Athletes’ Perceptions of the Motivational Climate on Their Teams in Relation to Career Exploration and Athletic Identity

By

Kiira Noelle Poux

Submitted to the graduate degree program in Health, Sport, and Exercise Science and the Graduate Faculty of the University of Kansas in partial fulfilment of the requirements for the degree of Master in Science in Education

Mary Fry, PhD.
Chairperson

Jordan Bass, PhD.

Tom Krieshok, PhD.
Date Defended: July 23, 2014

The Thesis Committee for Kiira Noelle Poux certifies that this is the approved version of the following thesis:

Athletes’ Perceptions of the Motivational Climate on Their Teams in Relation to Career Exploration and Athletic Identity

Chairperson Mary Fry, Ph.D.

Date Approved: July 23, 2014
Abstract
The core mission of the National Collegiate Association of Athletes (NCAA) is to develop individuals as both students and athletes in preparation for life after their collegiate endeavors. The purpose of this study was to examine the relationship between collegiate athletes’ perceptions of the climate on their sport teams to their career exploration and engagement, and their athletic identity. Student-athletes (N= 101) in both revenue and nonrevenue sport from various NCAA Division I institutions were administered online surveys assessing their perceptions of the climate on their sport teams, their athletic identity, career exploration, and career engagement. Canonical correlation analysis was employed to examine the relationship between the climate variables (i.e. caring, task, and ego) to athletic identity (AIMS), career self-efficacy (CDSES), and career exploration/engagement (EXPENG). Loadings revealed that perceptions of a high task-involving climate and moderate caring climate were positively associated with athletes’ reporting higher athletic identity, career self-efficacy, and career exploration/engagement. Perceptions of an ego-involving climate did not contribute to the canonical relationship, although the variable was negatively associated with career self-efficacy. Results suggest that Division I coaches may want to consider fostering a caring and task-involving team climate for Division I athletes to help them develop as holistic individuals who spend their college years performing at a high level of sport and also preparing for their lives after sport.
Athletes’ Perceptions of the Motivational Climate on Their Teams in Relation to Career Exploration and Athletic Identity

From the time of high school onward, individuals pursuing athletics at the collegiate level, and potentially beyond, devote significant time and energy to their craft. Considerable evidence suggests the physical and psychological benefits that can be reaped from participation in organized sport at varying levels (Wann, 2006). The core mission of the National Collegiate Association of Athletes (NCAA) is to develop individuals as both students and athletes in preparation for life after their collegiate endeavors, although some evidence suggests that collegiate level athletes, particularly at the Division I level are not adequately prepared for life after termination of their athletic career (Beamon, 2012). For some athletes, the time commitments and demands of playing competitive sport impair their ability to foster and pursue interests in future careers in comparison to university students who were not meeting the demands of NCAA sport (Houle, Brewer, & Kluck, 2010). Brewer (1993) and Beamon (2012) revealed that many athletes form a strong athletic identity that can lead to identity foreclosure, thus limiting the exploration in areas outside of their sport participation that they engage in at such a key point in their self-developmental process.

According to developmental psychologist Marcia (1966), there are two processes which characterize identity adoption, exploration and foreclosure. Exploration refers to individuals dedicating a period of time to investigating and building upon their interests, and Marcia (1966) suggests exploration occurs across the adolescent to young adult years. At some point across this period individuals begin to decide which of these interests most strongly align with their goals.
and beliefs. As they narrow their interests, this leads them to a state of commitment. Individuals are able to devote these exploration years to participating in organizations, taking courses and exploring opportunities to create a scaffold of sorts for the professional selves they would ultimately like to construct (Krieshok, 2008). The second process involves foreclosure, which involves premature commitment to an interest. Foreclosure can be characterized by little varied exploration and discernibly high levels of commitment. Marcia describes individuals’ healthy development as occurring when they have a lengthy period of exploration resulting in late stage foreclosure; this process is most likely to lead individuals to thrive in their lives and experience high achievement. A concern arises when individuals foreclose early on in life, before they have had adequate time to explore different activities (e.g., careers, hobbies). When this occurs, individuals typically invest in an exclusive identity at an early stage, at the risk of underdeveloping other identity dimensions.

Research has revealed that many athletes who compete at a high level of sport form a strong athletic identity (Brewer & Selby, 1993). This is not surprising given the rigor and demands of elite athletic participation. For example, Division I athletes spend many hours in practice and competition, in addition to team meetings, strength and conditioning sessions, and community outreach and appearances. All these activities are spent with teammates and coaches, and create a sport culture as a result of constant exposure. This culture can create an optimal environment for achieving high levels of athletic performance, as excellence is rarely achieved without this standard of commitment. However, research in sport has revealed that a high athletic identity is sometimes harmful to athletes when looking at the bigger picture of their overall development. Beamon (2012) found that Division I athletes with high athletic identity reported
investing less in their academic pursuits due to the demands of their sport. For example, in Beamon’s study, athletes gave less consideration to the majors they chose, because they saw the selection of their majors as a requirement that needed to be met in order to play their sport and not as an important decision impacting their future. These athletes also indicated they put less effort into their class assignments and were less concerned with missing class. Adler and Adler (1991) reported that athletes’ salience of academic identity diminished over the course of their college careers due to a lack of academic role reinforcement.

In addition to academic shortfalls, athletes with high athletic identity have also struggled more with rehabilitation after injuries. Researchers found that athletic identity was threatened for athletes dealing with ACL injuries. (Brewer, Cornelius, Stephan, & Van Raalte, 2010; Brewer, Raalte, and Linder, 1993). Brewer, Cornelius, Stephan, and Van (2010) also found that injured athletes with high athletic identity were more likely to experience heightened levels of depression during the rehab process, than were athletes with lower athletic identity. These results suggest cause for concern for athletes with high athletic identity, given the volatile nature of sport and the potential for serious injury.

Research has also demonstrated that athletes with high athletic identity experience social identity struggles when faced with the prospect of the termination of their athletic career. Specifically, Beamon (2012) describes athletes experiencing a social shift after their athletic career whereby they feel a hole in their social network (i.e., they no longer spend time with teammates daily) that hasn’t been replaced with new friendships. In addition, the social interactions they do have can be less fulfilling. Individuals they know and meet often are focused
on their past athletic accomplishments, making it challenging to focus on their future rather than their sport past.

Finally, research has revealed that high athletic identity can be harmful to athletes’ self-identity and self-satisfaction. Todd and Kent (2003) found that athletes with high athletic identity and a low sense of competence in their sport reported more negative perceptions of self. In a similar vein, Beamon (2012) also found that athletes with high athletic identity were negatively influenced in this specific realm of self-identity.

Overall, research in the sport psychology literature examining athletic identity and its consequences has revealed a number of concerns for future outcomes for student athletes. As best described by Brewer et al. (1993), an individual with strong athletic identity ascribes a significant level of importance to involvement in sport/exercise and is especially sensitized to self-perceptions in the athletic domain. In sport specific identity formation, individuals can place affective status, feelings of esteem and self-worth, and reason for motivation within a framework heavily or solely based on their sport performance (Brewer, 1993). The potential for these negative outcomes can denigrate the central goals for participation in collegiate sports. Given the reality of elite collegiate athletic participation and its’ affiliated demands, lowering athletic identity does not seem to be a feasible manner to address these issues. High athletic identity is likely to remain strong in sport. Rather, identifying a buffer between athletic identity and negative outcomes is an important area of inquiry.

