

Motivational Climate Collaboration between a Collegiate Native American Volleyball Program
and a Sport Psychology Researcher

By

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Abstract

Employing an action-based research approach, a motivational climate program based on a pre-assessment, Achievement Goal Perspective Theory (AGPT; Nicholls, 1989), and a caring framework (Newton et al., 2007) was planned, implemented, monitored, and assessed across a collegiate volleyball season. This research project was divided into two interrelated studies. Study one provides the findings from a qualitative assessment of the volleyball program's motivational climate that occurred at the end of the volleyball team's spring season. Assessment findings revealed that the athletes preferred a motivational climate that was caring and task-involving. In turn, a motivational climate program to promote caring relationships and task-involvement was planned during the team's summer break and implemented during the team's fall season. Study two explores the participants' experiences of the motivational climate program at three time points during the fall season, which included data collection at the end of the preseason, midseason, and post-season. Findings from study two indicated that our collective efforts to foster a caring and task-involving climate were effective, but challenged due to a range of external factors.

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Abstract

This action research study explored the role of assessment in developing a motivational climate program for a collegiate Native American volleyball program. In accordance with the principles of action research, the researchers collaborated with the head coach and 12 athletes in a qualitative assessment of the team's overall motivational climate. Findings from the assessment revealed that many of the athletes were overcoming challenging backgrounds while striving to play collegiate volleyball; volleyball provided them an important outlet for dealing with stress; athletes tended to define success in terms of interpersonal relationships; athletes' motivational preferences were consistent with AGPT (Nicholls, 1989); the team was in a state of transition; and finally, the athletes perceived that they were a highly skilled team, but needed more team bonding. The findings from this assessment served as the basis for developing a comprehensive motivational climate program that was in part based on contextual factors as well as relevant AGPT and a caring climate research (Newton et al., 2007). All in all, the qualitative assessment illuminated important contextual factors that would directly influence the appropriateness and effectiveness of our collaborative efforts to optimize the program's motivational climate moving forward.

Setting the Stage for a Motivational Climate Collaboration

Research indicates that the motivational climate is an important factor underpinning both the performances and experiences of individual athletes and their teams (Roberts & Treasure, 2012). Consistent with the theoretical expectations outlined in AGPT (Nicholls, 1989), research has long-established that ensuring adaptive motivational responses in the sport domain is in part based on the promotion of task-involving cues, such as emphasizing high effort and improvement, encouraging cooperation, giving every team member an important role, and treating mistakes as part of the learning process (Harwood, Keegan, Smith, & Raine, 2015; Seifriz, Duda, & Chi, 1992). More recently, research has revealed that when athletes perceive that the climate on their team is characterized by caring qualities, such as athletes and coaches demonstrating mutual respect and support for one another, they report benefits including increased effort, enjoyment, and commitment in sport (Fry & Gano-Overway, 2010; Iwasaki & Fry, 2013).

While the benefits associated with a caring and task-involving climate are well documented, nearly all this research has been quantitative in focus. More diverse research methods are needed that can explore the ways in which sport practitioners (e.g., athletes, coaches, sport psychology professionals) navigating the complex realities of sport can incorporate motivational climate research into their practice. This study was part of a larger research project that examined the implementation of a motivational climate program within a collegiate female Native American volleyball program using the principles of action research. The present study provides the findings and implications for the first stage of action research process, the assessment of the team's motivational climate.

