Exploring Athlete Proneness to Shame when Partaking in Sport and its Relationship with Achievement Goal Perspective Theory:

Creating and Validating the Shame in Sport Questionnaire

By

Mario Sean Fontana

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Chairperson Dr. Mary Fry
Dr. Meagan Patterson
Dr. Emily Cramer
Dr. Theresa Brown
Dr. Andy Fry
Dr. Joseph Weir

Date Defended: April 24, 2015

T	he Disserta	tion Commit	tee for Mario	Sean Font	tana
certifies th	at this is th	e approved v	ersion of the	following	dissertation:

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Chairperson Dr. Mary Fry

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Abstract

Understanding shame and its effects on the human psyche has been critical to understanding how crippling it can be to long-term health (Tangney & Dearing, 2002). However, research exploring shame in sport has been limited, particularly as it pertains to why athletes may experience shame when participating. Research is needed to better understand the various reasons why athletes may experience shame when partaking in sport. The first study created and validated the Shame in Sport Questionnaire (SSQ). The SSQ was vetted and validated via exploratory and confirmatory factor analysis in a sample of 216 high school wrestlers. A two-factor shame model featuring process shame (experiencing shame based on failing to give high effort or be appropriately prepared) and process shame (experiencing shame based on losing or failing to preform well) was confirmed. The scale was further validated using Nicholls' (1989) Achievement Goal Perspective Theory (AGPT). It was discovered that task-oriented athletes were more likely to experience process shame and less likely to experience result shame. Conversely, it was found that ego-oriented athletes were more likely to experience result shame and less likely to experience process shame. These results further emphasize research that suggests being high in task-orientation is more beneficial than being high in ego-orientation (Roberts & Treasure, 2012). The second study further explored and validated the SSQ with a population of 259 high school track and field athletes. The population was surveyed on their perceptions of the motivational climate (Nicholls, 1989; Newton et al., 2007) and how they relate to process and result shame. The results revealed that athletes perceiving a caring and task-involving motivational climate were more likely to experience process shame and less likely to experience result shame. Additionally, athletes perceiving a perceived ego-involving motivational climate were more likely to experience result shame and less likely to experience process shame. These data suggest that athletes partaking in sport in an environment where they are valued and where effort and improvement are emphasized would limit proneness to shame, while a sport environment that focuses on winning and normative comparison would enhance proneness to shame.

Keywords: goal orientation, shame, motivational climate, caring climate

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Creating and Validating the Shame in Sport Questionnaire

Mario S. Fontana

University of Kansas

Abstract

The purpose of this study was to create and validate the Shame in Sport Questionnaire (SSQ) and examine the relationship between goal orientations and shame in sport. High school wrestlers (N=216) were given a questionnaire after a practice during the season that included measures of goal orientations (Duda & Nicholls, 1992) and proneness to shame (SSQ). The SSQ included two scales, result and process shame. Exploratory and confirmatory factor analyses were conducted to examine the factor structure of the measure, and structural equation modeling was employed to consider the effect of task and ego orientation, respectively, on process and outcome shame. The SSQ was shown to be a valid instrument for measurement. Additionally, SEM analyses revealed that individuals reporting high task-orientation were more likely to experience process shame and less likely to experience result shame, while individuals reporting high ego-orientation were more likely to experience result shame and also likely to experience process shame. Athletes do experience shame in sport, for reasons related to their process preparation (i.e., effort and improvement) and outcomes (losing; performance outcomes). High task orientation appears to help athletes limit the shame they may experience from factors such as losing and performance outcomes for which they have little control.

Keywords: goal orientations, shame, high school, wrestlers

Creating and Validating the Shame in Sport Questionnaire

Despite the benefits of participating in sports, young athletes do not always have positive experiences. According to Coakley (2004), young people who choose to stop participating in sport sometimes do so because of negative experiences they have had with athletes and coaches. Research suggests that lack of enjoyment is a primary reason for athletes to stop playing sport (Butcher, Lindner & Johns, 2002; Gould, 1987). Experiences leading to low enjoyment may include overtraining, not having friends on the team, not feeling a sense of autonomy and relatedness, disliking of the coach, not having fun, and sensing parental pressure (Fraser-Thomas, Côté & Deakin, 2008; Wall & Côté, 2007; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002; Molinero, Salguero, Tuero, Alvarez, & Marquez, 2006; Salguero, Gonzalez-Boto, Tuero, & Marquez, 2003; Boiché & Sarrazin, 2009). All of these experiences are examples of what can happen when athletes are in a negative sports environment.

While there is evidence that negative environments can lead to a higher likelihood of athlete dropout (Sarrazin et al., 2002) less work has been done exploring what athletes are feeling internally, and specifically how negative sport experiences may have an impact on self-conscious emotions such as shame. Shame is a critical emotion to understand because it can cause people to be more resentful, angry, hostile, and less empathetic (Tangney & Dearing, 2002). To date, research on shame in sport is limited, and the measures used in sport to assess shame assume that the emotion results after a poor performance outcome. The purpose of this study was to develop a shame in sport measure for adolescent athletes to assess the reasons (e.g., performed poorly, didn't give full effort) and extent that adolescent athletes experience shame when participating in

sport.

The most prominent work on shame in sport is Conroy's (2001; 2003) development of and work with the Performance Failure Appraisal Inventory (PFAI), which measures the degree that athletes fear having a poor performance when playing sport. One of the PFAI's subscales is The Fear of Experiencing Shame and Embarrassment Subscale, which assesses the extent that athletes feel shame or embarrassment when they are performing poorly in sport. Specifically, Conroy (2001) states that items dealing with shame on the PFAI involve "personal diminishment" and "embarrassing self-presentational failure." He states that measuring fear of failure should "assess how strongly individuals believe or anticipate that certain aversive consequences" will occur when they perceive that they are failing (p. 433)." The Fear of Experiencing Shame and Embarrassment subscale often has the highest mean scores of the four subscales of the PFAI (Conroy, Kaye, & Fifer, 2007; Sagar & Stoeber, 2009). The subscales' items include "When I am failing, I worry about what others think of me," and "When I am not succeeding, I am less valuable then when I succeed." There is ambiguity in the measure as it is unclear how athletes are defining failure and success, and individuals can have very different views of these constructs (Nicholls, 1989).

Researchers have used the PFAI to explore the relationship between Fear of Failure and other constructs relevant to sport. Conroy and Elliot (2004), for example, reported that athletes who feared shame and embarrassment were more likely to have avoidance goals (i.e., goals involving not doing worse than a previous norm or avoiding demonstrating low ability in public view). Other researchers have linked Fear of Failure to perfectionism. Athletes who have perfectionistic tendencies, whether those tendencies

are aimed at fulfilling the self or meeting the perceived expectations of others around them, tend to also report having a higher fear of shame and embarrassment (Conroy, et al., 2007; Sagar & Stoeber, 2009). However, few studies have specifically examined why athletes may be experiencing shame. The Fear of Experiencing Shame and Embarrassment Subscale items are limited in that the items only consider that an athlete may experience shame or embarrassment when not performing up to expectations (i.e., their own or others) in the sport, but the items do not differentiate the emotions and do not allow researchers to identify the causes of shame. Additionally, Tangney, Miller, Flicker, & Barlow (1996) suggest that shame and embarrassment are distinct emotions that have very different effects on the human psyche. Understanding Tangney's work on shame is critical to properly measuring it among athletes.

According to Tangney & Dearing (2002), people can confuse shame with other self-conscious emotions such as guilt and embarrassment (Tangney et al., 1996).

However, shame is a distinct self-conscious emotion, and defining shame using Lewis's (1971) theoretical framework on shame and guilt, Tangney et al. (1996) wrote the following:

"In Shame, an objectionable behavior is seen as reflecting, more generally, a defective, objectionable self ('*I* did that horrible thing, and therefore *I* am an unworthy, incompetent or [a] bad person'). With this painful self-scrutiny comes a sense of shrinking or of "being small" and feelings of worthlessness and powerlessness...Finally, shame often leads to a desire to escape or to hide—to sink into the floor and disappear."

Understanding how athletes process shame is important because it is likely that athletes prone to shame could also be prone to experiencing other negative consequences that may be unforeseen by coaches but which could negatively impact athletes' sport experience. Interestingly, the causes of shame may vary widely across athletes. For example, one athlete that makes a critical mistake in a game may feel shame while

another may feel guilt. Tangney et al. (1996) defines guilt as an experience that is "generally less painful and devastating than shame because [it] does not directly affect one's core self-concept." People experiencing guilt tend to feel bad about specific wrongdoings and wish to repair the damage done, rather than feel the urge to shrink away (see Figure 4).

In an effort to measure how to identify whether individuals are prone to shame or guilt, Tangney and Dearing (2002) created the Test of Self-Conscious Affect (TOSCA), that includes scenarios (e.g., waiting until the last minute to plan a project) that have participants put themselves in real-life scenarios and answer questions that indicate their tendency to feel shame versus guilt. After a decade of research administering the TOSCA to children, adolescents, and adults, the researchers found that no single scenario definitively leads individuals to feel shame or guilt. In fact, while the shame and guilt proneness of individuals may possibly be influenced by parents or loved ones, the only way to predict whether or not individuals will be shame prone in the future is to know whether or not they were previously shame or guilt prone. This information suggests that shame prone athletes who put a high emphasis on successful performance are very likely to experience shame when playing sport. While the TOSCA is helpful in measuring the extent to which individuals experience shame, work has not been conducted in sport to examine specific causes of shame.

Nicholls' (1989) Achievement Goal Perspective Theory (AGPT) provides a critical framework for understanding athletes' motivation and experiences in sport, including those that are shame inducing. According to Nicholls (1984; 1989), individuals acquire goal orientations whereby they feel successful when they are working toward

mastery of skills and giving maximum effort (high task orientation), or when they have higher ability than others, win, and demonstrate higher normative performance in comparison to other competitors (high ego orientation; Duda & Nicholls, 1992; Duda, Chi, Newton & Walling, 1995; Duda & Nicholls, 1992; Nicholls, 1989). Goal orientations are orthogonal, so athletes can be high and/or low in both goal orientations (Nicholls, 1989; Pensgaard & Roberts, 2000; Roberts & Treasure, 2012).

While goal orientation combinations vary across individuals, Nicholls (1989) suggested that there are drawbacks to being predominately ego-oriented. He predicted that individuals higher in ego orientation and lower in task orientation would persist less when the challenge of a task increased or when they did not perceive that their skill levels were normatively higher than others in a group. Research has supported that those higher in task orientation are more likely to persist and adapt, while those higher in ego orientation are more likely to have lower perceived competence and perceptions of success (Van Yperen & Duda, 1999; Roberts & Treasure, 2012). It may be that athletes with a high ego orientation who judge their success based on uncontrollable criteria (i.e., normative ability and performance outcomes) may be more likely to experience shame than those who gauge their success on factors that are within their volition such as a high work ethic. However, to date there has been little research exploring the relationship between goal orientations to shame.

Just as athletes may adopt different goal orientations (task or ego), they also may be experiencing shame for different reasons. In fact, athletes may experience different types of shame based on their goal orientations. For example, highly task-oriented athletes could experience shame because they perceive that their effort levels were not

high enough or they are not displaying adequate improvement. Additionally, highly egooriented athletes could experience shame because they feel like they are not performing
up to their coaches' or teammates' expectations. Thus, there is a need to explore whether
two types of shame exist: (a) Process Shame may occur when athletes have not met the
perceived process expectations of their teammates and coaches (e.g., given high effort,
worked to improve skills) and as a result they experience reduced self worth, (b) Result
Shame may occur when athletes have not met the perceived performance outcome
expectations of their teammates and coaches (e.g., performed at a high level in the game,
led a team to victory, made key plays, won,) and as a result they experience reduced self
worth. While the end effects of experiencing shame are usually the same (e.g. feeling
small, experiencing lowered self-worth), it is critical to investigate whether or not athletes
experience shame for varying reasons.

The purpose of this study was two-fold: (a) to develop a sport specific shame measure for use with adolescent athletes that assesses process and result shame; (b) to consider the extent that adolescent athletes' goal orientations are related to their levels of process and result shame. It was hypothesized that the Shame in Sport Questionnaire (SSQ) would create a two-factor model featuring result and process shame. Further, it was hypothesized that task orientation would account for a positive relationship with process shame and negative relationship with result shame. Finally, it was hypothesized that ego orientation would account for a positive relationship with result shame and a negative relationship with process shame. This research contributes to the literature in sport psychology with regard to understanding the complexity of experiencing shame in sport and examining goal orientation's are related to how individuals process shame.

Method

Participants

The participants in this study were high school wrestlers in the Midwest, (N = 216, 212 males, M = 15.9 years). The athlete sample was comprised of 119 varsity wrestlers, 90 junior varsity wrestlers, four freshman team wrestlers, and three wrestlers who chose not to report their competitive level. Athletes reported their race/ethnicity as Caucasian (71.3%), African American (11.1%), Hispanic/Latino (8.3%), and Native American, Asian/Pacific Islander, or other (9.5%).

Permission to conduct the study was obtained from the Institutional Review Board, the athletes, and their coaches. Athletes provided their assent to participate in the study.

Procedure

Surveys were administered to the athletes before a team practice, and coaches were not present. Participation in the study was entirely voluntary and the players were informed that their responses were anonymous and confidential.