A theoretical framework which could provide insight to offset some of the negatives affiliated with high athletic identity is Nicholls’ (1984, 1989) Achievement Goal Perspective Theory. This theoretical framework supports the notion that athletes at various levels can
optimize their health, enjoyment, performance, and overall wellbeing through sport, when created as a safe space and with an overall positive coaching climate (Nicholls, 1984; 1989). According to Nicholls, individuals perceive a motivational climate in achievement settings that can impact their motivational responses. He identified two distinct climates: a task- and ego-involving climate. In sport research, a task-involving climate is characterized by the coach valuing each athlete’s personal effort, improvement and mastery; encouraging cooperation among teammates; and considering mistakes as part of the learning process. In turn, an ego-involving climate in sport is characterized by a coach emphasizing the importance of competitive outcomes and normative ability, creating rivalry among teammates, and punishing mistakes. Nicholls predicts that in a task-involving climate where individuals are focused on their effort and improvement, and have greater autonomy, they will display more adaptive motivational responses (e.g., effort, persistence). In contrast, he warns of the potential detrimental effects on individuals in ego-involving climates, as individuals have less control over normative comparisons in environments where outcomes are the sole defining factor for success.

Recently, researchers have considered a third aspect of the climate, the extent that it is perceived to be caring. A caring climate has been defined as an environment where everyone perceives that all members of the group are treated with mutual kindness and respect, and feel a sense of comfort and value (Newton, Fry et al, 2007). Research on caring in sport has stemmed from Noddings’ philosophical approach to human development, as she suggested that being in a caring environment is critical to optimal achievement and life experiences (Noddings, 2004).

Research in sport has supported the importance of creating a caring and task-involving climate for athletes, as well as concerns about strong ego-involving climates. A caring climate
has been associated with a host of critical positive outcomes such as greater emotional regulation (i.e., being able to express joy when good things happen, and temper negative emotions in challenging situations); psychological wellbeing (e.g., experiencing greater happiness and hope, and less depression and sadness), and prosocial behaviors. In addition, athletes who perceive a caring climate have reported engaging in more caring behaviors with their teammates and coaches (Fry & Gano-Overway, 2010). Further, perceptions of a task-involving climate have consistently been associated with higher levels of enjoyment, effort and overall intrinsic motivation (Keegan, Spray & Lavallee, 2010). In contrast, athletes perceiving an ego-involving climate have reported the converse of these responses, such as lower effort and enjoyment and greater anxiety and burnout (Isoard-Gautheur, Guillet-Descas, & Duda 2013). Taken together, this body of research suggests that athletes who perceive a caring and task-involving climate on their teams are more likely to experience optimal physical and psychological well-being.

Although motivational climate research has not considered athletic identity or athletes’ levels of career exploration, it stands to reason that these constructs may be closely related. Interestingly, a caring climate has been linked to athletes reporting greater teamwork, and desire to take initiative, which could translate into them feeling more comfortable exploring activities and pursuits beyond the athletic arena (Gould, Flett, & Lauer, 2012). There is potential that a caring and task-involving climate plays a key role in athletes formulating a healthy athletic identity, which is not at the expense of foreclosing on other important aspects of their lives. In a caring and task-involving climate individuals are made to feel important exclusive of their athletic performance. There is a genuine caring for each individual, and their interests and goals both within and outside the arena of sport. This sense of caring is fostered both between coaches
and athletes and among all athletes. Such an environment would set athletes up to feel secure and empowered to explore interests, careers, and potential nonathletic pursuits over the course of their collegiate sport career. It seems less likely that athletes would have this same sense of empowerment and support to explore to the same degree in an ego-involving climate. Thus, the purpose of this study was to examine the relationship between collegiate athletes’ perceptions of the climate on their sport teams to their career exploration and engagement, and athletic identity levels. It was hypothesized that all athletes would have a high athletic identity. However, those athletes who perceived a higher caring and task-involving climate, and lower ego-involving climate on their sport teams would score significantly higher on career exploration and engagement.

Method

Participants. Respondents included 50 male and 50 female collegiate level NCAA athletes (18-23 years old), along with one individual who did not identify gender (n=101). Athletes were invited to complete a survey through a sport and exercise Listserv as well as through personal contacts authors had with athletic departments around the nation. The sample included individuals involved in both team and individual sports with a racially/ethnically diverse population sample. Individuals were drawn from institutions across various regions of the United States at the Division I level. Approval to conduct this study was obtained from the researchers’ university and consent was obtained from each athlete. The majority (53%) of respondents identified as Caucasian, 43% identified as African American/Black, 6% identified as Hispanic, and 3% identified as Mixed Race (unspecified). In terms of scholastic year of enrollment, 28% identified as juniors, 23% identified as sophomores, 20% responded as freshman, 20% as
seniors, 5% as fifth year seniors, and 3% as graduate students. The average GPA reported was 3.42 ($SD = 1.07$).

**Procedure.** Participants were contacted directly at athletic meetings (e.g., study halls) or via email, and they were able to complete the survey online. The questionnaire assessed the following: demographic information, perceived motivational climate, athletic identity, and career exploration and engagement.

**Measures.**

**Motivational Climate.** The motivational climate on athletes’ teams was being measured using the 21-item Perceived Motivational Climate in Sport Questionnaire (PMCSQ). The PMCSQ was developed by Seifriz, Duda, and Chi (1994). This questionnaire assesses the extent that athletes perceive the environment on their team as more task- or ego-involving. The PMCSQ consists of items with a five-point Likert Scale. Athletes responded to the questions with a 5-point scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”. The PMCSQ has demonstrated both factorial validity and internal reliability (Ntoumanis, 2012). The task-involving scale has 12 items (e.g. “On this team, the coaches focus on skill improvement”) and the ego-involving scale has nine items (e.g. “The coaches favor some athletes over others”).

**Caring Climate.** The caring climate on athletes’ teams was measured using the 13-item, Caring Climate in Sport Scale created by Newton, Fry, Watson, et al. (2007). The Caring Climate Scale has demonstrated both factorial and internal reliability (Newton, Fry, Watson, et al, 2007). Examples of items include “Athletes feel they are treated with respect”. Athletes respond to the items with a 5-point scale ranging from strongly disagree (1) to strongly agree (5).
**Athletic Identity.** The Athletic Identity Measurement Scale (AIMS) developed by Brewer, Raalte, and Linder (1993) was employed to assess the extent that the athletes identify themselves primarily by their athletic participation. The measure contains seven items rated on a 7-point Likert scale, 1=strongly disagree to 7=strongly agree. Mean scale scores were calculated. Brewer, Raalte, and Linder found support for the reliability of the scale $\alpha=.89$. (e.g., I feel bad about myself when I do poorly in sport.)

**Occupational Exploration and Engagement.** Occupational engagement and levels of exploration was assessed with the Student Occupational Engagement Scale (EXPENG) developed by Cox and Krieshok (2013). This scale examines the extent that individuals are exploring and preparing for their future training and employment. Permission was obtained by the researcher to utilize the student-OES for the study. The measure contains nine items and participants responded to the items with a 5-point scale ranging from 1 (not at all like me) to 5 (very much like me). A sample item is, “I volunteer in an area that I find interesting”.

**Career Decision Self-Efficacy.** Student athletes’ feelings of self-efficacy were measured using the Career Decision Self-Efficacy Scale created Betz and Taylor (2001; CDSES). This scale examines the extent to which individuals feel confident to enact in career decision making and pursuit. This is a 25-item measure using a 5-point scale ranging from 1 (no confidence at all) to 5 (Complete confidence). A sample item was “Make a plan of your goals in the next five years.”
Statistical Analyses

The mean, standard deviation, and Cronbach reliability coefficients were calculated for each of the scales. Next, Pearson correlation coefficients were calculated for each of the variables measured. Further, canonical correlation analyses were conducted to examine the relationship between the climate variables (caring, task, ego) to the career exploration and engagement scale and athletic identity.