AGPT

AGPT posits that individuals can bring two types of goal orientations to the sport setting, namely task and ego. Goal orientations are proposed to reflect how individuals define success in achievement contexts (Nicholls, 1989). According to Nicholls (1989), understanding how individuals define success offered key insight into their purpose for achievement striving and could help predict the type of achievement strategies that they would adopt. A task orientation reflects a disposition to define success in a self-referenced manner by giving maximum effort and making personal improvements. At the other end of the spectrum, an ego orientation reflects a disposition to evaluate success through social comparisons or normative standing (Nicholls, 1989). A substantial body of research has linked a strong task-goal orientation with adaptive achievement strategies, such as the view that high effort and cooperation are essential determinants of success as well as a tendency to persist in activities in the face of obstacles (Duda & Hall, 2001). A high ego orientation has been linked to more maladaptive motivational patterns, such as dropping out of sport; especially when individuals perceive that their ability is lacking (Roberts & Treasure, 2012). While a high task orientation reflects a disposition to pursue success in a manner that is within athletes' control, such as giving maximum effort, a high ego-orientation focuses athletes on expectations that they may not be able to influence, such as their ability in comparison to their peers.

Based on Nicholls' (1989) work in AGPT, Ames (1992) proposed that the motivational climate, or key features of the social structure within the achievement setting, played an important role in shaping individuals' achievement striving or motivation. From an AGPT perspective, athletes can perceive the motivational climate as being task- or ego-involving based on the criteria for success that is emphasized (Seifriz et al., 1992). In a task-involving climate, athletes perceive that success is defined by giving high effort, making personal improvements,

cooperating, having an important role, and viewing mistakes as part of the learning process. In contrast, in an ego-involving climate athletes perceive that success is defined by being the top-performing athlete, the most talented athletes are treated preferentially, intra-team rivalry is encouraged, and mistakes are punished. Nicholls (1989, 1992) maintained that fostering task-involving characteristics while de-emphasizing ego-involving conditions was pivotal for enhancing individuals' long-term motivation.

Interested in investigating the relational features of the motivational climate, sport psychology researchers Newton et al. (2007) developed a caring framework with an accompanying Caring Climate Scale (CCS). They defined a caring climate as “the extent to which individuals consistently perceive a particular setting to be interpersonally inviting, safe, supportive, and able to provide the experience of being valued and respected” (Newton et al., 2007, p. 70). Perceptions of a caring climate in the athletic domain have been linked to a host of positive outcomes. For instance, Iwasaki and Fry (2013) found that youth athletes' perceptions of a caring climate were associated with increased levels of intrinsic motivation and greater desire for future participation. Similarly, Fry and Gano-Overway (2010) found that youth athletes that perceived a caring climate on their team were more apt to report higher levels of enjoyment, positive attitudes toward their teammates and coaches, increased engagement in caring behaviors with teammates and coaches, and a greater desire to continue their participation. Newton and colleagues (2007) contend that a caring and task-involving climate are complementary and can set athletes up to thrive in sport.

Motivational Climate Interventions

There is empirical support that coaching education designed to enhance the task-involving features of the motivational climate can translate into positive results for youth athletes. For

instance, Smith, Smoll, and Cumming (2007) designed an intervention employing the Mastery Approach to Coaching (MAC) to educate a league of youth basketball coaches to foster a task-involving climate. The intervention consisted of a one time 75-minute workshop where evidenced based coaching strategies grounded in AGPT were presented, modeled, and discussed. Findings from the intervention indicated that the athletes (ages 10-14) of trained coaches reported significantly lower sport performance anxiety over the course of a season compared to a control group of athletes playing for coaches with no training. Another intervention using the 75 minute MAC protocol revealed that the youth soccer players 10-18 years old, playing for MAC trained coaches reported higher levels of team cohesion over the course of a season, compared to athletes playing for coaches trained in attention control strategies, and athletes playing for coaches with no training (McLaren, Eys, & Robyn, 2015). Taken together, these interventions provide evidence that brief educational workshops for coaches can help them foster a more optimal motivational climate, which, in turn, can positively influence a number of key outcomes for youth athletes (McLaren et al., 2015; Smith et al., 2007). These intervention findings are in line with a considerable body of correlational research that has linked athletes' perceptions of a task-involving climate with a number of desirable outcomes (Harwood et al., 2015).