Measures

Task and Ego in Sport Questionnaire (TEOSQ). The TEOSQ (Duda and Nicholls, 1992) assessed athletes' task- and ego goal orientation (13 items). The measure employs a 5-point Likert response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The stem for each item states, "I feel most successful in wrestling when..." and sample items include, "I am the best" (ego), and "I learn a new skill" (task). The TEOSQ has demonstrated internal reliability for both task and ego orientations ($\alpha = .79$ and .81, respectively; Duda & Whitehead, 1998)

Shame in Sport Questionnaire (SSQ). The SSQ was developed for this study and is comprised of two scales, one measuring Process Shame and the other measuring Result Shame. Specifically, the SSO explores whether athletes experience shame because of the progression leading up to and through games played and/or because of the outcome(s) involved with their participation. Based on Nicholls' (1989) AGPT framework and Tangney and Dearing's (2002) conceptual framework of understanding shame and its difference from guilt, over 20 items were created by the authors in an effort to distinguish between the two hypothetical forms of shame. A panel of sport and exercise psychology faculty and graduate students debated and discussed how each of the items fit with the conceptual frameworks that they were based on and each item's quality and clarity. Because guilt and embarrassment are sometimes confused with shame (Eisenberg, 2000; Silfver, Helkama, Lonnqvist, & Verkasalo, 2008; Tangey et al., 1996; Tangney & Dearing, 2002) a panel of researchers convened prior to administering the survey to assure that all of the questions focus solely on situations where the athletes are feeling shame (e.g., feel as if they have violated cultural standards, are experiencing diminished self worth, feel as if they have let important others down) and not necessarily situations where they simply feel as if they've made a mistake that they want to correct (i.e., felt guilt) or did something which made them feel awkward in front of a group (i.e., felt embarrassment).

Several of the original items were dropped or re-worded based on the recommendation of the panel while additional items were created based on the discussion. After re-working the questionnaire, the researchers met again to create a finalized version of the scale. Additionally, a tentative decision was made to make all

never violated the basic tenets of process shame (work ethic and preparation). There may be athletes who truly don't believe that they have ever failed to give maximum effort or preparation. As such, it seems unlikely that those athletes could definitively answer the process shame items. The final SSQ had 18 items exploring whether an athlete is experiencing shame due to substandard preparation (e.g., not practicing hard enough, not giving maximum effort, not working to improve) or because of poor outcomes during play (e.g., making mistakes on the field, not performing up to expectations of themselves or others). Athletes respond to the measure using a 5-point Likert scale ranging from 1 (very unlikely to feel shame) to 5 (extremely likely to feel shame).

Results

Means, standard deviations, and descriptive information were calculated for each of the scales via SPSS 22 (see Table 1). Factor analyses and correlation matrices were calculated in Mplus 7.0. An exploratory factor analysis (EFA) was conducted with a randomly selected half of the sample on the SSQ in order to determine which items best account for the variance in the hypothesized process and result shame constructs.

The EFA was employed in order to verify the proposed two-factor model of process and result shame. The analysis explored different models ranging from one to six factors, while a scree plot was employed to identify the optimal number of factors to best account for statistical variance (see Figure 1). The scree plot indicated that a two- or three-factor model would be sufficient in exploring the proposed construct. Additionally, using 1.0 as the cutoff, eigenvalues revealed that a two- or three-factor model would be most appropriate for the items. Further analysis revealed the two-factor model as a more

logical fit. The two-factor model revealed each of the nine items to be significant in their respective factors (result and process shame; see Table 2). The two-factor model had a comparative fit index (CFI; Hu & Bentler, 1998) of .93, Tucker-Lewis Index (TFI; Tucker & Lewis, 1973) of .91, root mean square error of approximation (RMSEA; Steiger & Lind, 1980) of .06, and standardized root mean square residual (SRMR; Hu & Bentler, 1998) of .05. These values all represent acceptable model fit. The three-factor model represented better model fit, but the additional factor only had two significant rotated loadings, and lacked theoretical support when compared to the result and process shame factors, and thus the decision was made to accept the two-factor model.

After the EFA revealed a plausible two-factor model of the SSQ, the second half of the sample was used for a confirmatory factor analysis (CFA) of the measure. The purpose of the CFA was to examine the validity of process and result shame scales using the items from the EFA (see Table 2) that best accounted for the variance. After exploring the factor loadings from the EFA, a CFA was conducted with the top 12 items. Modification indices revealed that several items were either sharing residual variance or cross loading on the opposite factor. Because the 12-item model was over-identified, the decision was made to reduce the model to 10 items. The final CFA featured items 3, 4, 6, 7, and 8 for the result shame factor and items 2, 5, 7, 8, and 9 for the process shame factor. The CFA had a RMSEA and SRMR of .07. Hu and Bentler (1998) state that values lower than .08 represent acceptable model fit. The RMSEA tends to be more stringent when power is low, making an acceptable model fit with a 108-person sample particularly meaningful (see Figure 2).

After confirming model fit with the SSQ and TEOSQ, a structural equation model

(SEM) was run in order to account for the relationship between goal orientation and shame levels. Confirmatory factor analyses on the goal orientation items revealed abnormalities among a few of the items of the TEOSQ. One of the items measuring task orientation ("I feel most successful in wrestling when a skill I learn really feels right") had a loading of .17. Additionally, modification indices revealed that ego-orientation items 5 ("I feel most successful in wrestling when I have the best stats") and 6 ("I feel most successful in wrestling when I am the best") were sharing residual variance. Previous literature has shown items on the TEOSQ to be consistently reliable, but for this study the decision was made to remove the task-orientation item from the model based on its poor loading and allow the two ego-orientation items to correlate.

The final SEM exploring goal orientation's relationship with shame had an acceptable model fit, with a RMSEA of .08 and a SRMR of .06 (see Figure 3). The SEM revealed that task orientation had a strong positive relationship (.97) with athletes' process shame and a negative relationship (-.49) with athletes' result shame. Additionally the SEM revealed that ego orientation has a positive relationship with result shame (.75) and a negative relationship with process shame (-.30). Additionally, it was revealed that process and result shame have a positive correlation (.77).

Discussion

The intent of this study was to create and validate a scale that measured an athlete's proneness to experience shame in sport. Additionally, this study set out to explore the relationship between athletes' goal orientations and their proneness to shame. The results generally supported the hypothesized structure of shame in sport and its relationship to athlete goal orientation. Specifically, exploratory and confirmatory factor

analysis supported a two-factor shame construct.

Results supporting the two-factor SSQ with process and result shame scales are consistent with Nicholls' (1989) Achievement Goal Perspective Theory and will advance sport psychology professionals' understanding of shame in sport. The results suggest that athletes are prone to experiencing shame when playing sport, but not just because their performance on the playing field is not up to expectations, but also when they believe that their effort and dedication are lacking. These results extend the work of Conroy (2001) and Sagar and Stoeber (2009), Elison, Lennon, and Pulos (2006), and Partridge and Wiggins (2008), who previously considered more generally athletes' experiences with feeling fear of failure in sport. The benefit of the SSQ is that the items identify specific reasons athletes might experience shame and make no assumption that a poor or disappointing performance automatically results in athletes' experience of shame. The EFA and CFA were important in establishing the process and result shame constructs, providing discriminant construct validity with two separate factors. The final 10-item version of the measure appears to have solid support in this initial study, and length of the survey appears reasonable for capturing the two types of shame in a thorough but abbreviated process. In summary, initial validation of the SSQ presents clear evidence that athletes may experience shame in sport beyond perceived performance outcome failures.

A second purpose of the study was to examine the relationship between the athletes' goal orientations to their experience of process and result shame in sport.

Structural equation modeling revealed several important findings when considering goal orientations and shame proneness. First, the model revealed a significant relationship

between both forms of shame, suggesting that an athlete prone to process shame would also be prone to result shame. This matches Tangney and Dearing's (2002) assertion that individuals who are more prone to shame are likely to experience shame in a variety of situations, rather than very specific circumstances. More interesting, though, are the relationships that emerged between the goal orientations and shame scales. Task orientation had a positive relationship process shame and negative relationship with result shame, providing support for Hypothesis 2. These results suggest that athletes who value hard work, effort, and improvement would be less likely to experience result shame if they performed poorly, but may be more inclined to experience process shame if they failed to work as hard as possible to achieve success. It may be that such athletes understand that sport outcomes (i.e., winning, outperforming others) can be completely out of their control, regardless of their effort or preparation. Athletes high in task orientation value giving maximum effort and showing up as prepared as possible and they see value in doing so because it will help them perform to the best of their ability. It follows that these athletes would not experience result shame because they would not place as much importance or value on winning and being normatively considered the best, but they would put a huge emphasis on the importance of hard work and doing everything they could to succeed. Since athletes have volitional control over their work ethic, they are likely to display high effort and if so would not report high process shame. It is important to note that the process shame items ask athletes to imagine how they would feel if they did not give their best effort. Because athletes high in task orientation value high effort the likelihood of them reporting process shame is minimal. Further, there was a strong negative relationship between task orientation and result shame

indicating the improbability of athletes reporting shame for any reason. Thus, promoting high task orientation among young athletes may be an important strategy for preventing the negative outcomes related to experiencing shame in sport.

In contrast to task orientation SEM results, ego orientation was positively associated with result shame. Results support the hypothesis that those athletes who gauge their success based on normative comparison, (i.e., winning and being considered the best) would feel shame if they failed to accomplish those ideals. Since athletes have little control over sport outcomes, concern is raised for athletes who experience result shame after a sub-optimal performance. There was also a negative relationship between ego orientation and process shame. Athletes high in ego orientation and lower in task orientation do not prioritize the importance of effort. These results suggest that athletes who are prone to shame and high in ego orientation would be less likely to take solace in exceptional effort or preparation if competition results are unfavorable.

Overall the results support Nicholls' (1989) assertion that high ego orientation and low task orientation can be detrimental to individuals' enjoyment and overall experience in achievement settings. Stephens (1998) has highlighted that high ego goal orientations combined with low task orientations have been shown to decrease enjoyment and perceived value in sport. This study further reveals that athletes who define success based on uncontrollable outcomes may set themselves up for negative sport experiences by internalizing shame when they do not perform well in comparison to others. Shame can bring adverse conditions to individuals and harmful health effects over time, such has poorer physical health (Dickerson, Kemeny, Aziz, Kim & Fahey, 2004; Dickerson, Gruenewald & Kemeny, 2004), posttraumatic stress (Street & Arias, 2001; Jonsson &

Segesten, 2004), and anger and depression (Tangney & Dearing, 2002). Additionally, in a recent climate intervention study, Hogue, Fry, Fry, & Pressman (2013) found that individuals in an ego-involving climate reported experiencing higher shame, which was accompanied with increased physiological stress responses as measured via salivary cortisol. There is little research to suggest that individuals benefit from experiencing shame. The link between shame and ego goal orientation therefore offers additional support that highly ego-involved people may experience fewer benefits when partaking in sport.

Nicholls' (1989) theory also suggested that those high in task-orientation are likely to persist when challenged. A high task orientation may help buffer individuals' experience with shame. If their actions are consistent, they would be less likely to experience shame. Shame can be an emotion that can cause individuals to shut down or withdraw (Tangney & Dearing, 2002; Elison, Lennon, & Pulos, 2006). However, these results suggest that individuals high in task orientation would limit experiencing shame, which might in turn limit or minimize the likelihood of withdrawal from sport. Only failing to give maximum effort or striving toward improvement would result in shame for those athletes. Athletes high in task orientation and low in ego orientation place less value on uncontrollable outcomes such as winning, and therefore would be less likely to experience shame should outcomes not fall in their favor or should they not perform up to their hopes or expectations.

This study has some limitations that should be noted. High school wrestling teams mostly consist of male athletes, as was observed in this study. Although Tangney and Dearing (2002) state that shame proneness is consistent across gender, it will be

important to examine shame with female athletes in the future.

It will also be important to survey athletes across a variety of sports. Wrestling is an individual sport (although teams compete against each other in dual meets with overall scoring in tournaments) where performance is evident to those watching (e.g., an athlete is pinned). In other sports, performance may be less obvious due to more athletes being involved at one time and mistakes may be less noticeable. It is possible that some of the items could have more powerful loadings in a team sport where athletes are more likely to feel the pressure of meeting the expectations of their teammates. It will be important in future research using the SSQ in team sports for researchers to examine differences in athletes' responses on the measure, and the relationship of the SSQ to other outcome variables.

While limitations are evident, this research provides a valuable start to understanding shame in sport with adolescent athletes. Continuing research will be necessary to further validate the SSQ as a reliable instrument for measuring shame in sport. In addition to goal orientations, Duda & Nicholls (1992) stated that motivational climate is an important predictor of sport enjoyment. It stands to reason that athletes' proneness to shame would also be largely affected by the motivational climate on teams. Though Tangney & Dearing (2002) state that shame proneness is mostly stable in individuals, it will be important to look at athletes' proneness to shame over the course of a season or the course of multiple seasons to consider the long-term effects of shame on athletes. This study sets the stage for continued work examining how young athletes' negative sport experience can be minimized over time.