Results

Cronbach’s alpha reliability coefficients were calculated for each of the scales and revealed acceptable values (> .72) Mean scores and standard deviations for each of the scales were calculated and are presented in Table 1. In general, athletes perceived a moderately caring, task-involving climate and moderately higher ego-involving climate. Further, athletes reported possessing high athletic identity, and moderately high career self-efficacy (CDSES) and exploration/engagement (EXPENG).

Pearson correlation analyses were conducted on the scales and are also presented in Table 1. Perceptions of a caring and task-involving climate were positively and significantly correlated with athletes’ sense of career self-efficacy (CDSES) and exploration/engagement (EXPENG). Perceptions of a task-involving climate were also positively and significantly associated with levels of athletic identity (AIMS). Perceptions of an ego-involving climate were not significantly associated with the AIMS, CDSES, and EXPENG scores.

Canonical correlation analysis was employed to examine the relationship between the climate variables (i.e., caring, task, and ego) to athletic identity (AIMS), career self-efficacy
Results revealed one significant function \([L=.57, F (9) =5.46 (p<.001)]\). The canonical correlation was .61 with 37% overlapping variance (See Figure 1). Loadings revealed that perceptions of a high task-involving climate and moderate caring climate were positively associated with athletes’ athletic identity, career self-efficacy, and career engagement.

Discussion

The purpose of this study was to examine the relationship between Division I athletes’ perceptions of the climate to their athletic identity and career exploration and engagement. Findings were in line with the hypotheses and previous literature in that athletes’ perceptions of a task-involving climate were positively associated with their athletic identity, along with their career exploration and engagement.

These results suggest that the presence of a caring and task-involving climate may be critical for the development of athletes as both students and holistic human beings. Creating this positive and supportive environment appears to set the foundation necessary to assist athletes in becoming well-rounded student-athletes, in alignment with the core mission of the NCAA.

Considering the small percentage of Division I athletes who continue their athletic career post college, fostering an interest beyond athletic endeavors is important for optimizing students’ lives after graduation and/or their athletic career termination. Research conducted by Beamon (2012) and Stone (2012) suggest that many college athletes care little about their academic pursuits while in college and give minor consideration to the major they select during these formative years. Research suggests this occurs because these athletes’ total and complete focus was on their athletic performance and participation. These individuals find themselves in the
predicament of seeking future employment, too often without the proper training and preparation
that could have been obtained while they were in their collegiate years (Yukhymenko–Lescroart,
2014).

This study employed measures of self-efficacy and behaviors related to exploration and
engagement as they determine whether student-athletes felt confident in their career decision
making, and if they engaged in active behaviors with regard to their future pursuits. One may
posit in light of Busseri’s research (2011) that athletic involvement and identification could
result in a lack of focus on ulterior interests for many athletes. The finding that a caring and task-
involving climate correlated positively with both athletic identity and career exploration
measures suggests career exploration did not have to be at the expense of athletes’ sport
development. The findings suggest that coaches who foster a caring environment and who are
invested in their athletes’ total development and preparation for the future as opposed to only
their competitive outcomes provide a strong foundation for their athletes to explore careers and
future endeavors beyond sport. In contrast, coaches who create a climate focused solely on
performance outcomes may severely hamper their athletes’ development off the field.

This study included two measures of development beyond sport, a measure of athletes’
confidence that they can make good decisions related to their future careers, as well as a measure
assessing the extent that athletes engage in behaviors that will strengthen their ability to make
career decisions. These measures were positively correlated as expected, but together serve to
paint a picture of athletes’ interest, commitment, and confidence in pursuing life after their sport
careers end. The inclusion of both these measures is a strength of the study and offers support
that Division I athletes can engage in high level sport while pursuing a college education and
developing their career preparation capabilities.

While the hypotheses predicting a relationship between athletes’ perceptions of the
climate on their teams to their investment in life after sport were supported, interestingly the
hypothesis that Division I athletes would report high athletic identity regardless of their
perceptions of the climate was not supported. Instead, athletes who perceived a higher task-
involving climate were significantly more likely to report higher levels of athletic identity than
those perceiving a lower task-involving climate, and a significant correlation did not emerge for
the relationship between athletes’ perceptions of an ego-involving climate with athletic identity.

Many high level coaches would likely perceive that an ego-involving climate would be crucial
for instilling in athletes a strong sense of their identity as an athlete, but the findings revealed that
a positive and supportive climate was more likely to be associated with athletes’ high athletic
identity. This finding is new to the sport psychology literature, and highlights another benefit to
coaches’ creating a caring and task-involving climate that helps each athlete focus on reaching
his/her potential on and off the playing field/court.

This study is the first to examine Division I athletes’ scores on the AIMS. The mean
score of athletic identity for respondents in this study was 5.8 on a 7-point scale which is higher
than scores reported in prior research. For example, Brewer (2010) reported a mean AIMS score
of 5.28 with Division II athletes, and Gapin (2011) reported a mean AIMS score of 3.79 with
recreational youth sport participants. It follows that as athletes age and participate at a higher
level of sport they would in turn report higher athletic identity. However, previous literature
suggested that high athletic identity may be associated with less value placed upon academic
pursuits (Beamon 2012; Stone, 2012; Killeya-Jones, 2005). The current findings, however, are in distinct contrast and suggest that an environment which encourages athletes to focus on their personal effort and improvement and cooperation with teammates, can also foster the development of higher athletic identity as well as greater interest in exploring future career interests and pursuits. The current findings suggest that an ego-involving coaching climate may be counterproductive to a healthy sense of athletic identification.

In addition to the AIMS scores, it is also noteworthy to consider the climate scales scores in light of supplementary research. Published research examining motivational climate with Division I athletes is missing from the sport psychology literature making comparison across studies difficult. However, it is valuable to compare the Division I athletes’ scores to those found in youth sport research, where the caring and task-involving climate scores typically are considerably higher than the ego-involving scale scores. Iwasaki and Fry (2013) recently surveyed two samples of youth sport participants, finding that with each sample the caring and task-involving climate mean scores were in the 4+ range (i.e., on a 5-point scale), whereas the ego-involving climate scores were much closer to 2. In contrast, the Division athletes of the present study reported scores of 3.6-3.9, with the ego-involving scale having the highest mean score. While it is not necessarily surprising that the ego-involving climate would be high with this population, it is important to note that research is consistently identifying the benefits of athletes’ perceiving a positive and supportive climate (i.e., caring and task-involving) on their sport teams. The results of this study suggest that the strongest messages athletes are receiving center on their performance and competition outcomes, though it could prove beneficial for coaching messages to instead further emphasize their personal effort and improvement.
The fact that climate scores recorded highest for the ego-involving perceived motivational climate is likely indicative of the highly competitive and stressful nature of Division I sport. Many coaches’ jobs are dependent upon their athletes outperforming others, so the emphasis on winning has traditionally been part of high level sport. However, ego-involving climates in some ways lead to outcomes that are counter-productive to winning and setting athletes up to perform at their highest potential. Hogue (2011) found that participants in an ego-involving climate learning to juggle experienced significantly greater cortisol stress response than did participants in a caring and task-involving climate. Long term cortisol spikes have been associated with numerous detrimental outcomes (Hogue, 2011; Gustafsson, 2013). In a similar vein, Gustafsson et al. (2013) reported that stress contributed to adolescent soccer players’ emotional and physical exhaustion. Certain levels of stress are inevitable in the arena of athletics though this research raises the possibility that a caring and task-involving climate could provide athletes with a buffer between these stressors and other facets of life such as post-collegiate pursuits. Athletes that sustain perpetual stress accompanied with a lack of social support may experience decreased motivation and an increased likelihood for injury or extended rehab time (Isoard-Gauther, 2013). Common stressors that athletes must deal with include having new talented recruits join the team, having to adjust to coaching changes, and experiencing illness, injury, and poor seasonal performances. Dealing with such stressors over time in the absence of those caring and task-involving climate features can prove as a deterrent to the prospective goals outlined by NCAA participation for student-athletes.