While the results from motivational climate interventions have been encouraging; their pretest-posttest intervention design excludes some of the most important aspects involved in applying this empirically supported research to practice. For instance, absent from current motivational climate discourses is the role that an initial assessment would play in integrating motivational climate based strategies into a specific sport setting. Beckmann and Kellman (2003) argue that assessment and intervention should be viewed as phases within a psychological process for which intervention evolves from assessment. While assessment is viewed by many in

the field of sport psychology to be a necessary starting point for designing relevant interventions, the important role of assessment in planning motivational climate interventions has not been considered.

Action Research

Action research involves a partnership between organizational insiders (participants) and organizational outsiders (researchers) in a cyclical process of assessing, planning, implementing, and evaluating (Argyris, Putnam, & Smith, 1985). Central to an action research approach is the view that the investigative process must be carried out with the insiders of the setting and never to or on them (Herr & Anderson, 2005). There are important ethical reasons for engaging Native American participants, such as those represented in this study, as active partners in the research. Historically, Native Americans have had very little representation in the research process. Consequently, there have been a number of documented instances where the scientific community has exploited, misrepresented, and damaged the reputations of Native American research participants (Cochran et al., 2008). Furthermore, Western notions embedded in conceptual theories are not value free and have historically projected White norms onto Native Americans (Lomawaima & McCarty, 2002; Smith, 1999). For these reasons, a heightened distrust of researchers exists amongst many Native American communities (Smith, 1999). In view of these issues, action research employing qualitative methods was selected because it provided a well-established approach for prioritizing the voices and increasing contribution of Native American participants in the research process (Cochran et al., 2008). In accordance with action researcher principles, the present study was referred to as a motivational climate *collaboration* instead of an *intervention* to highlight the active role of the Native American participants throughout this project.

Conception of the study occurred during the previous volleyball season when the head coach reached out to the researcher and indicated that her team was not maximizing its' potential. The coach explained that two older, higher performing players frequently responded negatively to errors that the younger, less experienced players made during competition. From the coach's perspective, the manifestation of these older players' frustrations adversely affected the younger players' self-confidence. The head coach indicated that the situation was even more challenging because the younger players had more introverted personalities, which made it difficult for them to express themselves to their teammates. The coach was searching for strategies that would help the older athletes retain their intensity on the court, but tone down their frustration. Equally important to the coach was her interest in finding strategies to help the younger athletes play volleyball more assertively and confidently. Wanting to learn more about the dynamics of this team, the researcher discussed with the head coach the potential for conducting a comprehensive motivational climate assessment with the athletes.

The focus of this study is on the first phase of the action research process, assessment. More specifically, the main goals of the assessment were to determine whether the team could benefit from integrating motivational climate research into their athletic program. To achieve this aim, a comprehensive assessment was performed at the end of the team's spring season. In line with action research principles and the ethical standards of the sport psychology profession, a preliminary assessment that prioritized the participants' point of view through interviews was considered to be a necessary precondition for collaboration. While the field of applied sport psychology has long recognized the important function of assessment in delivering appropriate sport psychology services, current research is limited in explaining the role of assessment in applying motivational climate research to practice. The feedback derived from the assessment

served as the basis for developing a motivational climate program for the team for their upcoming season (described in a separate manuscript).

Method

Design

An action research approach utilizing qualitative methods was employed to provide a thorough investigation of this team's motivational climate (Herr & Anderson, 2005). Priority was given to the interviews with the athletes to help ensure that their voices were represented in an assessment that would be used to guide future action on their team. Notes from the researcher's interactions with the head coach were integrated with the interview transcripts to provide additional insight into the team's motivational climate. While action research is oriented toward increasing the involvement of participants in the research process, their level of investment can vary considerably based on situational factors (Herr & Anderson, 2005). The participants in this study had a limited amount of time to invest in the technical aspects of the research process, such as writing, transcribing, and data analysis. Therefore, this study was designed around a cooperative model of action research where the researcher sought the participants' input through a comprehensive assessment, shared assessment results, and worked with the participants to determine priorities for future action (Herr & Anderson, 2005).