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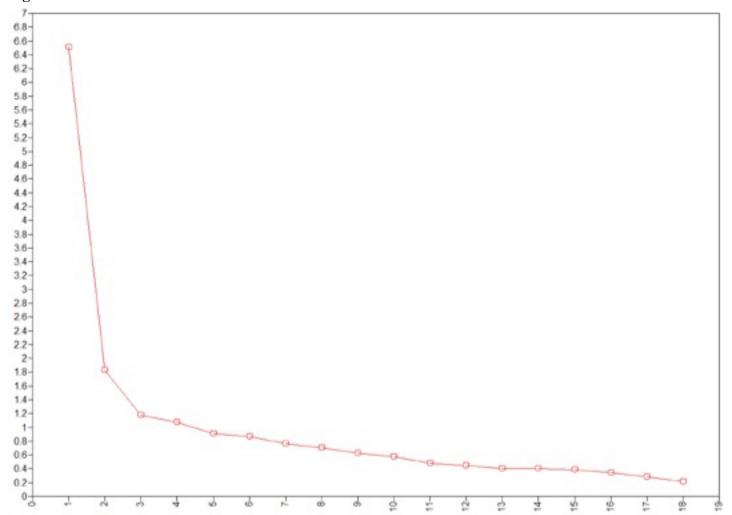
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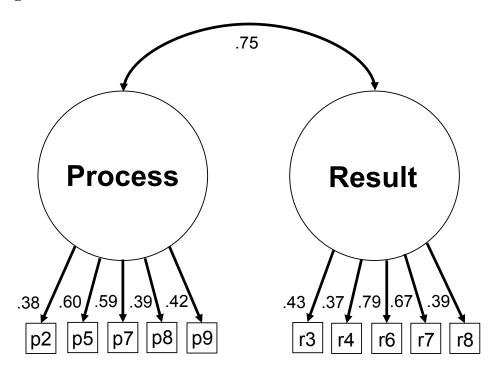
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Figure 1: EFA Scree Plot



753 Figure 2: Shame CFA

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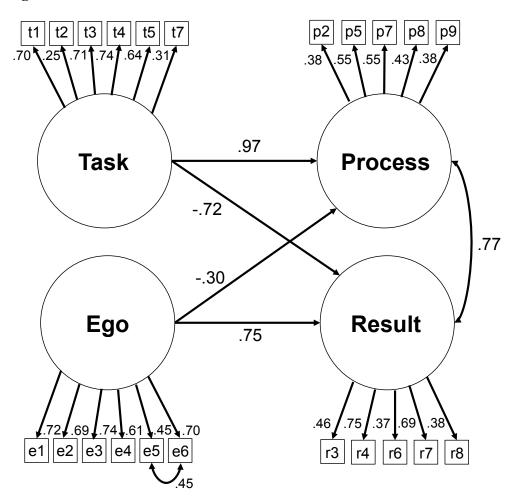


Figure 3: Goal Orientation to Shame CFA

Figure 4: Three Similar Emotions

Deciphering Shame, Guilt and Embarrassment



Shame

"I am worthless because I messed up"

"I am worthless because I didn't try hard."



Guilt

"I have to make up for the fact that I just messed up."

"I have to make up for the fact that I didn't try hard."



Embarrassment

"I can't believe everybody just saw me mess up."

"I wish people didn't know that I didn't try hard."

Table 1: Item Correlations and Descriptive Statistics

Item	PS2	PS5	PS7	PS8	PS9	RS3	RS4	RS6	RS7	RS8	E1	E2	E3	E4	E5	E6	T1	T2	T3	T4	T5	T7
PS2	1.00																					
PS5	.34	1.00																				
PS7	.40	.48	1.00																			
PS8	.39	.47	.31	1.00																		
PS9	.26	.29	.29	.35	1.00																	
RS3	.06	.19	.14	.18	.22	1.00																
RS4	.07	.14	.15	.14	.24	.37	1.00															
RS6	.15	.30	.40	.25	.29	.33	.40	1.00														
RS7	.20	.37	.34	.21	.33	.35	.30	.54	1.00													
RS8	.17	.21	.22	.22	.41	.32	.34	.36	.23	1.00												
E1	.05	.20	.17	.18	.12	.25	.08	.16	.22	.12	1.00											
E2	.14	.21	.29	.15	.21	.19	.05	.18	.22	.07	.45	1.00										
E3	.04	.20	.12	.08	.23	.18	.12	.23	.21	.18	.39	.50	1.00									
E4	05	.01	.10	04	.12	.14	.16	.19	.19	.18	.37	.36	.44	1.00								
E5	03	.03	.12	04	.04	.07	.06	.15	.19	.07	.25	.44	.36	.44	1.00							
E6	.13	.19	.23	.14	.19	.15	.10	.15	.20	.20	.46	.57	.47	.42	.59	1.00						
T1	.15	.19	.09	.24	.23	07	.03	.10	.05	.14	.15	.10	.04	12	02	02	1.00					
T2	.01	.04	.09	.01	.01	08	13	02	.03	14	.11	.04	.05	05	02	05	.32	1.00				
T3	.16	.11	.00	.12	.02	12	02	06	13	.02	01	.01	.02	11	03	01	.46	.31	1.00			
T4	.29	.18	.18	.18	.15	09	.03	03	04	.07	01	.10	03	13	01	.05	.49	.16	.46	1.00		
T5	.12	.12	.03	.16	.09	15	09	.00	08	.01	.00	03	01	08	.08	02	.60	.39	.45	.47	1.00	
T7	.14	.09	.18	.21	.02	19	12	05	11	08	04	.04	01	03	.03	.09	.24	.30	.25	.33	.25	1.00
Mean	4.05	4.16	3.73	3.72	3.17	2.47	2.16	3.05	3.11	2.29	3.32	3.94	3.25	2.72	3.34	3.59	4.08	4.10	4.25	4.49	3.93	4.50
SD	.77	.85	.99	1.01	1.22	1.04	1.08	1.14	1.14	1.06	1.20	.97	1.18	1.22	1.25	1.28	.77	.87	.81	.74	.89	.77
Min- Max	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5

Table 2: EFA Factor Loadings

Iter	n	Factor 1	Factor 2
Res	sult Shame Items		
1.	I would feel ashamed if I made a big mistake in competitions that could affect whether the team wins or loses	.42*	.23
2.	If I make a mistake, I feel like my coaches and teammates think less of me.	.45*	02
3.	I wouldn't want to face my coaches and/or teammates if I made a mistake.	.76*	15
4.	If I were to mess up, I would wish I could disappear.	.73*	10
5.	If I didn't perform to the expectations of coaches and teammates, I would feel small.	.46*	.30*
6.	If I didn't have a strong performance, I would feel like a failure.	.60*	.15
7.	If things didn't go well for me in a competition, I would feel as if I've let everybody down.	.56*	.13
8.	If I didn't perform well, I would feel alone	.49*	.19
9.	If I didn't perform to my expectations, I would feel low.	.25*	.44*
Pro	ocess Shame Items		
1.	I would not deserve to wrestle if I didn't try as hard as possible.	.06	.45*
2.	I would feel shame if I didn't keep working hard to improve my skills.	22*	.83*
3.	If I didn't work as hard as I could, I would want to shrink away	.37*	.35*
4.	If I didn't give my best effort during the preseason, I would feel like I shouldn't be part of the team.	.31*	.24*
5.	I would feel like I let teammates and coaches down if I didn't try my hardest.	.01	.63*
6.	If I didn't work hard, it would be difficult to look my coaches and teammates in the eye.	.46*	.38*
7.	I would feel like a failure if I didn't do everything I could to reach my potential.	.09	.65*
8.	I would feel ashamed if I didn't not give full effort when in practice or competitions.	.13	.69*
9.	I would feel alone if I did not do everything possible to improve.	.22	.50*

Note: Items in **bold** are those that are in the final version of the Shame in Sport Questionnaire.

Exploring the Relationship between Motivational Climate and Shame

Mario S. Fontana

University of Kansas

Abstract

Athletes have been shown to experience shame while playing sport, both for their preparation (process shame) and for outcomes (result shame) during competition (Fontana & Fry, 2015a). The purpose of this study was to explore how motivational climate is related to athletes' process shame and result shame, and to further validate the Shame in Sport Questionnaire (SSQ). A questionnaire was administered to 259 track and field athletes before a practice three weeks into the season. The athletes were surveyed on their proneness to experiencing shame via the SSO and the perceived motivational climate via the Perceived Motivational Climate in Sport Questionnaire and the Caring Climate Scale. To determine how motivational climate relates to shame proneness, a structural equation model analysis was employed. A perceived caring and task-involving motivational climate was shown to be positively related to athletes' process shame and negatively related to athletes' result shame. Perceptions of an ego-involving motivational climate were shown to be negatively related to athletes' process shame and positively related to athletes' result shame. Athletes who feel supported by coaches and also feel that high effort and improvement are valued most on their teams are likely to experience shame only for circumstances under their control (lack of preparation and effort). Additionally, athletes who feel that winning and high performance are valued most on their teams are more likely to experience shame for things that are out of their control (performance outcomes).

Keywords: Motivational climate, shame, high school, track and field

Exploring the Relationship between Motivational Climate and Shame

Research on participation in youth sport has revealed positive outcomes, with young athletes engaging in healthier behaviors, having more positive social interactions and improved school behavior, and experiencing enhanced self-perceptions (Pate, Trost, Levin, & Dowda, 2000; Ullrich-French & Smith, 2009; Findlay & Coplan, 2008; Stuntz & Weiss, 2009). Sport can provide an arena for young athletes to learn teamwork, a positive work ethic, and sportspersonship (Telama, Xiaolin, Hirvensalo, & Raitakari, 2006). Additionally, sport has the potential to increase the likelihood of an active lifestyle as an adult. Despite all of the potential benefits, participation rates in sport decline sharply through adolescence (Haskell et al., 2007), and some researchers suggest that some young athletes drop out of sport due to negative experiences, lack of enjoyment, and a non-supportive motivational climate (Coakley, 2004; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002; Butcher, Lindner & Johns, 2002; Gould, 1987). Motivational climate research, in particular, has revealed that environments that focus heavily on winning and rivalry can lead athletes to withdraw effort and experience increased anxiety (Solmon, 1996; Pensgaard & Roberts, 2000). It's possible that a less supportive motivational climate may lead athletes to experience other harmful internal emotions such as shame, but research exploring these relationships is limited. Since shame can have negative long-term effects on individuals (Tangney & Dearing, 2002), exploring its effects on young athletes may be beneficial to understanding how to foster their participation in physical activity through adolescence. The purpose of this study was to explore the effect of the motivational climate on shame levels of adolescent athletes.

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Shame can be a devastating emotion. It can lead people to experience more anger and anxiety, inhibit development of social skills, and withdraw socially (Tangney & Dearing, 2002). People experiencing shame report feeling small, powerless, and a lowered sense of self worth (Lewis 1971; Tangney, Miller, Flicker, & Barlow, 1996). Shame causes individuals to feel as if they have violated a cultural norm or set of expectations put forth by family and/or peers. Tangney and Dearing's (2002) extensive research on shame suggests that some individuals have a greater proneness to experience shame than others. While temperament, parental socialization, and certain cultural factors can influence individuals' shame proneness, there are no specific personality traits or profiles that have been directly linked to individuals experiencing shame. With regard to shame, individuals may process the same social situation differently, and experience shame for different reasons or in different situations. For example, if two people did poorly on an academic test, one may feel less valued (and thus experience shame), while the other may not feel less valued for a host of reasons (e.g., might perceive that the instructor wrote a poor exam, might not place a high value on academic achievement). Even though individuals vary in their proneness to experiencing shame when violating social expectations, understanding why individuals experience shame is an important area of inquiry because it may be beneficial in helping individuals maximize their experiences in important contexts such as sport.

In an effort to explore athletes' shame, Fontana and Fry (2015a) created a scale that explores two types of shame: process and result. Process shame occurs when athletes feel they have not met the perceived effort and improvement expectations of others while result shame occurs when athletes feel they have not met the perceived performance

outcome expectations of others. This distinction is key because most existing research on shame assumes that athletes only experience shame when performing poorly (e.g., not winning, making mistakes in competition) (Conroy, 2001; Conroy 2003; Partridge & Wiggins, 2008; Elison & Partridge, 2012), and the specific precursors or causes of shame have not been considered. Current research does not take into account, for example, how athletes may judge themselves if they were in a positive and supporting climate where the emphasis is on working hard, mastering skills, and improving over time. It would be beneficial to explore the relationship between these distinct forms of shame and the perceived motivational climate. Of interest would be the role a nurturing climate might play in potentially limiting shame, and the role a climate focused solely on performance and outcomes (i.e., winning) might play in potentially promoting shame.

Motivational climate is an important facet of Nicholls' (1989) Achievement Goal Perspective theory (AGPT). Nicholls stated that people in achievement settings could perceive the climate to be either task-involving (where the focus is on effort, improvement, learning from mistakes, and mastery of skills) or ego-involving (where the focus is on creating rivalry, punishing mistakes, and achieving high normative standing). Nicholls maintained that the climate predicts individuals' thoughts, feelings and behaviors in achievement settings. Research has revealed athletes can clearly distinguish the features of a task- and ego-involving climate (Seifriz, Duda, & Likang, 1992; Newton, Duda, & Yin, 2000; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002). A third facet of the motivational climate, the caring climate, has also been found to exist with sports teams. Athletes perceiving a caring climate on their teams feel nurtured, supported, valued and respected (Newton et al., 2007a; Newton et al., 2007b; Fry &

Gano-Overway, 2010;). Additionally, in a caring climate, athletes feel a sense of belonging and being welcomed. Noddings' (1995) research suggests that feeling cared for is extremely beneficial because it allows for people to feel connected to others and feel invested and passionate about what they are trying to accomplish. Research reveals that a caring climate is positively associated with a task-involving motivational climate (Newton et al., 2007a; Iwasaki & Fry, 2013; Brown, Fry, & Little, 2013; Moore & Fry, 2014). Both are necessary for optimizing athletes' experience in sport.

Researchers have reported strong benefits to athletes perceiving a caring and task-involved climate, such as displaying more positive attitudes toward teammates and coaches and increased enjoyment and commitment (Fry & Newton, 2003; Newton & Fry, 2007; Fry & Gano-Overway, 2010). Conversely, athletes perceiving an ego-involving motivational climate are more likely to report displaying less sportspersonship-like behaviors (Kavussanu & Roberts, 2001; Ommundsen, Roberts, Lemyre, & Treasure, 2003), experience more stress and anxiety (Pensgaard & Roberts, 2000), and are more likely to drop out of their sport (Sarrazin et al., 2002). Additionally, a recent metanalysis of the motivational climate in sports by Harwood, Keegan, Smith, and Raine (in press) has revealed that ego-involving climates negatively affect autonomy and relatedness and tend to foster amotivation in athletes.