This study was a first to examine the relationship of Division I athletes’ perceptions of the climate to their athletic identity and career exploration, and it is not without limitations. First,
a larger sample size would have been preferred, but gaining access to Division I athletes is challenging, and once obtained, it is difficult to identify athletes who will take time out of their busy schedules to complete a survey. A second limitation is that the sample size did not allow for analyses based on specific sports, gender, race, academic classification, and context (e.g., win-loss record, point in season). A third limitation is that the data collection occurred at a single point in time, and surveying the athletes at more than one point in the season would be valuable.

This study directs the path for many interesting avenues of additional research. While NCAA collegiate sport is huge in the United States, very little sport psychology research has been conducted with athletes, particularly at the Division I level. A growing body of literature on motivational climate suggests there may be tremendous benefits to athletes who experience a caring and task-involving climate. However, supplementary research is needed examining a host of variables, such as the dynamics of the climate across different sports (team vs. individual; revenue vs. nonrevenue), potential gender differences, scholarship status, and division levels (i.e., I, II, and III). Achievement Goal Perspective Theory would predict that a caring and task-involving climate would be beneficial regardless of these varying factors but further research is needed (Nichols, 1989). Another interesting area of inquiry would be examining the specific behaviors that coaches engage in that are interpreted by athletes as being indicators of a more caring and task-involving versus ego-involving climate. Such research could employ qualitative and/or observational methods. It would be beneficial to examine both the coaches and athletes’ perspectives of how the team climate is created and the resulting outcomes. Specific to this study, it would be worthwhile to examine how coaches convey to athletes that they are invested in future development and lives outside of sport. It would also be of interest to conduct
longitudinal interviews with former collegiate athletes in the years following their NCAA participation. Lastly, future research might examine the relationship between athletes’ perceptions of the climate on their teams to their self-reported stress levels and actual physiological responses.

In summary, this study revealed a relationship between Division I athletes’ perceptions of the climate on their sport teams to their athletic identity and career exploration. The findings support prior research (Roberts, 2012; Stebbings, 2012) highlighting benefits of positive coaching through creation of a caring and task-involving climate, which in turn can foster individual development as both students and athletes.
References


Table 1

<table>
<thead>
<tr>
<th></th>
<th>CARE</th>
<th>TASK</th>
<th>EGO</th>
<th>AIMS</th>
<th>EXPENG</th>
<th>CDSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARE</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TASK</td>
<td>.58***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGO</td>
<td>-.41***</td>
<td>-.17*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIMS</td>
<td>0.20*</td>
<td>0.35***</td>
<td>0.12</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXPENG</td>
<td>0.39***</td>
<td>0.30***</td>
<td>-.16</td>
<td>.252*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>CDSES</td>
<td>0.37***</td>
<td>0.41***</td>
<td>-.19*</td>
<td>0.09</td>
<td>.554**</td>
<td>1.00</td>
</tr>
<tr>
<td>MEAN</td>
<td>3.60</td>
<td>3.84</td>
<td>3.91</td>
<td>5.76</td>
<td>3.74</td>
<td>3.75</td>
</tr>
<tr>
<td>SD</td>
<td>0.83</td>
<td>0.53</td>
<td>0.57</td>
<td>0.81</td>
<td>0.70</td>
<td>0.63</td>
</tr>
<tr>
<td>ALPHAS</td>
<td>0.95</td>
<td>0.74</td>
<td>0.82</td>
<td>0.72</td>
<td>0.88</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Pearson Correlations between Perceived Motivational Climate, Career Exploration and Engagement, Career Decision Self-Efficacy, and Athletic Identity.

Note. *p<.10; **p<.05; ***p<.01
Figure 1. Canonical Relationships between climate variables (Care, Task, and Ego) to athletic identity (AIMS), career exploration and engagement (EXPENG), and career self-efficacy (CDSES).
Appendix A

Extended Literature Review

Introduction

Individual identity is a construct of different internal and external systems which interplay with one another to represent the notion of “self”. This formation of “self” is determined by social and psychological factors which in turn form a conglomerate of how individuals internalize who they are and who they decide to project to the outside world. At its core, identity has the ability to create a sense of cohesion or dissonance, camaraderie or conflict, harmony or discord. Identity provides a manner in which individuals can form bonds and create social interactions in order to ensure survival at a basic level, and at complex levels it provides a sense of inclusion and belonging. As aptly described by Kleiber and Kirshnit (1991) this process involves “intentionality of the individual in being a producer of his or her own development”. Individuals can choose to adopt a certain persona and identify a group to which they gravitate towards. The topic of foreclosure in regards to athletics and identity begs the question of what occurs when an individual is not necessarily the primary locus of control in this developmental process, and how this potentially results in the premature advent of identity commitment. This question is particularly salient as it prompts the question of how this premature commitment and early stage foreclosure can impact the individual on a holistic level.

Identity Formation
According to Klimstra et al. in their study of adolescents at various developmental phases, there are three key components that contribute towards the development of one’s personal identity. These three factors are reconsideration, in depth exploration, and lastly commitment (Klimstra et al., 2010). Klimstra introduce the idea of the identity status paradigm devised by Marcia (1966), who elaborates upon the constructs of reconsideration and commitment. For Marcia’s framework exploration is selection of the most prominent and pertinent factors for self-construct, and in turn, construction is the implementation of these factors to form a holistic “character”. From this foundation Marcia posits that in the identity development process there are four discernible identity oriented outcomes. The first of the four products is termed moratorium. Moratorium is characterized by high levels of exploration, with no distinctive commitment. The next outcome is diffusion which is best defined by low levels of exploration and in turn low levels of commitment. The next two constructs appear to be the most salient and applicable when exploring the literature regarding general identity and athletic identity formation. The first of this dichotomy is identity achievement which is characterized by high levels of exploration resultant in high commitment. The converse of achievement is foreclosure, which is characterized by little varied exploration and discernibly high levels of commitment. The composite of these levels of exploration and commitment can lead to the development of both identity dimensions and identity status. Identity status is qualified as a shift between diffusion, which is less functional and adaptive, towards achievement, i.e. the ideal. The idea of identity statuses fall in line most with Erikson’s construct of identity development.

Klimstra et al. (1998) carried out their research focusing primarily upon the expansion of the framework provided by Erikson, reasoning that identity formation is a progressive
developmental shift that primarily occurs between adolescence and adulthood, becoming most solidified once one reaches early adulthood. This belief system functions under the identity dimension premise adding the construct of reconsideration to the previously devised factors of commitment and in-depth exploration. In order to quantifiably assess these markers, researchers developed a multitude of scales. The scale accepted by Klimstra et al. as most representative of how to assess these stages was the U-MICS or Utrecht-Management of Identity Commitments Scale (Crocetti et al. 2008). The U-MICS is a revised version of the Utrecht-Groningen Identity Development Scale, U-GIDS, (Meeus, 1996) which contained factors concerning commitment and exploration. The U-MICS is accepted as an enhanced and ameliorated scale as it considers exploration not only for initial identity formation, but also explores the implications of reconsideration while one is attempting to solidify an image of self. Reconsideration is depicted as a dimension of exploration, however what differentiates the two is the time in development at which one occurs versus the other. With these dimensions exploration is the act of investigating and weighing the merit of the commitments one has chosen, whereas reconsideration involves weighing current commitments in comparison to other potential venues open for exploration and pursuit. At the micro level reconsideration can be immediately injurious or damaging to the internal stability of an individual, typically adolescent’s, psyche. Reconsideration does not mesh well with individuals’ inherent system of believing that which we value should be correct and true because we have dedicated energy to said end. Crocetti argues however that this journey of self-discovery is imperative and the reconsideration is necessary for adequate and extensive exploration to occur to ensure an individual does indeed choose the most fitting and personalized composite identity. One factor that can serve to propel or thwart the development of the reconsideration dimension is external factors. External factors can include family, friends,
coaches, or any other individuals who the individual perceives to be a large source of acceptance and importance.

