There will be no individuals involved in the research beyond the PI and advisor.
Principle Investigator: Erin S. Bullett, B.A.
    Master’s Student: Major-Kinesiology
    Concentration: Sport Psychology

Advisor: Jonathan N. Metzler, Ph.D.
    Assistant Professor
    College of Health and Human Sciences
    Department of Health and Kinesiology

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?

1. The current study is designed to investigate the role fear of failure, self-esteem, and need achievement plays in moderating individuals’ reactions to hostile/controlling coaching behaviors. By determining which personality characteristics affect interpersonal reactions, athletes will have more information available to them when choosing a future coach. Coaches may also benefit by knowing variations for treating individuals based on their known personality characteristics.

2. a) When faced with hostile-controlling coaching behaviors athletes high in fear of failure are expected to respond with greater levels of sulk and self-blame, and lower levels of disclosure and self-affirmation.
   b) When faced with hostile-controlling coaching behaviors athletes high in need for achievement are expected to respond with greater levels of disclosure and self-affirmation, and lower levels of sulk and self-blame.
   c) When faced with hostile-controlling coaching behaviors athletes high in self-esteem are expected to respond with greater levels of disclosure and self-affirmation, and lower levels of sulk and self-blame.

3. Research has shown that within interpersonal relationships behaviors tend to follow patterns based on the initial or enduring actions of the participating parties (Benjamin, 1996). Research has shown that hostile-controlling behaviors elicit
sulking and self-blame (see Benjamin, 1996). Athletes’ motivation, emotions and performance may be influenced by coaching behavior. Coaches can implement positive or negative practices in order to motivate their athletes (Weinberg & Gould, 2007). Brown and Dutton’s research found that individuals with low self-esteem tend to respond positively to positive events and negatively to negative events, and by contrast, those with high self-esteem tend to disregard negative events and maintain positive psychological states (as cited in Lane, Jones, & Stevens, 2002). While research has been conducted regarding reactions to failing, there has been no research found to date that investigates how personality moderates interpersonal and intrapsychic reactions to specific interpersonal behaviors. The personal factors impact reactions to different events in one’s life the current study hopes to illuminate some factors that influence reactions in the sporting world.

Outcome. Please state what results you expect to achieve? Who will benefit from this study? How will the participants benefit (if at all). Remember that the participants do not necessarily have to benefit directly. The results of your study may have broadly stated outcomes for a large number of people or society in general.

It is expected that the hypotheses will be supported by the current research and that self-esteem and need achievement will likely buffer against hostile-controlling behaviors eliciting hostile-controlling reactions from athletes. It is also expected that those high in fear of failure will be more likely to react with less adaptive behaviors when presented with hostile-controlling coaching behaviors. It is hoped that the results of this study will help to further develop coaching education modules. It is hoped that by recognizing individual differences in motives that coaches and athletes can implement individualized interpersonal behavior patterns based on the personality of the athlete. This may lead to more successful coach-athlete interactions and relationships.

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 will include 239 collegiate NCAA division I and division II athletes recruited from NCAA programs around the United States. Participants will be asked to identify sport as well as demographic data including age, and gender. Subject names will not be asked. School data will be kept for demographic purposes but will not be connected to any other identifying information. Recruiting will be done through athletic departments, CHAMPS Life Skills Coordinators, and the primary researcher’s direct and indirect personal connections with coaches. No incentive will be given to participants other than helping in a research project. As this population will include only athletes the results will only be generalizable to division I and division II athletes. This is the target population for this research and will limit the results to athletes at a high competitive level.
**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. 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.

There is minimal risk to the athletes greater than what would be encountered in an athletic setting. Hostile-Controlling behaviors while sounding negative are often used in athletic settings, the behavior that athletes will be witnessing should not cause any harm or risk to them. Participation in the study is also anonymous.

**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.

In order to collect a sample of participants from a geographically diverse area a web-based survey will be utilized. This will allow for standardized administration without the added confound of having multiple administrators and can reduce socially desirable answers (Reips, 2002). A webpage that gathers demographic data will follow the informed consent page. Participants will complete Intrex surface 2 which gathers information regarding how they react in general to their current coach. Then the PFAI, Rosenberg Self-esteem scale, and the Need Achievement Pride Scale will be completed. Following this, a 30 second web-based video of a coach displaying hostile-controlling coaching behaviors will be presented. Then the participants will be asked to fill out the Intrex surfaces 2 and 3.

**Special Conditions:**

**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.
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.
APPENDIX F

BIOGRAPHICAL SKETCH
Erin is originally from Elmira, NY. She began her collegiate career at the University of North Carolina at Chapel Hill and completed her undergraduate degree at Syracuse University. Erin spent 10 years competing at the Junior Olympic level in springboard diving. After an injury forced her to retire from the sport, she became interested in the psychological aspects of sport. Having long been interested in psychology and psychopathology, Erin chose to pursue her Masters degree in Sport Psychology at Georgia Southern University. She chose to complete this degree in order to gain a specialization in psychology early in her career. For the past year, Erin has served as one of the co-associate directors of the Southern Performance Clinic, the sport psychology laboratory at Georgia Southern University. While at Georgia Southern University, Erin has experience many opportunities that have influenced her consulting style. A little over a year ago, Erin was able to provide consulting services to individuals preparing for the NFL draft.

Erin plans to attend Saint Louis University in the fall of 2008 to pursue a Ph.D. in Clinical Psychology. Upon completion of this degree, Erin plans on going into private clinical practice or going to work in an inpatient setting.