There is also research to support a connection between athletes' perceptions of the motivational climate and the manner in which they process performance shame. Tsai and Chen (2009) explored the relationship between athletes' perceptions of the motivational climate and their fear of failure in sport using Conroy's (2001) Performance Failure Appraisal Inventory (PFAI). One of the subscales of the PFAI is the Fear of Experiencing

Shame and Embarrassment Subscale (FSE). The researchers indicated that adolescent athletes perceiving an ego-involving motivational climate were more likely to experience shame. Fontana and Fry (2015b) had similar findings when exploring motivational climate in adult recreational sport participants. Specifically, perceptions of an ego-involving motivational climate were positively associated with shame, with no significant relationships occurring between shame and the caring and task-involving climate. The findings revealed an overall picture that associated more positive motivational responses, including compassion and authentic pride (pride based on high self-worth), with perceptions of a caring and task-involving climate, and more negative motivational responses, including shame and hubristic pride (pride based on narcissism), with an ego-involving climate.

Initial research, while limited, suggests that individuals' sport experiences may be influenced by the environment created by coaches. Individuals experience shame when they feel they have violated expected social norms (Tangney et al., 1996) and it follows that a phenomenon of shame might be evident within a sport culture where teams have their own expectations and social norms. Because participation in sport has extensive physical, psychological and emotional benefits for individuals, and particularly young people who are in important developmental periods, research examining the factors that contribute to their positive experiences in sport, or lack there of, are important. Thus, research examining young athletes' perceptions of the climate on their sport teams and their experiences with shame can provide important information for coaches and administrators. The purpose of this study was two-fold: (a) to further validate the Shame in Sport Questionnaire with adolescent athletes; (b) to examine the effect that young

athletes' perceptions of the climate (caring, task-, and ego-involving) on their sport teams has on the extent to which they experience process and result shame. Structural equation modeling was employed to examine the relationship that motivational climate had with shame levels. It was hypothesized that a caring and task-involving climate would be positively related to process shame and negatively related to result shame. Alternately, it was predicted that an ego-involving climate would be positively related to result shame and negatively related to process shame (see Figure 1).

Method

Participants

High school track and field athletes (N = 259, M = 16.2 years) participated in this study. The sample consisted of 159 males, 91 females, 1 pangender, and 8 athletes that chose not to report their gender. The athletes came from four schools and identified their primary events as either sprinting, distance running, throwing, jumping, hurdling, pole-vaulting or relays. The sample was comprised of 130 varsity athletes, 101 junior varsity athletes, and 27 athletes that chose not to report their level of competition or were unsure of their team assignment. Over 31 percent of the athletes reported that they expected to qualify for the state tournament in their preferred event. The sample was 48 percent Caucasian, 26 percent African American, 11 percent Hispanic/Latino, and 15 percent reported as Native American, Asian/Pacific Islander, or other.

Each team's head coach gave permission to administer the survey prior to the data collection dates. The Institutional Review Board gave permission to conduct the study with the athletes, and players provided their consent to participate after receiving an information statement.

Procedure

Players received the survey before or after a team practice three weeks into the season as research suggests that the perceived motivational climate takes a few weeks to be established by the coaches (Duda, Chi, Newton, & Walling, 1995; Newton, Duda, & Yin, 2000; Seifriz, Duda, & Likang, 1992; Walling, Duda, & Chi, 1993;) Participation was voluntary and players were informed that they could opt out of the survey at any time during the survey process. Researchers were on hand to field any questions or give clarification to the survey questions. The surveys were administered without coaches present.

Measures

Perceived Motivational Climate in Sports Questionnaire (PMCSQ). The PMCSQ (Seifriz, Duda, & Likang, 1992) was administered to assess the athletes' perceptions of the motivational climate on their team as task- (focused on effort and improvement) or ego-involving (focused on winning and outperforming others). Individuals were asked to answer the questions using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Seifriz et al., (1992) reported the PMCSQ demonstrated reliability coefficients of $\alpha = .88$ (task-involving) and $\alpha = .87$ (ego-involving).

Caring Climate Scale (CCS). The CCS (Newton et al., 2007a) was employed to measure the athletes' perceptions of the extent that members of their team feel cared for and nurtured on their team. The 13-item scale measures the participants' perceptions of multiple caring elements, including support, concern, and acceptance. Athletes respond to the items using a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly*

agree). Newton et al. (2007a) reported a strong internal reliability (α = .92) for the CCS. In addition, support for convergent validity of the CCS with a task-involving climate (r = .56) and discriminant validity with an ego-involving climate (r = -.36) was established.

The Shame in Sport Questionnaire (SSQ). The 10-item scale was administered to the athletes to assess the extent that they experience process (5 items) and result shame (5 items). Process shame items focus on effort and preparation (e.g., "I would feel alone if I did not do everything possible to improve,") while result shame items focus on performance outcomes (e.g., "If I were to mess up, I would wish I could disappear,"). The athletes were asked to answer the items on a 5-point Likert scale ranging from 1 (*strongly* disagree) to 5 (*strongly* agree). Fontana and Fry (2015a) developed the measure for use with adolescent athletes, and the measure demonstrated acceptable fit in a CFA.

Results

SPSS 22 was used to calculate descriptive information, standard deviations and mean scores (see Table 1). Additionally, Mplus 7.0 was used to calculate a correlation matrix for all items and factor analyses to further examine the validity of each scale and the proposed model of climate on shame levels.

Model reliability for the two-factor CFA was determined by the comparative fit index (CFI; Hu & Bentler, 1998), Tucker-Lewis index (TLI; Tucker & Lewis, 1973), root mean square error of approximation (RMSEA; Steiger & Lind, 1980), and standardized root mean square residual (SRMR; Hu & Bentler, 1998). Acceptable model fit for CFI and TLI are values that approach one (specifically, .9 or higher) and acceptable model fit for RMSEA and SRMR are values approaching zero (specifically, .08 or lower. The two-factor shame CFA had an acceptable to good model fit, including a .93 CFI, .90 TLI, .08

RMSEA and .06 SRMR. The five item loadings on each factor were moderately strong (see Figure 1), and process and result shame were highly correlated with one another.

CFA's were also run on each of the climate scales individually. Modification indices revealed that many of the items on the CCS and PMCSQ questionnaires were sharing residual variance. In order to account for the shared variance and balance the standardized regression weights, items on the caring, task-involving, and ego-involving factors were parceled (Little, 2013). Each parcel was balanced with strong and weak variables (Little, Cunningham, Shahar, & Widaman, 2002). The CCS (13 items and the PMCSQ (21 items; 8 task and 13 ego) have a larger number of items that can lead to more error in the model, which parceling helps control for. With the validity of all four models reaffirmed, a structural equation model (SEM) was run in order to explore the climate's relationship with shame levels.

Because track and field teams generally have a large number of athletes and multiple coaches that could potentially emphasize different motivational climates, the cluster analysis option was used in Mplus in order to account for the nested nature of the data. The SEM revealed good model fit with a .94 CFI, .92 TLI, .06 RMSEA and .06 SRMR. The perceived caring and task-involving climate showed a positive relationship with process shame and a negative relationship with result shame. Concurrently, the perceived ego-involving climate showed a strong positive relationship with result shame and a negative relationship with process shame (see Figure 2). Each construct demonstrated moderate to strong item loadings. No adjustments were made to the model aside from maintaining the same motivational climate parcels as employed in the CFAs.

Discussion

The intent of this study was to explore the relationship of the motivational climate and process and result shame while further validating the SSQ. A structural equation model supported the hypothesis that a perceived caring and task-involving motivational climate was positively related to process shame and negatively related to result shame. Additionally, a perceived ego-involving motivational climate was positively related to result shame and negatively related to process shame. The results also affirmed the Shame in Sport Questionnaire's effectiveness in measuring a two-factor shame construct consisting of process and result shame with a sample of high school track and field athletes.

Structural Equation Modeling confirmed the hypothesized model between climate and shame, providing additional concurrent validity for the SSQ as all predicted relationships with existing validated scales were confirmed. A positive relationship between process and result shame found in this study is consistent with that reported by Fontana and Fry (2015a) with high school wrestlers. Results across these two studies suggest that athletes prone to one form of shame are likely to be prone to the other. However, proneness to process shame could be considered more beneficial because process shame occurs when athletes violate social norms that are under their control (e.g., giving high effort, being prepared).

The SEM results also revealed a caring and task-involving motivational climate was positively associated with process shame. According to Tangney and Dearing, (2002), individuals experience shame when they violate widely accepted social norms and as a result, feel that those around them would think less of them. The results of this

study suggest that in a perceived caring and task-involving climate, athletes could potentially experience shame if they failed to give high effort, work to improve, learn from mistakes, and/or care and support others involved with the team.

Additionally, the perceived caring and task-involving motivational climate has a negative relationship result shame. Athletes experiencing result shame do so because they feel they have violated expectations of winning, performing at a high level, and demonstrating superiority over others. Since these outcomes are not the main emphasis in a caring and task-involving motivational climate, it makes sense that athletes in a caring and task-involving climate would not be likely to experience result shame. Athletes have very little control over the talent level of the opposition and could perform less optimally on a given day despite high effort and preparation. This is information because it suggests that athletes who experience a caring and task-involving motivational climate and are prone to shame would not experience shame for things that are out of their control. A caring and task-involving climate has been positively related to athlete enjoyment, commitment, intrinsic motivation, perceived competence, self-efficacy, pro-social behavior, and moral behavior (Gano-Overway et al., 2009; Fry & Gano-Overway, 2010; Kavussanu & Roberts, 2001; Iwasaki & Fry, 2013), and could potentially limit the extent to which athletes experience shame on their sport teams.

This study also shows clear negative ramifications for an ego-involving climate, which punishes mistakes and values high normative ability (Nicholls, 1989; Seifriz, Duda, & Likang, 1992). In an ego-involving climate, athletes who fail to meet these expectations and who are prone to shame would experience the emotion when they do not perform at a high level, make mistakes, or fail to come away with a victory. Previous

literature has linked an ego-involving climate to increased anxiety and dropout rate (Pensgaard & Roberts, 2000; Sarrazin et al., 2002, Hogue, Fry, Fry, & Pressman, 2013). This research reveals an ego-involving climate is also more likely to have a positive relationship with result shame, which is troublesome when considering that eventually, all athletes experience failure or poor performance. This would imply that all athletes who are prone to shame will eventually experience shame when playing sport if they are also experiencing an ego-involving motivational climate. An ego-involving motivational climate has been shown to promote anxiety (Pensgaard & Roberts, 2000), while research by Dickerson, Gruenewald, & Kemeny (2004) shows a link between anxiety and shame. The results of this study create a clear link between an ego-involving climate and the likelihood of experiencing shame.

In addition to the positive relationship of an ego-involving climate with result shame, a perceived ego-involving climate also had a negative relationship with process shame. This is again in line with the hypothesized results and would suggest that because effort, improvement, and preparation are not principally valued in an ego-involving climate, athletes would be less likely to feel as if they violated standards in these areas. While ideally no athletes would experience shame, process shame might have fewer long-term ramifications when compared to result shame, and could have potential benefit for athletes who are not giving their best effort. Athletes experiencing process shame could potentially reflect on their experiences and vow to improve upon their poor effort and preparation. Because they do have control over those two facets of sport, it's possible that they could eventually persist and overcome. However, because athletes have less control over the talent of the opposition or the outcome of a competition, it seems less

likely that athletes may be able to persist and overcome result shame. Even if athletes experiencing result shame vow to come out ahead the next time, there is no guarantee of their normative success, so result shame is more likely to be detrimental to playing with confidence.

Winning and performing at a high level are worthy outcomes of sport. Without competition, sport would have less meaning and potentially teach fewer lessons about persistence, teamwork, and enjoyment. Unfortunately, shame is an emotion in sport that for some may be unavoidable. As long as athletes see great importance in participating in sport, those who are sensitive to foiling social norms and how others might look upon them will always be susceptible to experiencing shame in sport. This study highlights the importance of a supportive motivational climate in order to alleviate shame that occurs due to uncontrollable outcomes.

If expectations on teams are set so that athletes value the process of preparing, improving, and giving maximum effort, then those who are more prone to experiencing shame will only do so when they fail to meet the expectations that they can control on their own accord. However, if the expectations on teams are set so that athletes value winning and normative comparison, those who are shame prone are less likely to have control over whether or not they experience shame. This could, in turn, cause athletes to feel so down about sport and themselves that they decide it is no longer worth trying to participating and competing.

Several limitations of this study should be noted. The sample was more weighted toward male than female athletes than initially expected. Despite previous research that suggests there are not gender differences with regard to shame proneness (Tangney &

Dearing, 2002) it will be critical to examine gender differences in process and result shame in sport in the future.

Additionally, track and field is predominately an individual sport. Certain items in the Shame in Sport Questionnaire pertaining to how athletes think others may react could be different in a team sport where individual performances more closely affect others. Future research should include samples of individual and team sport athletes to determine if there are differences in their experiences with result and process shame. They hypothesis predicting the relationship of climate to shame would not change, however, based on theoretical tenets. Lastly, while the SSQ has revealed strong psychometric properties across two studies, it will be important to continue to examine the structure of the measure with future samples.

This study provides a valuable examination of the Shame in Sport Questionnaire and how shame proneness is related to motivational climate. Because climate can change over the course of a season (Gano-Overway & Ewing, 2004), a longitudinal consideration of shame as it pertains to climate over the course of a season would be valuable. This would involve multiple data points to determine if athletes in a caring and task-involving climate experience less process and result shame than those in an ego-involving climate. Additionally, given the findings of Fontana and Fry's (2015a) study involving shame and goal orientations, a model exploring how motivational climate mediates the relationship between goal orientations on shame proneness would contribute to further understanding shame in sport.