The consensus in literature concerning identity formation is that as an individual’s levels of identity maturation increase, and identity achievement approaches, the level of commitment to said identity increases. In-depth exploration of factors that could contribute towards this chosen identity increases as well; conversely the levels of reconsideration and exploration of other territories begin to decrease. With this construct in mind, the level of applicability in terms of the dangers or nuances of premature foreclosure could become apparent. This notion could become particularly salient if the stage of exploration decreases at an early stage of life, as it could cease or disrupt the possibility for healthy construction of commitment and potential reconsideration in regards to formation of the self. Due to changes in social norms such as postponed marriage timing, post-secondary educations, etc. there is a hypothesis that the identity achievement process may be delayed to an extent as theorized by Busseri et al. (2011). Knowledge that there is an option to de-commit from one pursuit is something many individuals are able to developmentally realize relatively early in life; however this is not the case for individuals who prematurely foreclose on a specific identity. Another issue which can arise from lack of reconsideration and excessive in-depth exploration of one facet of identity; a potential rise in singularity of importance placed upon that one personal construct. This can thus result in diminished levels of satisfaction if said construct of self does not pan out in the manner in which one may expect. This type of early or premature foreclosure can become most prevalent in fields where specialization is almost a necessity at a certain level, for example athletics.

Identity Foreclosure vs. Identity Achievement
Typical identity achievement occurs around adolescence and solidifies around the stage of early adulthood. Typically identity is developed through overall assessments of self and values and takes on a more global perspective according to Brewer et al. (1993). The literature supports the notion that individuals compartmentalize different versions of self in relation to a variety of domains. In youth there are a basic amount of constructs with which one assesses and affiliates themselves. As time progresses one’s competence and comfort with each construct allows an individual to gravitate and identify most with specific paradigms. This developmental process typically results in identity formation. This diminishment and selection of most relevant domains occurs as individuals perceive achievement and success within a specific category or lack thereof.

The issue of identity foreclosure occurs when individuals determine there is a substantially significant level of success in one domain, and in turn neglects to explore other potential areas of identification and self-discovery. Individuals can assess the overall value of a given domain by determining whether there is a level of competence present, and by assessing how this domain impacts self-esteem, affect or mood, and overall motivation. If individuals feel that a specific area of focus or membership is not providing the expected returns or outcomes, and the sense of competence or belonging is challenged, this will result in psychological turmoil and a schism of sorts between what they believe they should be and actually are exemplifying and enacting.

**Athletic Identity Formation**

A summation of the development of an identity profoundly based upon one’s activity level and athleticism is best encapsulated by Eldridge (1983) stating that many individuals
ascribe a great deal of psychological importance to their involvement in sport and exercise. The
identity of athletes is typically a composite of internal and external factors, which can many
times be described not only as factors, but pressures as well.

Identification as an athlete functions on the personal level as a label one can ascribe to
themselves, but it can also serve as a way to label one’s social role and construct. Astle refers to
this form of labeling as a manner of applying “occupational self-image” (1986). These different
types of self-assessment are the result of applying self-description in terms relative to how others
see or perceive an individual. Many times an individual will engage in athletics in an exploratory
manner, whether self-motivated or imposed by an external force. A large determinant of whether
in-depth exploration of athletic identity will occur is based upon the initial outcomes and
competency one experiences, and the appraisal of said performance from the outside world. This
rationale stems from the Cooley “looking glass self” described in Brewer et al. (1993).
Individuals construct an identity based upon the assessments and appraisals provided by parents,
friends, coaches, media, or even at times rivals.

A positive outcome of athletic identity formation as opposed to foreclosure is evident in
the fact that an individual identity is created. Individuals can feel as if they are a part of a whole,
and a sense of belonging and comfort can be instilled. When developed properly, athletic
identification can enable social interaction and increase levels of confidence. The issue is how to
ensure the athletic identity is not the only manner in which individuals are able to derive these
factors. When individuals feel they are trapped in the facet of athletics and sport, there is a level
of danger in that a schism from truly believing in that identity could cause immense emotional
and psychological distress. There was once an argument that the narrow focus upon individuals’
sport and its related activities could be interpreted as a positive outcome; however, with further exploration, such a narrow schema became more closely associated with foreclosure. While this could have immediate benefits, in terms of long term observations, the level benefit can be called into question.

Outcomes of Athletic Foreclosure

Within the university student-athlete schema premature foreclosure can result in a variety of detrimental external outcomes and conflicting internal assessments. As analyzed by Woodruff and Schallert, motivation and self-perception can perform a precarious dance resulting in a sense of diminished internal locus of control and an overwhelming sense of incomplete function in both major identity roles (Woodruff & Schallert, 2008). For many there is an expectation of “success” in daily life; however where that achievement occurs can arise from a variety of avenues and the level of pressure placed upon succeeding can vary. In terms of manners of success measurement for the student-athlete, there is a high level of expectation placed upon not only success in the academic arena, but the arena of sport as well. There is typically a higher level of variability in terms of academic expectations for the student-athlete in comparison to the “normal” student, which at times can increase the self-imposed pressure by the student athlete (Woodruff & Schallert, 2008).

When dealing with a threat to this identity, for example a devastating and potentially career-ending injury, not only is the physical-self impaired, the mental dimensions of the self are also debilitated. Research conducted by Brewer et al. aimed to determine if anterior cruciate ligament (ACL) tears and surgery held significant impact on the overall perception of self and personal identity assessment. When an individual derives a sense of self from an activity as time
consuming as athletics, the ability to parse out other parts of what is personally important and defining can be overlooked. If an athlete suffers from an event which can remove the factor in life that is the base for almost or potentially all personal appraisal, the likely for destructive thoughts and behaviors can be heightened.

Brewer et al. found that when a potential threat to the identity as athlete was presented, divestment appeared to be the typical coping approach. The issue at hand is that divestment is not counterbalanced with investment into another portion of self. Nor is it offset by the development of additional aspects of self. If the exploratory phase of identity development is halted as a result of early occurrence of foreclosure, divestment and removal of athletics can prove especially problematic if the individual does not possess another medium through which they are able to perceive who they are as an individual.

Brewer, Selby, Linder, and Pettipas (1999) found that athletic identity is a trait and dispositional-like tendency and that they were more inclined to gravitate towards this characteristic description of self in an exclusive manner. This tendency can lead to poor adjustment and coping towards unforeseen situations which could potentially challenge their framework of athletic identification. Brewer et al. also found that as certain athlete’s achievements, or perceived achievements, diminished they began to buffer against said effect by distancing themselves from the level of identification they felt towards being a student athlete (1999). This type of disengagement occurs most commonly with individuals dealing with issues of esteem or perception. If an individual does not agree with an inherent portion of self, they are apt to ignore or attempt to distance from that schema of identification in order to diminish psychological discomfort. This behavior is typically an action of preservation of self-concept,
thus enabling a healthier personal perception; however issues arise when the distancing from that
self does not possess an alternative identity or group of identities to fall back upon. This
preservation of self-construct allows for the maintenance of self-esteem and positive self-regard,
however once again this is not applicable for the process of long-term distancing, such as in the
case of career retirement or unanticipated injury.