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Table 1. SEM Correlation Matrix and Descriptive Data

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. RS3	1.00																				
2. RS4	.46	1.00																			
3. RS6	.42	.40	1.00																		
4. RS7	.39	.40	.56	1.00																	
5. RS8	.29	.38	.44	.47	1.00																
6. PS2	.15	.20	.27	.36	.15	1.00															
7. PS5	.19	.26	.33	.53	.30	.52	1.00														
8. PS7	.14	.27	.42	.52	.30	.46	.56	1.00													
9. PS8	.11	.22	.20	.39	.21	.45	.53	.54	1.00												
10. PS9	.11	.34	.31	.41	.40	.35	.45	.43	.47	1.00											
11. CP1	19	17	07	01	03	.12	.17	.08	.06	.00	1.00										
12. CP2	13	02	07	.02	01	.12	.24	.08	.08	.02	.77	1.00									
13. CP3	19	14	14	04	07	.07	.18	.06	.12	.00	.80	.77	1.00								
14. CP4	21	11	12	08	10	.11	.10	.06	.05	.01	.80	.77	.71	1.00							
15. EP1	26	.18	.23	23	.14	.06	.04	.17	.04	.08	20	15	17	24	1.00						
16. EP2	.32	.29	.37	.37	.27	.17	.15	.21	.08	.13	24	15	20	25	.59	1.00					
17. EP3	.28	.23	.19	.19	.20	.02	.06	.05	.04	.08	26	16	22	30	.65	.52	1.00				
18. EP4	.25	.18	.25	.25	.09	.12	.08	.10	.04	.05	16	08	16	21	.58	.54	.65	1.00			
19. TP1	06	04	10	10	06	.05	.13	.10	.03	.12	.30	.34	.30	.40	03	17	14	14	1.00		
20. TP2	06	.00	07	07	.00	.15	.23	.15	.17	.11	.35	.48	.36	.44	02	10	16	04	.54	1.00	
21. TP3	06	13	.02	.02	06	.20	.23	.17	.14	.15	.31	.40	.35	.39	02	01	16	.01	.58	.60	1.00
Mean	2.53	2.19	3.06	3.13	2.25	4.12	3.95	3.66	3.58	3.00	4.00	4.38	4.23	4.05	3.40	3.31	2.95	3.03	3.98	4.21	4.17
SD	1.09	1.18	1.19	1.16	1.08	.907	1.04	1.09	1.14	1.22	.71	.67	.70	.77	.76	.75	.71	.84	.60	.55	.59
Min-Max	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5	1-5

Figure 1: Shame CFA

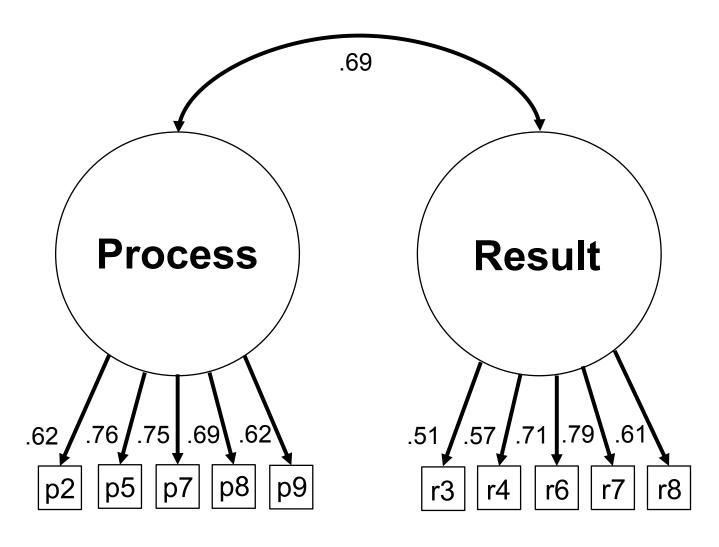
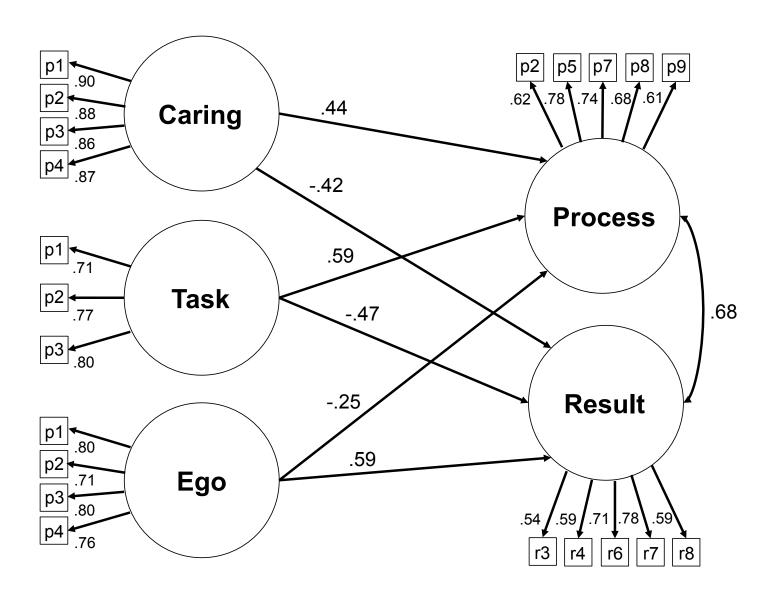


Figure 2: Climate's relationship with shame



Exploring Shame's Relationship with Sport and Motivational Climate

Mario Fontana

University of Kansas

Overview

This literature review focuses on the research examining shame, how it pertains to sport, and how it may relate to the perceived motivational climate on sports teams.

Researchers have been exploring the concept of shame and how humans may interpret it for decades (Eisenberg, 2000; Lazarus, 1991; Tangney, 1995; Tangney, Miller, Flicker, & Barlow, 1996). More recent literature suggests that shame can be confused with other emotions such as guilt or embarrassment, and certain cultures actually value shame as an important tool to shape moral behavior. The first part of this literature review will explore how to define and measure shame and its implications for psychological well-being.

Perceived motivational climate is part of Nicholls' (1989) Achievement Goal

Perspective Theory. Research in sport psychology has suggested that the motivational

climate on sports teams has a huge impact on athlete commitment and enjoyment, as well

as the likelihood of wanting to continue to participate. Increased emphasis on the

importance of winning leaves athletes focusing more on outcomes and who is best rather

than team enjoyment, effort and improvement. Competitive environments where the focus

is on winning ultimately can turn away many participants who may want to engage in sport

but do not consider themselves talented enough to contribute to a winning team. The

second part of this literature review will explore how motivational climate functions in

sports settings.

The final section of this literature review will investigate the current work exploring shame in sport, future directions, and what can be done to add to existing literature in a meaningful way. Finally, a hypothesized connection between perceived motivational climate and how athletes process shame in sport will be related based on existing literature.

Shame

Shame can be a difficult emotion for people to understand. According to Tangney and Dearing (2002), asking a panel of randomly selected people to define shame usually results in a variety of answers. The emotion can be confused with other self-conscious emotions, guilt and embarrassment. Based on Lewis' (1971) framework on the differences between guilt and shame, Tangney and Dearing (2002) define shame as:

"[A]n objectionable behavior [that] is seen as reflecting, more generally, a defective, objectionable self ('I did that horrible thing, and therefore I am an unworthy, incompetent or [a] bad person'). With this painful self-scrutiny comes a sense of shrinking or of "being small" and feelings of worthlessness and powerlessness...Finally, shame often leads to a desire to escape or to hide—to sink into the floor and disappear."

People experiencing shame tend to internalize perceived wrongdoings as a reflection of their overall self-worth. It is an emotion that is experienced alone, but occurs because of people's surroundings. Fischer and Tangney (1995) explored how shame, along with other emotions such as guilt, embarrassment, and pride, is a social emotion that can only be experienced because of interactions with others. When people are experiencing shame, they are feeling as if they have violated certain cultural standards.

For some time, shame was thought to be an emotion experienced when failing in a public realm. As research in this area has evolved, it has become more evident that experiencing shame involves internalized feelings that have little to do with failure in public and more with an individual's own perceived failure. People experiencing shame typically feel as if they've violated a cultural standard (Fessler, 2007; Tangney & Dearing, 2002; Tangney et al., 1996). Whether or not the standard in question is a uniform expectation is irrelevant, individuals feeling shame believe they have wronged a standard and begin to view the self as less than ideal. In many cases, the shame comes from the knowledge that if significant others knew of the misdoing, they would disapprove. As

Brown (2006) states, shame is "An intensely painful feeling or experience of believing we are flawed and therefore unworthy of acceptance and belonging." There is little research on shame to suggest that any individual enjoys experiencing shame. However, there is plenty of evidence to suggest that experiencing shame can bring negative consequences.

People experiencing shame are more likely to experience increased anxiety, depression and lower self-esteem (O'Connor, Berry, & Weiss, 1999). Shame can also have long-term ramifications as it pertains to individual well-being. Researchers have found that experiencing shame can lead to poorer physical health (Dickerson, Kemeny, Aziz, Kim, & Fahey, 2004; Dickerson, Gruenewald & Kemeny, 2004), posttraumatic stress (Street & Arias, 2001; Jonsson & Segesten, 2004), and anger and depression (Tangey & Dearing, 2002). Individuals feeling shame desire to hide, escape or strike back in anger.

While shame is not something that people enjoy experiencing, some have suggested that it has value. Abell & Gecas (1997) reasoned that guilt and shame are imperative for socialization and upholding moral standards. Guilt and shame, the researchers note, act as a filter for all transgressions in life. These emotional responses are consequences for not living up to expectations set forth by a culture, such as treating others with respect or living up to the laws of a society. Gilbert & McGuire (1998) have stated that experiencing shame can lead people to feel as if their inclusion in or among a social group is potentially in jeopardy. People's shame levels are tied entirely to the perceived expectations of the group of loved ones around them. If people violate those expectations, they may tend to feel as if they are going to lose their standing, membership or credibility. Additionally, many eastern cultures place a high value on shame as they believe it is beneficial for proper motivation (Ha & Tangney, 1995). If there were no shame to experience, people may be freer to do

things that hurt others. Shaver, Schwartz, Kirson, & O'Connor (1987) conducted a study that had participants from China, Italy and the United States take dozens of words and associate them in different clusters. All three groups of people had anger, sadness, fear, love and happiness as specific groups, but only the Chinese participants considered shame its own category, separate from the other emotions. This may suggest that some Eastern cultures see shame as a very necessary emotion for balance in life.

Without shame, people may not be able to appreciate when they do adhere to the social norms around them, not dissimilar to how Suits (1978) argues that leisure is only meaningful when one also has to work in order to appreciate (and afford) the time away. Johnson et al. (1987) studied shame across subjects from Hawaii, Korea and Taiwan using the Dimensions of Conscience Questionnaire. The results revealed that the Taiwanese sample showed higher mean scores than the Korean or Hawaiian groups. It may be that it's not shame itself that is meaningful, but perhaps instead the fear of experiencing shame. By Tangney et al.'s (1996) definition, shame occurs when individuals feel as if they have let others down, and the result is a feeling of smallness or the desire to hide. If Maslow's (1941) theory that humans need connectedness with other humans is true, it would suggest that at their core, people would not want to experience or enjoy experiencing shame (i.e., they've let important others down). However, violating norms does not always result in shame. Studies over the last generation show that shame is often confused with other internal emotions.

While some researchers such as Tangney and Dearing (2002) have noted that shame is already challenging to properly measure, it becomes more complicated when factoring other emotions such as guilt. Tangney et al. (1996) notes that while feeling shame or guilt

involves violating established standards, how individuals react to that violation determines which emotion is being experienced. While people experiencing shame tend to think of themselves as bad because of the transgression in question, those experiencing guilt tend to fixate on the idea that they did a bad thing that they would like to repair. Tangey et al. (1996) define guilt as:

"...[An] experience [that] is generally less painful and devastating than shame because guilt does not directly affect one's core self-concept...People in the midst of a guilt experience often report a nagging focus on pre-occupation with the specific transgression—thinking of it over and over, wishing they had behaved differently or could somehow undo the bad deed that was done. Whereas shame motivates concealment or escape, guilt typically motivates reparative action—confessions, apologies, and attempts to undo the harm done."

While a person experiencing shame may react by withdrawing, lashing out, diverting attention or attacking the self (Elison, Lennon, & Pulos, 2006), a person experiencing guilt typically wants to quickly fix the situation by trying to make up for the error. Additionally, Tangney and Dearing (2002) write that people experiencing the same scenario may not necessarily both experience the same emotion. One person that cheats on a relationship with another person may feel like he or she is a very bad person for doing so, while the next may believe that infidelity is not a big deal. This would suggest that shame and guilt are entirely internal and dependent on the individual. There is no single scenario where an individual would definitively feel guilt or shame. Instead, individuals end up being more shame-prone or more guilt-prone. Additionally, Tangney and Dearing argue that individuals' shame and guilt proneness are influenced by many factors. There is not a specific profile or social situation that might lend people to feeling shame instead of guilt or vice versa. While studies involving how to predict individuals' shame and guilt proneness are limited, researchers have had more success in pinpointing when individuals begin to experience the emotions.

Barrett (1995) suggests that there are seven principles to understanding how people develop shame and guilt. Among the principles, Barrett lists that socialization is an important factor in how one begins to process shame. Barrett's text focuses more on the socialization that a child experiences in the home and among loved ones, citing that family relationships, communication and disciplinary practices play a role in how a child begins to understand the self socially and judge whether or not that behavior is acceptable. This understanding of the social self does not only happen in the home, however. Harter (1999) writes that people's understanding of the self develops throughout childhood and adolescence and into adulthood. As children head toward the teenage years, how they act socially becomes less about the expectations of parents or loved ones and more about how they normatively see themselves among peers. Harter notes that how one experiences shame can also be rooted in social interaction. Adolescents see their peers as the people they most want to please, and therefore those social standards are the ones they most adhere to. If adolescents fail to achieve what they think their peers value most (e.g., popularity), they may end up experiencing shame.

Tangney and Dearing (2002) echo Barrett (1995) and Harter (1999) in their belief that shame and guilt proneness develops during childhood. Their research suggests that shame and guilt are traits that are likely to be learned via observed interaction of parents. Specifically, the researchers note that children tend to parrot their parents' reactions when social wrongdoing is observed. Parents who are more likely apologize for their actions (an indication of guilt) have children who also tend to be more guilt-prone. Parents who are more likely to avoid the situation (e.g., they could blame others, avoid a confrontation, or completely withdraw from the situation which are all indicators of shame) have children

who also tend to be more shame-prone. While researchers agree shame and guilt proneness tend to develop before adolescence, differentiating between the two has proven to be tricky. Tangney, Wagner, & Gramzow (1992) spent the better part of a decade working to explore the developmental time frame when people are experiencing the two emotions.

Tangney's Test of Self Conscious Affect (TOSCA) is a thorough reflective questionnaire that walks participants through a number of different scenarios and asks them a series of questions on a five-point Likert scale to see if the scenario causes them to experience shame or guilt. For example, one scenario reads "You attend your co-worker's housewarming party and you spill red wine on a new cream-colored carpet, but you think no one notices." After putting themselves in the scenario, the reader then responds to a series of over a dozen hypothetical responses designed to determine if the reader is experiencing guilt or shame (scored from 1 not likely to 5 very likely). Examples of the responses include "You would feel small, like a rat," (shame) and "This is making me anxious. I need to either fix it or get someone else to." (guilt). Tangney (1995) reports a positive correlation between proneness to guilt and proneness to shame and maintains that the measure appropriately separates guilt and shame as distinct emotions, where guilt is an emotion that causes reparative behavior and shame brings more negative long-term consequences. However, other researchers aren't as confident in the measure.

Despite being developed over a long period and refined several times to be more specific to both children and adolescents, other researchers have brought into question whether the TOSCA affectively measures shame. Luyten, Fontaine, & Corveleyn, (2002) explore the notion that the TOSCA takes into account maladaptive shame (shame for which there is no way for people to repair the damage done in a given situation), but not

necessarily adaptive shame (shame for which people can repair the damage done in a given situation). The researchers' factor analysis indicates that the TOSCA shame scale appears to only take into account maladaptive thoughts and behaviors, with no potentially adaptive or reparative items included to balance out the questionnaire. They argue that the TOSCA does not adequately take into account the possibility that shame could lead to reparative behavior and that future adaptions of the TOSCA or other new measures of shame should take this into account. However, other researchers have found the TOSCA to be a reasonably valid measure and useful tool.

Fontaine, Luyten, De Boeck, & Corveleyn (2001) administered the TOSCA among 614 subjects to determine whether or not guilt and shame proneness produced long-term effects (how frequently people experience feelings and emotions such as sadness, fear, and anger). The researchers wanted to verify Tangney's (1995) assertion that people experiencing guilt wanted to atone for their misdeeds quickly while those experiencing shame tended to shrink away and avoid atonement. According to Fontaine et al. (2001), those reporting guilt-proneness should not report long-term effects because misdeeds would be repaired and thus not be worth dwelling on. Conversely, those reporting shame-proneness would report long-term effects because the misdeeds were never addressed. In addition to finding that shame-proneness had a relationship with anxiety and depression and a decreased likelihood to experience joy, the researchers also verified that the TOSCA did an adequate job in showing that guilt leads to a desire to repair, while experiencing shame leads to negative self evaluations.

Additionally in a study exploring whether or not the TOSCA applied to people with mental illness, Rüsch et al. (2007) found additional verification to support Tangney's

(1995) claim that the TOSCA showed a positive correlation between guilt proneness and shame proneness, both among the healthy and the mentally ill. Additionally, the researchers found that the TOSCA was consistent when compared to other measures of shame, as it was positively associated with both Harder & Zalma's (1990) Personal Feelings

Questionnaire and Turner's (1998) Experiential Shame Scale. Moreover, Strömsten et al.

(2009) created a Swedish version of the TOSCA and found in a sample of 361 adults that the survey was an acceptable measure of shame and guilt. Research shows that the TOSCA may not be a perfect measure of guilt and shame, but its efforts to separate the two emotions are commendable and a very important foundation for future efforts to measure shame in different settings.

In addition to creating a means for measuring the shame- and guilt-proneness of individuals, Tangney and Dearing (2002) also explored why individuals become shame- or guilt-prone. In short, being shame- or guilt-prone is unpredictable aside from learning the emotion from parents. Through longitudinal research, the investigators found that the only way to consistently predict whether individuals are shame- or guilt-prone is to consider their previously measured levels of shame- and guilt-proneness. Tangney and Dearing found that levels of shame- and guilt-proneness are fairly consistent once people reach a level of understanding of the meaning of shame and guilt. The general unpredictability of shame-proneness across a sample highlights how critical it is to treat all people equally with kindness and respect. Making light of flaws in a group setting such as the work place or a sports team is dangerous because non-constructive criticism could set back a person who is highly shame-prone.

Perceived Motivational Climate

Perceived Motivational Climate is a component of Nicholls' (1989) Achievement Goal Perspective Theory. According to Nicholls, people in achievement settings such as academic classes can perceive either a task-involving motivational climate where the emphasis is on effort, improvement and mastery of skills, or an ego-involving climate where the focus is on performance outcomes and who is the most talented. In an egoinvolving climate, individuals perceive that the leader values players that have the highest skill level and best performances, encourages rivalry among those in the group, and punishes those involved for mistakes. Nicholls argued that ego-involving climates would be problematic for groups because by definition, they create competition among group members and only a few receive praise and recognition. While some individuals may thrive in such a climate, it is unlikely that everybody would. Students that did not consider themselves to be among the best would be more likely to "shut down" or decide that giving the effort to improve was of no importance because they would never likely be considered a "top" performer. Additionally, students perceiving an ego-involved motivational climate that did in fact consider themselves to be among the best in the group would not necessarily work to improve on their skills because their goal of being the best was already achieved. Conversely, Nicholls predicted that students in a task-involving motivational climate would continue to work hard and improve because the emphasis was not on performing the best among their peers but rather bettering themselves over a period of time. Nicholls argued that a task-involving climate is best for everyone involved because all the students would be working to improve, not just a small group of the larger sample and would lead to sustained motivation.

This framework has received support in both the academic and sport venues, and

research over the past generation has supported Nicholls' assertion that a perceived task-involved climate is paramount to optimizing athletes' motivational responses (Seifriz, Duda, & Likang, 1992; Duda, 1996; Fry & Newton, 2003). Those in task-involving sport climates believe that success can be measured in effort and improvement. Rather than comparing performance to each other, athletes perceiving task-involving motivational climates are focused on increasing personal skill level and competence. Mistakes in task-involving climates are seen as part of the learning process. Athletes in an ego-involving sport climate tend to believe that only greater ability breeds success and perceive that the coach punishes their mistakes (typically by either being taken out of games or being given additional tasks in practice such as running more sprints). Coaches creating an ego-involving motivational climate view rivalry as important, not only with other teams but also with teammates. They often compare athletes to one another in terms of skill and performance. Finally, athletes perceiving ego-involving climates believe that the coach values winning above all else.

In contrast, athletes who perceive a task-involving motivational climate typically report higher enjoyment and increased likelihood of continuing to play that sport than those perceiving ego-involving motivational climates. Walling, Duda, and Chi (1993) used the Perceived Motivational Climate in Sport Questionnaire (PMCSQ) with young athletes to examine the relationship between the task and ego climate scales with participation anxiety and team satisfaction. The researchers found that athletes who perceived a higher task-involving motivational climate reported lower performance worry and higher team satisfaction. Athletes in this study who perceived an ego-involving motivational climate reported higher performance worry and lower team satisfaction.

A recent review of motivational climate literature by Harwood, Keegan, Smith, and Raine (in press) found a number of meaningful correlates of climate as it relates to physical activity. The researchers included over 100 articles pertaining to climate and assessed the quantitative trends in motivational climate literature (N = 34,156). The authors found very consistent positive relationships between the task-involving climate and competence, self-esteem, intrinsic motivation, and general sportspersonlike behaviors. Alternately, the researchers found strong links between ego-involving climate and extrinsic motivation, amotivation, poor sportspersonship, and antisocial attitudes. Additionally the researchers found negative relationships between the ego-involving climate and positive affect, autonomy, and relatedness. This is a landmark paper that shows how powerful the motivational climate can be in regard to athletes' experience and behaviors.

Recent research has revealed a third aspect of the perceived motivational climate, the caring climate, to be another key component of the environment in sport. Based off the conceptual framework of Noddings' teaching themes of care (1995), athletes in a caring climate feel nurtured, cared for, valued and respected by coaches and teammates (Newton et al., 2007b). A caring climate is critical because it has been shown to increase enjoyment among participants and enhance athletes' intention to continue their sport participation. Fry and Gano-Overway (2010) found that youth soccer athletes perceiving a caring climate also reported more positive attitudes toward their coach and teammates, and more sport enjoyment and commitment. In a study involving young athletes, Iwasaki and Fry (2013) found that those perceiving a caring and task-involving climate reported more enjoyment and likelihood to continue to participate in their sports. Additionally, those perceiving an ego-involving climate were less likely to enjoy playing. In addition to the many factors that

a caring climate can influence positively with members of a team in regards to their sport, it can also influence some very important facets of athletes' lives as they pertain to their own personal well-being.

A caring climate has been shown to have a positive relationship with a taskinvolving climate and negative relationship with an ego-involving climate (Newton et al., 2007a; Iwasaki & Fry, 2013; Brown, Fry, & Little, 2013; Moore & Fry, 2014). If athletes perceive that they are cared for and that their effort is valued, then it would posit that this sort of climate would bring dozens of positive outcomes for the people involved and few negative ones. If everybody in a group or on a team felt cared for, highly valued, and that all that mattered was giving maximum effort and improving, then the likelihood that they would give full effort and work to achieve to the best of their ability would increase exponentially. There is a misconception among individuals less familiar with motivational climate research that a caring and task-involving motivational climate does not encourage participants to strive to win or compete to their fullest. This is not the case, as young athletes typically list fun or enjoyment as a top reason for playing sport, the reason people partake in game play is to attempt to be victorious in the contest. Athletes value winning in a caring and task-involving climate, but not at the expense of other outcomes. Being in a caring and task-involving climate allows athletes to strive to win but to still value the sport experience when they work hard, improve, and work well with their teammates, even when they experience unfavorable normative outcomes.

Several researchers have explored the relationship between motivational climate and anxiety. Pensgaard and Roberts (2000) explored distress and its relation to perceived motivational climate. Among elite adult athletes, the researchers found that those

perceiving performance climates were very likely to experience distress, while those experiencing a mastery climate were less likely to experience distress due to coaches and teammates. In a hypothesized seven-factor confirmatory factor analysis looking at adolescent handball athletes, Sarrazin, Vallerand, Guillet, Pelletier, & Cury (2002) found that those perceiving ego-involving motivational climate were more likely to consider dropping out of the sport entirely, while those experiencing a task-involving motivational climate were less likely to consider dropping out. Additionally, Iwasaki and Fry (2013) found that athletes experiencing an ego-involving climate reported feeling more pressure and tension when playing their sport.

The link between motivational climate and anxiety is not surprising. One key aspect of both task and ego-involving motivational climates is making mistakes (Nicholls, 1989). In task-involving motivational climates, mistakes are seen as part of the learning process. In ego-involving motivational climates, mistakes tend to be punished. By that definition, a player perceiving an ego-involving climate has a lot more at stake. Athletes in an ego-involving climate may be concerned that a mistake is going to cost them playing time because the coach has a low tolerance for miscues. Additionally, mistakes while competing could effect the outcome of the game, which is another key aspect of ego-involving climates (winning). Players perceiving a task-involving motivational climate understand that mistakes happen and should not to be feared (additionally, because game outcomes are not prioritized in task-involving motivational climates, players are theoretically also less likely to fear their mistakes affecting game outcomes because those results are simply not emphasized). Having less fear, particularly over things that are mostly out of player control (e.g., game outcomes, skill level of opponents), is a clear path to lower anxiety.

It's important to note that teams perceiving a caring and task-involving or ego-involving motivational climate may or may not be successful in terms of wins and losses. For example, in an ego-involving motivational climate, a coach emphasizes winning, creates rivalry among players, and punishes mistakes. These behaviors happen regardless of the team's record. Should the team perform poorly, the coach will continue in creating rivalry and punishing mistakes because he or she may believe it is the only path toward improvement. If the team is successful, the coach likely believes that the rivalry/punishment mentality is what is leading toward the team's winning record.

A key takeaway from this research is that an ego-involving climate may be fine for a small portion of athletes (probably the most talented and highest performing), but are not necessarily going to be helpful for everybody on the team and can cause angst for people involved. These emotions are derived from an emphasis by the coach on winning, creating rivalry among teammates by focusing on who is the best, and punishing mistakes. Meanwhile, in task-involving motivational climates, rivalry among teammates and opponents is removed, with the focus being solely on athletes working to the best of their ability. This atmosphere can foster less harsh feelings, both toward the self or toward teammates and coaches.

Shame in sport and with PMC

While shame research is fairly substantial, it is less prominent in the realm of sport. Conroy's (2001) Performance Failure Appraisal Inventory (PFAI) is one measure that associates shame with sport performance. According to Conroy (2004), shame plays a role in both fear of failure and a person's coping ability. Conroy found that people participating in recreational physical activities who have the fear of experiencing shame and

embarrassment are more likely to have two types of goals: mastery-avoidance (MAv) and performance-avoidance. Mastery-avoidance goals occur when athletes want to avoid demonstrating incompetence, or strive to not do worse than they have done previously. Performance-avoidance goals occur when athletes want to avoid performing worse than others. Both mastery and performance-avoidance goals were strongly correlated with the fear of experiencing shame and embarrassment.

While Conroy's work suggests that the fear of experiencing shame is associated with the fear of failure, defining the reasons why athletes are experiencing shame is unclear. Athletes' personal definition of success may be such that they do not define failure as making an error or losing a game. Nicholls (1989) would suggest that athletes experiencing a task-involving motivational climate perceive that mistakes are simply a part of the learning process and they would not define making an error as failing. However, those same athletes might go into a competition without giving full effort to prepare, and feel as if they were letting teammates down in that manner (because they weren't optimally ready for the season or the game).