The literature has found a trend in this maneuver of psychological self-preservation in the
sports of football, volleyball, track, basketball, and field hockey in both male and female
population samples. In turn, additional success in one’s career past a certain point does not
necessarily ensure a heightened identification with the given athletic identity role. Many
hypothesize that past a certain point the success is a given expectation thus after a certain point
an athlete’s perception of self is so enmeshed with their sport that there is not a subsequent
construct with which they can identify. With early foreclosure of athletic identity, the importance
of discovering a “well-rounded” amount of interests and potential realms of personality
development are negated as a result of both internal and external factors. This returns to the
stages of Klimstra et al.’s identity formation in that the individual devotes excessive energy to in-
depth exploration of athletics and related components are thus negated from their personal
foundation of important items to explore. This in-depth exploration progresses to commitment,
which then results in a minimized opportunity to reconsider other constructs with which to
identify.

Specializations of sport at early stages of identity formation provide an increased
opportunity for foreclosure and lack of reconsideration over the progression of an individual’s
lifespan. Erikson deemed identity formation as the primary developmental stage during
adolescence; however, with the case of foreclosure and specialization, in many cases a solidified unilateral identity has formed prematurely. This formation is best described as an exceedingly high level of commitment with minimized level of desire for exploration. The earlier this event occurs, resultant lack of exposure to other potential areas of self-expansion can lead to difficulties if said identity must be abandoned for any given reason, especially with lack of preparation. In the instance of injury, individuals with high levels of athletic identity are subject to feel the injury has left not only physical damage, but damage to their levels of perceived self-worth and self-identification (Brewer, 1993). Diminished self-complexity will have an inverse relationship with subjective well-being, and a parallel relationship with levels of depression and self-esteem. Termination of career can also possess similar if not parallel outcomes as injury if athletes do not have time to expand upon and investigate other facets of their personal selves.

Athletic identity foreclosure can prove to be a negative risk factor for a multitude of negative outcomes in the event an athlete does unfortunately become injured. A level of disconcerting irony present in literature is the idea that athletic identity foreclosure can leave an individual more susceptible to overtraining and injury or diminished performance, both of which then present an attack on their personal identity schema (Brewer et al., 1993). The actions which an athlete may undertake during the recovery process after an injury can also prove detrimental to overall physical along with psychological well-being. If an individual overextends or strains themselves as a result of believing they are failing because they are not on par with prior performance, they have a better chance of permanent damage, which then can cause even more psychological distress.
From a professional perspective approximately one percent of student-athletes can continue on to pursue their sport of choice at the professional level. With this percentage in mind, it is safe to assume that retirement from sport at competitive levels early in the athlete’s life course is more likely than not. Even at the elite and professional level the advent of professional retirement is earlier than for the average career. With these factors in mind, if an individual is not prepared and holds a high level of foreclosure in athletic identity, an abrupt redefinition of self and interaction with society must occur. The exclusivity of being an athlete in a given sport as the level of competition increases can only bolster the personal belief that the base of one’s self in its entirety should revolve around said sport. Beamon (2012) attempted to address how social influences of the external world could provide increased stressors which could help solidify the reliance athletes’ possesses upon their athletic identity and the construct of self as a student-athlete in particular. Over the course of athletes’ lifetime, individuals will typically pick and choose certain portions of life and activities to which they will personally adhere or gravitate towards. These individual items could include religion, familial roles, personality, academia, hobbies, or occupation. An issue arises when individuals do not pick and choose from this array and a portion of that lone construct falls apart for any given reason as previously mentioned. At times this dependence upon a lone construct of self is arguably more a product of individuals’ environment and societal factors.

Beamon makes the argument that in the instance of identity construction for African-American males, there is an emphasis placed early on upon athleticism, thus presenting an inherent disadvantage in attaining complete identity achievement. Beamon argues the deficit of African-American male athletes, specifically in basketball and football, attaining adequate
identity achievement is also a result of media reinforcements. Within this specific population the belief is that the community, peers, and media socialize these individuals to believe that they are their capability on the track, field, court, etc. Because of this emphasis there is not a capability to devise the aforementioned “cushion” to fall back upon in hard times, and thus in life-change events the self-concept is diminished. Reinforcement of norms and expectations begin at a very early stage, and thus the potential for initial foreclosure can occur in certain instances prior to adolescence. The development of a realistic sense of self can become stagnated as a result of perceived superiority in a certain sport, and from there dimensional mobility becomes progressively difficult as the individuals increase in age.

An over exaggeration upon physicality has been a cultural and societal norm associated with certain people groups, such as African-Americans, and as a result individual identity, and many times masculinity become closely affiliated with athleticism for said people groups. Sport becomes a determining factor from a very early stage as to whether an individual will be accepted or rejected by their in-group. According to Harrison et al. (2011) African-American males were apt to score higher on AIMS than their Caucasian male counterparts, which led to the Beamon study. The focus of said study was to highlight the notion that identity foreclosure can become increasingly difficult to cope with when the perceived social identity and self-identity are both dependent solely or maximally upon sport. In the instance of Beamon’s sample, the themes of self-identity, social identity, and impact of foreclosure on retirement were most salient and had the highest levels of reoccurrence. With this qualitative sample individuals interviewed felt that their identity was shaped for them at a very young age, thus returning to locus of control.

For many individuals involved in sport at an early age, there is a common theme of following the
instruction of adults, particularly coaches. Just as with other instances of development, athletes’
self-construct is a result of input from peers, parents, guardians, educators, and coaches. Athletes
feel that from an early stage in life they are expected to participate and excel in sport and thus
much of their energy should be devoted to such. The individuals repeatedly returned to the
notion that their identity was not necessarily something they possessed, but instead something
with which they were imposed. One individual interviewed in the Beamon work (2012) stated
that from the age of twelve he knew it was “us” and “them”, and when asked to elaborate he
stated that “smart people and White people” constituted “them”. In turn the same gentleman felt
that almost as early as he could remember “us” constituted the “jocks, Blacks, and the team”.

Some of the individuals interviewed felt that athleticism was literally all they possessed
and could not fathom another role they could play in society, highlighting the social identity
factor. This devotion to one specific identity prevented said individual from contemplating the
possibility of career searching and development. This athlete felt there was literally no other
venue to explore and in researching other career options he could miss an opportunity to play at
the professional level. To some of these individuals they felt athletics had been present and was
an equally important influence in comparison to their parents or guardians. A common
occurrence for many individuals interviewed who left the sports arena entirely, had individuals
inquire regularly about their athletic achievements due to familiarity or stature. Even if they left
the field it still figuratively followed these athletes over the course of their lives. Many of these
individuals also revealed that their family members fixated upon athletic achievements from an
ego-oriented perspective thus only reinforcing the foreclosure they experienced.
At the collegiate level of athletics the emphasis of maintaining balance and being “well-rounded” could arguably be considered impossible given the environment of certain programs. Emphasis is placed upon being an exemplary student and a stellar athlete, however as examined by Killeya-Jones (2005), there are certain restrictions that make it impossible to actively achieve this balance, especially considering the backgrounds and mental “grooming” which has likely occurred prior to their arrival to collegiate sport. At times the reason the “student” factor is present is because the “athlete” title opened a window of opportunity which may not have originally been present. In these instances in particular it would follow that emphasis should be placed on using that time frame to teach and expand upon potential areas of interest, but instead the reverse typically occurs.