Others have explored the fear of failure to try in a sport setting with the experience of shame becoming a theme in their work. Sagar and Lavallee (2010) conducted in-depth interviews with three athletes in the United Kingdom and their parents. The interviews provided several common themes. The parents wanted to see their children succeed in sport so badly that they engaged in punitive behaviors and love withdrawal in order to try to urge their kids to perform better. Meanwhile, the children spent much of their time on the field fearing their parents' retribution should they play poorly or not win their respective games. The irony of this sort of environment is that in reality, parents badly want their children to

feel successful. Unfortunately for these parents, past experience has made them think that punitive behavior is a way of inspiring people to be at their best. Fear of failure (FF) on the field could lead to less fun for athletes and more stress. Further, these factors, particularly being overly concerned with meeting athletic expectations of others, can lead to reduced self esteem in young athletes (Scanlan & Passer, 1979).

Other researchers have tried to understand how athletes react when experiencing shame while participating in sport. Using Nathanson's (1992) compass of shame, Elison and Partridge (2012) measured the four "poles" of how athletes cope: attack self, avoidance, attack others, and withdrawal. Withdrawing athletes acknowledge their faults and try to hide from the situation. Examples could include not giving full effort for fear of making the mistake again or even quitting the team. The second pole, Attack Self, is when people give themselves a hard time internally for their transgressions. They may refer to themselves as "stupid" or experience general disgust or contempt toward their gameplay. At both the Withdrawing and Attacking the Self poles, people acknowledge that they've committed a transgression (or violated an expected norm) and are reacting to it accordingly. Elsewhere within the Compass of Shame, people are trying to divert their feelings elsewhere. When people experiencing shame Attack Others, they are attempting to make others feel poorly in order to avoid their own emotions. An example of attacking others would be a player putting down a teammate for making a mistake or perhaps not performing up to an ideal expectation (e.g., striking out instead of getting a hit or making a very tricky defensive play). Finally, the Avoidance pole sees people not acknowledging any negative feelings and perhaps feigning disinterest. For example, players who work hard in the offseason but are not rewarded with playing time by the coach due to lower talent

may comment to their teammates that the sport is "dumb" and not even worth their high effort.

Items on the CoSS ask a single question with four responses representing the four poles. An example question is, "When I make an embarrassing mistake in competition...I hide my embarrassment with a joke (Avoidance); I feel like kicking myself (Attack Self); I wish I could become invisible (Withdraw); I feel annoyed at people for noticing (Attack Others). Items are measured on a Likert scale from 0 (never) to four (almost always). The compass of shame provides a unique look at how people may react when feeling shame, but it does not necessarily identify how and why athletes experience shame. Tangney and Dearing (2002) have stated that more while research is needed on shame coping strategies, the most popular strategy for coping with shame is attacking others or withdrawing. The researchers would likely argue that Attacking the Self is allowing shame to dictate self-worth.

Among college athletes, Elison and Partridge (2012) found that those experiencing shame were significantly likely to experience any of the four poles of the compass of shame: attacking the self, attacking others, withdrawal, and avoidance. Additionally Partridge and Wiggins (2008) looked at the compass of shame and how it pertains to how an athlete experiences anxiety. Among participants in the study, the researchers found that those attacking themselves (blaming themselves for their failure) after experiencing shame were also likely to attack others and withdraw from competition. Additionally the researchers found that those dealing with shame by attacking others are much more likely to experience cognitive and somatic anxiety. While the work by Elison, Partridge and Wiggins (2012) still does not get to the core of why athletes experience shame in sport, it is

helpful confirmation that athletes would be better served to be put in situations where shame is minimized. Therefore, examining the relationship between perceived motivational climate and shame may be beneficial. If athletes in a caring and task-involving motivational climate experience less shame than those in an ego-involving climate, results would provide further evidence of how critical it is for athletes to feel nurtured, cared for, and pushed to give maximum effort and achieve their personal bests.

With the work of Barrett (1995) and Harter (1999) in mind, it stands to reason that shame could also be influenced by the perceived motivational climate that athletes experience. People experiencing shame feel as if they are violating the expectations of valued others (Tangney and Dearing, 2002). Meanwhile, the perceived motivational climate on sports teams also set expectations or standards. Coaches that establish a caring and task-involving motivational climate set expectations that athletes give high effort, work to improve, and show kindness and respect toward one another (Seifriz, Duda, & Likang, 1992; Walling, Duda, & Chi 1993; Newton et al., 2007). If athletes perceiving a caring and task-involving motivational climate fail to give full effort, work to improve, or show kindness and respect toward teammates and coaches, it stands to reason that they could experience shame for failing to uphold those standards. Conversely, an ego-involving climate sets expectations of winning and being considered normatively the best, whether it is among a single team or multiple teams (Sarrazin et al., 2002; Walling, Duda, & Chi 1993). If athletes fail to win games or have a performance where they could be considered a "star" competitor, it's plausible that failing to meet those expectations could also lead to an athlete experiencing shame. The environments that theoretically lead young athletes to experience shame on sports teams are not dissimilar to the environments where children

learn how to process shame.

Abell and Gecas (1997) noted that people begin to process shame at an early age, and a great deal of how they process the emotion comes from what they learn from parents. Parents looking to discipline children for transgressions typically do so using three types of control: inductive, affective, and coercive. Inductive control occurs when a parent sees the misstep and instructs on what the moral behavior in that situation should be if replayed. Affective control would be when parents withdraw love and support from the child to show that the action was not appropriate. Finally, coercive control is when the parent punishes the child for the misdeed. A real-life example may occur if a parent finds that his or her child took candy from a store. Inductive control would have the parent explaining to the child that stealing is wrong and taking anything without payment is a very bad thing to do. Affective control might see the parent yell at the child and then refuse to acknowledge or do any activities with the child for a period of time. Lastly, coercive control would likely be some sort of punishment like receiving a spanking, being grounded or not being permitted to play for a period of time. Abell and Gecas' research indicates that all three types of control do assist the child in understanding the expectations for moral social norms, but while inductive control would help the child process misdeeds as bad actions that can be addressed, affective and coercive control leads to a higher likelihood of shame where the child processes the post-transgression self as a lesser person.

The researchers' findings present a pretty clear parallel to task and ego-involving motivational climates. Team dynamics can be very close to family dynamics where the player (child) takes cues from the coach (parent). It would stand to reason that participating in sport has a series of expected norms, be it gameplay (e.g., playing the game within the

rules, trying to score more points than the other team), or social expectations (e.g., working very hard, performing at a high level). A coach exhibiting inductive control may be instructing the athlete on how to better perform after a mistake, but not fixating on the transgression as something that can't be fixed. Meanwhile, coaches showing affective and coercive control would be more likely to withdraw coaching (e.g., ignoring players who have erred) or punish mistakes (e.g., running laps, being benched for poor performance). It would follow that coaches in a perceived ego-involving climate would show more affective and coercive control over their players and thus foster more shame in their athletes.

Some of these connections have been explored as part of larger research. Tsai and Chen (2009) explored the effect that motivational climate has on fear of failure. Using Conroy's (2001) Performance Failure Appraisal Inventory (PFAI), the researchers found a relationship between the fear of experiencing shame and embarrassment and athletes perceiving an ego-involving motivational climate. Additionally in a study exploring how motivational climate is related to shame, pride, and compassion, Fontana and Fry (2015) also found a link between ego-involving climates and shame. It should be noted that in both studies, only ego-involving climates had a significant correlation with shame. There are several potential explanations for these data. First, Conroy's (2001) shame measure is limited. Conroy determined that the items in the Fear of Experiencing Shame and Embarrassment subscale (part of PFAI) were a good fit for measuring how much athletes fear failure because they do not want to experience shame and embarrassment. However, Tangney et al. (1996) would argue that shame and embarrassment are two very distinct emotions that should not be combined in a measurement. Tangney defined shame as feeling low or small due to violating a cultural standard. Conversely, Tangney noted that

embarrassment is a much less severe emotion that leads to things like blushing and smiling, not a devaluation of self worth. Additionally, Tangney noted that shame can be experienced privately, while embarrassment is very public. People can commit socially unacceptable transgressions without the public being aware, and then feel shame for the action. An example may be if a person cheated on a test or stole items from a store. However, people are only embarrassed when they think or know that other people have seen or know about their transgressions (e.g., finding out that there is food stuck in your teeth for all to see).

Also of issue with Conroy's (2001) measure is that it does not clearly define the parameters for which athletes might be experiencing shame. According to Conroy, "...individuals' perceptions of failure appeared to be grounded in beliefs that they either (a) met their evaluative criteria for failure, or (b) did not meet their evaluative criteria for success." These parameters make the reason for experiencing shame murky, as athletes are not able to directly establish scenarios in which they experience shame. Tangney and Dearing (2002) would likely say that context is critical for understanding shame because different people may or may not experience shame in the same given scenario. Most critical for experiencing shame is the notion that people have violated socially set standards. According to Nicholls (1989) and Newton et al. (2007b), there are clear expectations in caring and task-involving motivational climates (e.g., giving high effort, working to improve, treating others with kindness and respect) just as there are clear expectations in ego-involving climates (e.g., winning, being the best normatively among others, not making mistakes). With that in mind, it stands to reason that athletes could feel shame for reasons that have nothing to do with performance outcomes. Athletes could certainly experience shame if they deem that their effort levels were not high enough or that they

"went through the motions" rather than working to improve their skills, just as they could experience shame for performing poorly in competition. There is a clear need for a measurement tool that can clearly define why athletes are experiencing shame, and to see if certain motivational climates cause athletes to be more prone to shame than others.

Conclusion

Shame is an interesting and complex emotion to explore within psychological research. While shame may be necessary as a consequence for failing to live up to social standards, actually experiencing it has many negative consequences. People experiencing shame feel as if others are looking down on them. The result is that they tend to have lower self-worth and self esteem and do not feel as if their actions are repairable. This is in stark contrast to those who feel guilt. Individuals who feel guilty do not feel like they are bad people, but do want to try and repair their misdeeds as quickly as possible.

Identifying whether or not one feels guilty or ashamed is difficult because the emotions are often confused with one another. Only being very specific about scenarios and how the person feels during those scenarios can encompass whether or not shame is being experienced. Tangney and Dearing (2002) have stated that shame proneness in individuals is unpredictable. In sport, any athlete could be prone to shame. For a coach to change an athlete's shame-proneness, it would require a high amount of time, caring, understanding, and trust. Even if coaches can't immediately change athletes' shame-proneness, it's likely that they can furnish environments where athletes may be less likely to experience shame. Coaches can create an environment where upholding expectations is plausible for every athlete involved.

The motivational climate has been shown through copious research to be a very

effective indicator of overall athlete experience. A positive motivational climate (caring and task-involving motivational climate) is key to athlete enjoyment, caring behaviors, sportspersonship, and commitment (Newton et al. 2007a, Fry & Gano-Overway, 2010, Iwasaki & Fry, 2013). A negative motivational climate (ego-involving motivational climate) fosters anxiety, rivalry, poor sportspersonship, and a higher likelihood of dropout (Duda, 1996; Pensgaard & Roberts, 2000; Sarrazin et al., 2002). In an ego-involving motivational climate, by definition not all athletes can be considered the best normatively, and winning is not always in an athlete's control (athletes have little control over how talented their teammates or competitors are). However, in a caring and task-involving climate, all players can uphold the standards of effort, improvement, and kindness and respect toward teammates, thus limiting the potential for any single athlete to feel shame while playing on the team.

It stands to reason that an ego-involving motivational climate could foster shame in athletes. Limited research has shown that there is a link between the two (Tsai & Chen, 2009; Fontana & Fry, 2015). Research by Tangney and Dearing (2002) and Abell and Gecas (2007) would indicate that shame could theoretically be fostered on teams that promote punishment for mistakes and rivalry among teammates. Athletes could also experience shame in caring and task-involving motivational climates (perhaps if they failed to give maximum effort or did not engage in caring behaviors toward teammates and coaches). However, given the work done on caring behavior by Noddings (1995) and research on caring climate (Newton et al., 2007b, Fry & Gano-Overway, 2010; Fry et al., 2012; Iwasaki & Fry, 2013), it's unlikely that shame would be fostered on teams where a caring climate is perceived.

Unfortunately, current measures exploring shame in sport are inadequate. There is a clear need for a measurement tool that can explore why athletes might be experiencing shame on their teams and the relationship between their shame levels to the motivational climate. Such a measure would be a valuable addition to the motivational climate literature, providing a clearer understanding of what is happening to athletes' self-conscious emotions when experiencing caring and task-involving or ego-involving motivational climates.