The research of Beamon and Killeya-Jones, along with others, reiterates the notion that life of the student-athlete is encompassed almost entirely by other student-athletes and sport on a whole. The day revolves around their sport, practice, and competition, conversations with one another typically revolves around sport and in many instances communication with “civilians” or “regular” student’s centers around athletics. At this stage it is easier for these individuals to accept the construct placed in front of them and not consider other facets that could be of interest as to an extent there is no time if not minimal time to do so. In addition, the identity to adhere to that is most readily available also appears to provide the highest level of rewards or returns. Killeya-Jones utilized the identity-discrepancy model to explain the internal conflicts which can occur as a result of discord between athlete expectations, both internal and external. The framework for this model focuses upon the idea that extensive foreclosure in one realm can work to the further detriment of the identity “juggling” which must inherently occur as a student-
athlete. An exaggerated investment in the “athlete” facet of being a student-athlete can also enact in a dangerous cyclical pattern in the realm of academics and stereotype threat (Stone, 2012). Stone (2012) found that individuals on campus such as administrators, faculty, and non-athlete students provided an overwhelming response when surveyed of regarding the student-athlete population as “dumb jocks”. While Stone posits stereotype cue threat can be most detrimental to college aged athletes, he believes the trigger for internal disquiet when hearing the term “student-athlete” begins at a far earlier stage. Stone found that amongst the athletes surveyed, they began to feel the term student-athlete began to have negative academic connotations as early as middle school. When an individual enters the University setting believing that there is already a negative connotation with their identity in certain environments, their academic performance can in turn suffer.

As touched upon by one of the individuals interviewed in the Beamon work, at time of the collegiate process, the student-athlete may not feel competent in anything aside from sport. If this is the case then providing individuals with temporal and psychological resource restrictions can only hinder overall levels of satisfaction and senses of self-efficacy. If an individual is acclimated to ego-involving climates and is never taught to place importance upon task-orientation this can easily lead to the aforementioned psychological schism and distress. With this framework if a student athlete is placed in a situation where the stressors presented, in essence the requirements of fulfilling academic and athletic endeavors, conflict with one another and the resources necessary to cope are in constant contrast to one another a heightened level of psychological identity oriented anguish can occur. This internal conflict would be difficult with internalized and accepted identities for an individual with a high level of identity maturity and
low levels of foreclosure. This struggle is heightened for an individual who can not necessarily reconcile one facet of demands being required with the self they personally perceive. With the specific instance of the student-athlete, they may have sensed a certain level “identity competency” in earlier stages of life and in turn once they are thrown into a novel set of expectations that do not necessarily correlate with their personal repertoire of qualifications and identification a sense of unrest arises.

In order to minimize the effect of Identity Discrepancy a sense of integration and convergence of roles is necessary. This integration could potentially translate into a theory that the convergence between perception of self as both a “student” and “athlete” can expand on the individual’s self-perception and thus buffer against any potential “failures” which may have elicited more negative responses when only one sense of worth was placed upon the athletic identity. As soon as the athlete realizes that they are regarded as both a student and an athlete, a sense of harmony can become resultant and they can in turn begin to minimize the levels of stress felt in both arenas of life.

**Achievement Goal Perspective Theory**

A theoretical framework which could offset some of the shortcomings affiliated with high athletic identity is Nicholls’ (1984, 1989) Achievement Goal Perspective theory. This framework supports the notion that athletes at various levels can optimize their health, enjoyment, performance, and overall wellbeing through sport, when created as a safe space and with an overall positive coaching climate (Nicholls, 1984; 1989). According to Nicholls, individuals perceive a motivational climate in achievement settings that can impact their motivational responses. He identified two distinct climates: a task- and ego-involving climate, respectively. In
sport research, a task-involving climate is characterized by the coach valuing each athlete’s personal effort, improvement and mastery; encouraging cooperation among teammates; and considering mistakes as part of the learning process. In turn, an ego-involving climate in sport is characterized by a coach emphasizing the importance of competitive outcomes and normative ability, creating rivalry among teammates, and punishing mistakes. Nicholls predicts that in a task-involving climate where individuals are focused on their effort and improvement, and have greater autonomy, they will display more adaptive motivational responses (e.g., effort, persistence). In contrast, he warns of the potential detrimental effects on individuals in ego-involving climates, as individuals have less control over normative comparisons in environments where outcomes are the sole defining factor for success.

Recently, researchers have considered a third aspect of the climate, the extent that athletes perceive a level of care and concern from coaches, staff and teammates. This research has been explored in the realm of youth sport, physical activity, collegiate, and elite level sport. A caring climate has been defined as an environment where everyone perceives that each member of the group is treated with mutual kindness and respect, and feels a sense of comfort and value (Newton, Fry et al, 2007). Research on caring in sport has stemmed from Noddings philosophical approach to human development, as she suggested that being in a caring environment is critical to optimal achievement and life experiences (Noddings, 2004).

Research in sport has supported the importance of creating a caring and task-involving climate for athletes, as well as concerns about strong ego-involving climates. A caring climate has been associated with a host of critical positive outcomes such as greater emotional regulation, psychological wellbeing, and prosocial behaviors. Athletes who perceive a caring
climate have reported engaging in more caring behaviors with their teammates and coaches (Fry, Gano-Overway 2010). Further, perceptions of a task-involving climate have consistently been associated with higher levels of enjoyment, effort and overall intrinsic motivation (Keegan, Spray & Lavallee 2010). In contrast, athletes perceiving an ego-involving climate have reported the converse of these responses, such as lower effort and enjoyment and greater anxiety and burnout (Isoard-Gautheur, Guillet-Descas, & Duda 2013). Taken together, this body of research suggests that athletes who perceive a caring and task-involving climate on their teams are more likely to experience optimal physical and psychological well-being.

Climate and Orientation in Relation to Athletic Identity

In sport specific identity formation, an individual can place affective status, feeling of esteem and self-worth, and reason for motivation within a framework heavily or solely based on the premise of sport performance. If an individual is acclimated to ego-involving climates and is never taught to place importance upon task-orientation this can easily lead to the aforementioned psychological schism and distress. As best described by Brewer et al. “an individual with strong athletic identity ascribes great importance to involvement in sport/exercise and is especially attuned to self-perceptions in the athletic domain” (1993). For the individual described by Brewer et al. there is an assumption that these self-perceptions are driven by outcomes and thus
the perceptions and judgments of worth or balanced upon the base of success or failure and whatever manner they choose to define each of these constructs.

Within an ego-involving climate the primary focus is upon success, outcomes being defined as winning and being the best, most elite, fastest, and strongest, etc. The issue with this is that there is no way for everyone to accomplish this in the arena of sport, thus individuals are left feeling denigrated and each “failure” is internalized as a blow to the psyche and identity. If an individual does not possess other “buffers” to facilitate resilience after a perceived failure, it could be theorized the time to regroup and rebound from the feeling of incompetence would be exponentially higher as the athlete does not have other pieces of self from which they can draw a sense of success and competency.

Wippert theorizes that when athletes are placed in premature career termination situations, coaching can also play a significant role in player health outcomes (2008). Wippert found that when athletes dealt with unforeseen circumstances that would remove them from their professional careers, coaching climate determined how well they would cope with being removed from a sport career. If coaches were not emotionally supportive in the time of and after career termination, athletes were more likely to suffer from traumatic stress disorder symptoms. Terminations which lacked support and discussion were viewed as socially disintegrative and delayed the time necessitated by the athlete to actively cope and begin a process of progress into other facets of life. With a lack of coaching support, individuals reported higher levels of stress, anxiety, along with depressive symptoms. These facts appear intuitive in that they follow the general schemas provided by research regarding coaching climates. It could then follow that the coaches in the supportive group were more likely to interact with the athlete as more than an
athlete, both pre- and post-termination, thus allowing these athletes to examine themselves outside the concept of their athletic identity.

With a caring and task-involving climate that promotes and fosters task-orientation, one could posit there would be a higher level of resilience when coping with lack of perceived success as the individual understands there are other factors within themselves that are valued and appreciated. In addition, one could postulate that if an individual is working with a more task focused orientation, they are less likely to possess a traditional outcome based perception of success and thus the cushion to their psyche is further bolstered. A hearty barrier between the developed identities of an athlete with various other facets could minimize the need for reconsideration at later stages of development as there is less need to feel that said identity is challenged by incompetency and lack of self-worth. Working with the same logic one could minimize the threat of early retirement for any given reason or career ending injury using the task-involving base. If an individual had to leave their athletic realm for a given reason, if they are able to internalize and accept the notion that they are more than an athlete, performance, and outcomes, the negative aforementioned consequences could be reduced.

Measurement

The manner in which individuals attempt to assess whether identity foreclosure versus formation has occurred within athletics is a bit less concrete or substantial on a whole in comparison to other fields such as vocational studies. The Perceived Importance Profile, or the
PIP, developed by Kendzierski, focused upon the importance of physical activity and exercise, however it lacked applicability to the realm of competitive and athletes in particular (1988).

The scale of measurement with the highest level of consensus within the field does not necessarily account for exploration and identity formation in other facets of life, thus providing a realm for further elaboration and development. The Athletic Identity Measurement Scale, or AIMS, is however the most applicable scale when attempting to examine at least a basic construct of intensity or level of importance placed upon athletic identity for a given athlete. The AIMS is a seven item scale reduced from ten items developed by Brewer et al. in 1993. This scale provides a basic measurement of devotion to athleticism as a means of identifier for an individual; however said scale works upon the assumption that a strong affiliation to the identity of athlete excludes other realms of exploration and self-representation. The Athletic Identity Measurement Scale includes items such as “I feel bad about myself when I do poorly in sport” or “I would be very depressed if I were injured and could not compete in sport” (Brewer, 1993). This scale is a foundation or starting block from which practitioners can assess a basic level of identity foreclosure in relation to athletics, and thus from there ideally work on expansion and exploration so as to avoid these aforementioned outcomes.

Conclusion

Identifying with a particular group, organization, belief system, occupation, etc. can prove to be beneficial and even necessary for human function. However, development of a particular form of identity can possess polarized outcomes. When an individual becomes excessively attached to one facet of self, and neglects to explore the assets they have to offer to themselves or others, the issue of foreclosure arises. This rift in complete identity is a cause for
concern due to a multitude of factors including adjustment deficiencies, potential physical and mental health risks, and lack in feelings of self-esteem and self-worth. In order to be considered a holistic and functional individual, it is imperative to develop an internal locus of control when considering passions, pursuits, and identity. For this to become a possibility for any individual pursuing athletics from the kindergarten to professional level, emphasis must be placed not upon accomplishments and success being marked by pay grades, but instead a focus upon a well-rounded exploration of interests and celebration of any personal advancement regardless of whether it is in the sports arena or the arena of life.
References


APPENDIX B

APPROVAL OF PROTOCOL

April 18, 2014

Kiira Poux

Dear Kiira Poux:

On 4/18/2014, the IRB reviewed the following submission:

Type of Review: Initial Study
Title of Study: Relationship between Motivational Climate, Athletic Identity and Career Exploration
Investigator: Kiira Poux
IRB ID: STUDY00001016

Funding: None
Grant ID: None

The IRB approved the study on 4/18/2014.

1. Any significant change to the protocol requires a modification approval prior to altering the project.
2. 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.
3. Any injury to a subject because of the research procedure must be reported immediately.
4. 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.

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
APPENDIX C

Career Decision Self Efficacy Scale

INSTRUCTIONS: For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the key. Mark your answer by filling in the correct circle on the answer sheet.

<table>
<thead>
<tr>
<th>HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:</th>
<th>No Confidence At All</th>
<th>Very Little Confidence</th>
<th>Moderate Confidence</th>
<th>Much Confidence</th>
<th>Complete Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use the internet to find information about occupations that interest you.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Select one major from a list of potential majors you are considering.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Make a plan of your goals for the next five years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Accurately assess your abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Select one occupation from a list of potential occupations you are considering.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Determine the steps you need to take to successfully complete your chosen major.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Persistently work at your major or career goal even when you get frustrated.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Determine what your ideal job would be.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Find out the employment trends for an occupation over the next ten years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Choose a career that will fit your preferred lifestyle.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Prepare a good resume.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Change majors if you did not like your first choice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Decide what you value most in an occupation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Find out about the average yearly earnings of people in an occupation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Make a career decision and then not worry whether it was right or wrong.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Change occupations if you are not satisfied with the one you enter.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Figure out what you are and are not ready to sacrifice to achieve your career goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Talk with a person already employed in a field you are interested in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Choose a major or career that will fit your interests.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Identify employers, firms, and institutions relevant to your career possibilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. Define the type of lifestyle you would like to live.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. Find information about graduate or professional schools.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Successfully manage the job interview process.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Identify some reasonable major or career alternatives if you are unable to get your first choice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### Caring Climate Scale

Read each statement and think about how much you believe the statement describes your team environment. Then choose the answer that shows how much you agree or disagree with each statement.

On my team…

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Athletes are treated with respect.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2) Coaches respect athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3) Coaches are kind to athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4) Coaches care about athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5) Athletes feel that they are treated fairly.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6) Coaches try to help athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7) Coaches want to get to know all the athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8) Coaches listen to athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9) Teammates like athletes for who they are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10) Coaches accept athletes for who they are.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11) Athletes feel comfortable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12) Athletes feel safe.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13) Athletes feel welcome every day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Perceived Motivational Climate in Sport Questionnaire (PMCSQ)

Directions: As you read each of the following statements think about your experience with coaches and staff. Please choose the number on the 5-point scale listed below that best describes how you truly feel. There is no right or wrong answer, so please answer honestly.

<table>
<thead>
<tr>
<th>On this team . . .</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Athletes feel good when they do better than their teammates.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Trying hard is rewarded.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Athletes are punished for mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. The coaches focus on skill improvement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Athletes are taken out of the game/off the field for mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Each athlete’s improvement is important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Out-playing teammates is important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Athletes try to learn new skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Coaches pay most of their attention to “the stars”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Athletes are encouraged to work on their weaknesses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>11. Doing better than others is important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. The coaches want athletes to try new skills.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. The coaches favor some athletes over others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Athletes like competing against good teams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Athletes are encouraged to outplay other teammates.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. All athletes play an important role on the team.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Every athlete wants to be the one with the most points, goals, yards, best time, etc.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. All athletes get playing time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Only the top athletes “get noticed”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Athletes are afraid to make mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. Only a few athletes can be the “stars”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Choose the answer that shows how much you agree or disagree with each statement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Neither Agree or Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Very Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I enjoy being on this team</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. I think I am pretty good at my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. I put a lot of effort into my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. It is important to me to do well at my sport</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. I feel tense while playing my sport,</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>6. I try very hard in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. Participating in my sport is fun.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. I would describe my sport as very interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. I am very satisfied with my performance in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. I feel pressured while participating</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>---</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>11. I am anxious while participating in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. I do not try very hard in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. While on this team, I think about how much I enjoy this sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14. I feel pretty competent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15. I am very relaxed while participating in my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>16. I am pretty skilled at my sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>17. My sport does not hold my attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>18. I can’t do my sport very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
## Student Occupational Engagement Scale (EXPENG)

<table>
<thead>
<tr>
<th>How well does each statement describe you?</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Not Sure</th>
<th>Agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I talk about my career choices with family or friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I have contact with people in fields I find interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I gain hands on experience that I might use in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I volunteer in an area that I find interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I attend presentations or talks related to a career I might find interesting.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I ask people in social settings about what they do for a living or what they are interested in doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I visit places I am interested in working so I can learn more about them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I pursue opportunities in life because I just know they will come in handy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I do lots of things that are interesting to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
# Athletic Identity Measurement Scale (AIMS)

Please choose which corresponds most closely to your personal thoughts, feelings, and experiences.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I consider myself an athlete.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. I have many goals related to sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. Most of my friends are athletes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. Sport is the most important part of my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. I spend more time thinking about sport than anything else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. I feel bad about myself when I do poorly in sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. I would be very depressed if I were injured and could not compete in sport.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>