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well	Directions: These items explore how you feel when things don't go well for you when participating on this team. Circle the answer for each item that best describes how you feel.		ree	ral	o.	Strongly Agree
On	this team	Strongly Disagree	Disagree	Neutral	Agree	Stron
1.	I would feel ashamed if I made a big mistake in competitions that could affect whether the team wins or loses.	1	2	3	4	5
2.	I would not deserve to wrestle if I didn't try as hard as possible.	1	2	3	4	5
3.	If I make a mistake, I feel like my coaches and teammates think less of me.	1	2	3	4	5
4.	I would feel shame if I didn't keep working hard to improve my skills.	1	2	3	4	5
5.	I wouldn't want to face my coaches and/or teammates if I made a mistake.	1	2	3	4	5
6.	If I didn't work as hard as I could, I would want to shrink away.	1	2	3	4	5
7.	If I were to mess up, I would wish I could disappear.	1	2	3	4	5
8.	If I didn't give my best effort during the preseason, I would feel like I shouldn't be part of the team.	1	2	3	4	5
9.	If I didn't perform to the expectations of coaches and teammates, I would feel small.	1	2	3	4	5
10.	I would feel like I let teammates and coaches down If I didn't try my hardest.	1	2	3	4	5
11.	If I didn't have a strong performance, I would feel like a failure.	1	2	3	4	5
12.	If I didn't work hard, it would be difficult to look my coaches and teammates in the eye.	1	2	3	4	5
13.	If things didn't go well for me in a competition, I would feel as if I've let everybody down.	1	2	3	4	5
14.	I would feel like a failure if I didn't do everything I could to reach my potential.	1	2	3	4	5
15.	If I didn't perform well, I would feel alone.	1	2	3	4	5
16.	I would feel ashamed If I did not give full effort when in practice or competitions.	1	2	3	4	5
17.	If I didn't perform to my expectations, I would feel low.	1	2	3	4	5
18.	I would feel alone if I did not do everything possible to improve.	1	2	3	4	5

feel, each	ctions: These statements ask how hard you try, how skilled you and how much you enjoy your sport. Choose the answer for item that best describes how you feel.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1.	I am the only one who can do a skill.	1	2	3	4	5
2.	I learn a new skill and it makes me want to practice more.	1	2	3	4	5
3.	I can perform better than other people.	1	2	3	4	5
4.	Others can't perform as well as me.	1	2	3	4	5
5.	I learn something that is fun to do.	1	2	3	4	5
6.	Others mess up and I don't.	1	2	3	4	5
7.	I learn a new skill by trying hard.	1	2	3	4	5
8.	I work really hard.	1	2	3	4	5
9.	I have the best stats.	1	2	3	4	5
10.	Something I learn makes me want to practice more.	1	2	3	4	5
11.	I am the best.	1	2	3	4	5
12.	A skill I learn really feels right.	1	2	3	4	5
13.	I do my very best.	1	2	3	4	5

Pleas	e questions ask how you feel about your sport. e circle the answer that you feel best describes you feel.	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	I consider myself a wrestler.	1	2	3	4	5	6	7
2.	I have many goals related to wrestling.	1	2	3	4	5	6	7
3.	Most of my friends are wrestlers.	1	2	3	4	5	6	7
4.	Wrestling is the most important part of my life.	1	2	3	4	5	6	7
5.	I spend more time thinking about wrestling than anything else.	1	2	3	4	5	6	7
6.	I feel bad about myself when I wrestle poorly.	1	2	3	4	5	6	7
7.	I would be very depressed if I were injured and could not wrestle.	1	2	3	4	5	6	7

Directions: Read each statement and think about what it's like to compete on your team. Choose the answer for each item that best describes what you think.		Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
On n	On my team			No	Ag	Str
1.	The wrestlers are treated with respect.	1	2	3	4	5
2.	The coaches respect the wrestlers.	1	2	3	4	5
3.	The coaches are kind to the wrestlers.	1	2	3	4	5
4.	The coaches care about the wrestlers.	1	2	3	4	5
5.	The players feel that they are treated fairly.	1	2	3	4	5
6.	The coaches try to help wrestlers.	1	2	3	4	5
7.	The coaches want to get to know all the wrestlers.	1	2	3	4	5
8.	The coaches listen to team members.	1	2	3	4	5
9.	Wrestlers like one another for who they are.	1	2	3	4	5
10.	The coaches accept wrestlers for who they are.	1	2	3	4	5
11.	Wrestlers feel comfortable.	1	2	3	4	5
12.	Wrestlers feel safe.	1	2	3	4	5
13.	Wrestlers feel welcome every day.	1	2	3	4	5



your the 5	ctions: As you read the following statements think about what team has been like this season. Please circle the number on s-point scale listed below that best describes how you truly feel.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1.	Wrestlers feel good when they do better than their teammates.	1	2	3	4	5
2.	Trying hard is rewarded.	1	2	3	4	5
3.	Wrestlers are punished when they make mistakes.	1	2	3	4	5
4.	Coaches focus on skill improvement.	1	2	3	4	5
5.	Wrestlers are taken off the mat for mistakes.	1	2	3	4	5
6.	Each wrestler's improvement is important.	1	2	3	4	5
7.	Wrestling better than teammates is important.	1	2	3	4	5
8.	Wrestlers try to learn new skills.	1	2	3	4	5
9.	Coaches pay most attention to the "stars."	1	2	3	4	5
10.	Wrestlers are encouraged to work on weaknesses.	1	2	3	4	5
11.	Doing better than others is important.	1	2	3	4	5
12.	Coaches want us to try new skills.	1	2	3	4	5
13.	Coaches favor some Wrestlers.	1	2	3	4	5
14.	Wrestlers like wrestling against good teams.	1	2	3	4	5
15.	Wrestlers are encouraged to out-perform their teammates.	1	2	3	4	5
16.	Everyone wants to be the best wrestler/OW.	1	2	3	4	5
17.	Each wrestler feels like they have an important role.	1	2	3	4	5
18.	Only the best wrestlers get noticed.	1	2	3	4	5
19.	Most wrestlers get to compete.	1	2	3	4	5
20.	Wrestlers are afraid to make mistakes.	1	2	3	4	5
21.	Only a few wrestlers can be the "stars."	1	2	3	4	5

:Age:				
_				•

Gender: Male Female

Ethnicity (You may specify more than one):

White Black/African American Hispanic/Latino

Native American/American Indian Asian/Pacific Islander Other

Class (circle one):	Freshman	Sophomore	Junior	Senior						
Team (circle one):	Freshman	Team	JV T	eam	Varsity Team					
Weight Class:										
What was your bes	t wrestling a	ccomplishmen	t this seas	on (for ex	kample, tournament					
performance, best win, best job in practice)?										
What is your best v	vrestling acc	omplishment ir	n your car	eer?						
What is your record	d this season	?								
On this team which	ı coach do yo	ou work most c	losely wit	h?						
Number of years yo	ou have wres	stled for your h	igh schoo	l?						
Number of years yo	ou have wres	stled overall? _								
Would you like to v	vrestle next	year? Yes N	0							
Are you glad that w	ou wrestled	this vear? Ve	s No							

well	ctions: These items explore how you feel when things don't go for you when participating on this team . Circle the answer for item that best describes how you feel.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	I would feel ashamed if I made a big mistake in competitions that could affect whether the team wins or loses.	1	2	3	4	5
2.	I would not deserve to compete if I didn't try as hard as possible.	1	2	3	4	5
3.	If I make a mistake, I feel like my coaches and teammates think less of me.	1	2	3	4	5
4.	I would feel shame if I didn't keep working hard to improve my skills.	1	2	3	4	5
5.	I wouldn't want to face my coaches and/or teammates if I made a mistake.	1	2	3	4	5
6.	If I didn't work as hard as I could I would want to shrink away.	1	2	3	4	5
7.	If I were to mess up, I would wish I could disappear.	1	2	3	4	5
8.	If I didn't give my best effort during the preseason, I would feel like I shouldn't be part of the team.	1	2	3	4	5
9.	If I didn't perform to the expectations of coaches and teammates, I would feel small.	1	2	3	4	5
10.	I would feel like I let teammates and coaches down If I didn't try my hardest.	1	2	3	4	5
11.	If I didn't have a strong performance, I would feel like a failure.	1	2	3	4	5
12.	If I didn't work hard, it would be difficult to look my coaches and teammates in the eye.	1	2	3	4	5
13.	If things didn't go well for me in a competition, I would feel as if I've let everybody down.	1	2	3	4	5
14.	I would feel like a failure if I didn't do everything I could to reach my potential.	1	2	3	4	5
15.	If I didn't perform well, I would feel alone.	1	2	3	4	5
16.	I would feel ashamed If I did not give full effort when in practice or competitions.	1	2	3	4	5
17.	If I didn't perform to my expectations, I would feel low.	1	2	3	4	5
18.	I would feel alone if I did not do everything possible to improve.	1	2	3	4	5

feel, each	ctions: These statements ask how hard you try, how skilled you and how much you enjoy your sport. Choose the answer for item that best describes how you feel.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
I fee	l most successful in track and field when	Sti	٥	ž	Ag	Stı
1.	I am the only one who can do a skill.	1	2	3	4	5
2.	I learn a new skill and it makes me want to practice more.	1	2	3	4	5
3.	I can do better than other people.	1	2	3	4	5
4.	Others can't do as well as me.	1	2	3	4	5
5.	I learn something that is fun to do.	1	2	3	4	5
6.	Others mess up and I don't.	1	2	3	4	5
7.	I learn a new skill by trying hard.	1	2	3	4	5
8.	I work really hard.	1	2	3	4	5
9.	I have the best stats.	1	2	3	4	5
10.	Something I learn makes me want to practice more.	1	2	3	4	5
11.	I am the best.	1	2	3	4	5
12.	A skill I learn really feels right.	1	2	3	4	5
13.	I do my very best.	1	2	3	4	5

Pleas	e questions ask how you feel about your sport. e circle the answer that you feel best describes you feel.	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
1.	I consider myself a track athlete.	1	2	3	4	5	6	7
2.	I have many goals related to track and field.	1	2	3	4	5	6	7
3.	Most of my friends are track and field athletes.	1	2	3	4	5	6	7
4.	Track and field is the most important part of my life.	1	2	3	4	5	6	7
5.	I spend more time thinking about track and field than anything else.	1	2	3	4	5	6	7
6.	I feel bad about myself when I perform poorly.	1	2	3	4	5	6	7
7.	I would be very depressed if I were injured and could not perform.	1	2	3	4	5	6	7

Directions: Read each statement and think about what it's like to compete on your team. Choose the answer for each item that best describes what you think.		Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
On n	On my team		Dis	Š	Agı	Str
1.	The athletes are treated with respect.	1	2	3	4	5
2.	The coaches respect the athletes.	1	2	3	4	5
3.	The coaches are kind to the athletes.	1	2	3	4	5
4.	The coaches care about the athletes.	1	2	3	4	5
5.	The athletes feel that they are treated fairly.	1	2	3	4	5
6.	The coaches try to help athletes.	1	2	3	4	5
7.	The coaches want to get to know all the athletes.	1	2	3	4	5
8.	The coaches listen to team members.	1	2	3	4	5
9.	Athletes like one another for who they are.	1	2	3	4	5
10.	The coaches accept athletes for who they are.	1	2	3	4	5
11.	Athletes feel comfortable.	1	2	3	4	5
12.	Athletes feel safe.	1	2	3	4	5
13.	Athletes feel welcome every day.	1	2	3	4	5



your the 5	ctions: As you read the following statements think about what team has been like this season. Please circle the number on 5-point scale listed below that best describes how you truly feel.	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1.	Athletes feel good when they do better than their teammates.	1	2	3	4	5
2.	Trying hard is rewarded.	1	2	3	4	5
3.	Athletes are punished when they make mistakes.	1	2	3	4	5
4.	Coaches focus on skill improvement.	1	2	3	4	5
5.	Athletes are taken off the field for mistakes.	1	2	3	4	5
6.	Each athlete's improvement is important.	1	2	3	4	5
7.	Performing better than teammates is important.	1	2	3	4	5
8.	Athletes try to learn new skills.	1	2	3	4	5
9.	Coaches pay most attention to the "stars."	1	2	3	4	5
10.	Athletes are encouraged to work on weaknesses.	1	2	3	4	5
11.	Doing better than others is important.	1	2	3	4	5
12.	Coaches want us to try new skills.	1	2	3	4	5
13.	Coaches favor some athletes.	1	2	3	4	5
14.	Athletes like competing against good teams.	1	2	3	4	5
15.	Athletes are encouraged to out-perform their teammates.	1	2	3	4	5
16.	Everyone wants to be the best.	1	2	3	4	5
17.	Each athlete feels like they have an important role.	1	2	3	4	5
18.	Only the best athletes get noticed.	1	2	3	4	5
19.	Most athletes get to compete.	1	2	3	4	5
20.	Athletes are afraid to make mistakes.	1	2	3	4	5
21.	Only a few athletes can be the "stars."	1	2	3	4	5

Age:	

Gender: Male Female

Ethnicity White

(you may circle Hispanic/Latino

more than one): Black/African American

Native American/American Indian

Asian/Pacific Islander

Other

Class (circle one) Freshman Sophomore Junior Senior

Team (circle one)	Freshman Team	JV Team	Varsity Team		
Preferred Event:					
What was your bes	t track and field accomp	lishment this s	eason (for example, meet		
performance, best j	job in practice)?				
What is your best track and field accomplishment in your career?					
Do you expect to qu	ualify for the state tourn	ament?			
Which coach do you	u work most closely with	n?			
Number of years you have competed for your high school?					
Number of years you have competed overall?					
Do you plan to compete next year? Yes No					
Are you glad that yo	ou competed this year?	Yes No			



APPROVAL OF PROTOCOL

February 4, 2015

Mario Fontana mfontana@ku.edu

Dear Mario Fontana:

On 2/4/2015, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Creating and Validating the Shame in Sport Questionnaire for
	High School Athletes
Investigator:	Mario Fontana
IRB ID:	STUDY00002148
Funding:	None
Grant ID:	None
Documents	• Fontana_Assent.docx, • Fontana_InfoStatement.docx, •
Reviewed:	Fontana_HSCL.pdf, • Sample_email.docx, •
	Fontana_Questionnaire.pdf, • Fontana_Methods.docx, •
	Fontana_Questionnaire2.docx, • Response to Stephanie

The IRB approved the submission from 2/4/2015 to 2/3/2016.

- Before 2/3/2016 submit a Continuing Review request and required attachments to request continuing approval or closure.
- Any significant change to the protocol requires a modification approval prior to altering the project.
- Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at https://rgs.drupal.ku.edu/human_subjects compliance training.
- 4. Any injury to a subject because of the research procedure must be reported immediately.
- When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

If continuing review approval is not granted before the expiration date of 2/3/2016 approval of this protocol expires on that date.

Please note university data security and handling requirements for your project: https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm

You must use the final, watermarked version of the consent form, available under the "Documents" tab in eCompliance.

Sincerely,

Stephanie Dyson Elms, MPA IRB Administrator, KU Lawrence Campus