Participants

Head Coach. To protect the anonymity of the participants, limited descriptive information is provided. Further, the participants are identified by pseudonym (self-chosen) throughout the study. The head coach self-identified as Native American, is a former NCAA Division-1 athlete, and has a master's degree. The coach had over 12 years of coaching experience, including nine

years of head coaching experience at multiple levels, including NCAA Division-1, NAIA, and high school. She was in her sixth season with the team.

Athletes. The college-athletes consisted of four first year players, six-second year players, one-third year player, and four players that were in their fourth year with the team. The athletes' ages ranged from 18-23 years. The athletes and coach represented over seven different federally recognized tribes, each tribe having its own distinctive cultural orientation. Nine of the athletes were from a reservation setting and the other three athletes were from towns that bordered a reservation.

Researcher/Sport Psychology Consultant. The researcher joined the team over the duration of the study in the dual roles of researcher and sport psychology practitioner (Merriam, 2009). He is Native American, a former collegiate-athlete, former coach, and was a sport psychology doctoral student in the process of completing his dissertation at the time of the study. Although the researcher was considered an outsider to the volleyball program participants, he was very familiar with the athletic program. This helped him come into a research relationship with the participants more fluidly than would have been the case if he were a complete outsider.

It is important to disclose that the researchers entered this study with a dual interest in exploring the role that the motivational climate played in shaping the collegiate Native American athletes' responses in sport and in working with the participants to develop strategies to foster a climate that would optimize their motivation. Caring and AGPT frameworks were used to guide this research and the sport psychology practice with the team. These conceptual frameworks undoubtedly influenced the researchers' perceptions of the environment surrounding this team and should be kept in mind while reading this study. It is generally understood that all scientists approach the research site with pre-existing belief systems and theoretical perspectives that can

affect the research process. While it was impossible for the researcher to enter this study value-free, he did take a number of steps to ensure that the methods he used to collect data were rigorous and that his interpretations of the data were trustworthy. The following sections outline these steps.

Data Collection

Two primary methods of data collection were adopted to assess the team's motivational climate. The data collection techniques comprised semi-structured interviews and a research journal.

Interviews. Semi-structured interviews with the 12 athletes were conducted on site, lasting approximately 25-30 minutes each, and were audio recorded and transcribed verbatim (Merriam, 2009). The semi-structured questions (Appendix A) were designed to gain insight into the following factors: athlete's background (questions one and two), definition of success in volleyball (questions three and four), motivational preferences (questions five and six), and perceptions of the team environment (questions seven through nine). The open-ended structure of the questioning increased the likelihood that the interview would be shaped by the athletes' understanding and also reduced the risk of interviewer bias, or a situation where the researcher was asking the participants leading questions to solicit responses in support of the guiding theories (Lewis-Beck, Bryman, & Liao, 2003; Merriam, 2009). For example, asking, "How would you define success for yourself in volleyball?" afforded athletes an opportunity to express their perspective on their own terms. Additionally, the athletes' responses to this question could be juxtaposed with the definition of success (task and ego) described in AGPT to gauge relevance of the theory.

Researcher Journal. Notes and reflections based on the primary researcher's interactions with the coach were collected in a field note journal. The field notes were transcribed and integrated with data from the interviews to provide a more comprehensive account of the assessment phase of the motivational climate collaboration (Maxwell, 2005).

Data Analysis

Braun and Clarke's (2006) six-phase method for identifying, analyzing, and reporting themes was employed in this study. The first phase consisted of becoming familiar with the data. The 12 interviews with the athletes, along with hand written notes collected in meetings with the head coach were transcribed and read through multiple times by the researcher and his advisor. During the second phase of analysis, the transcripts were inductively coded for repetitive words, phrases, and statements. Inductive analysis allowed emergent themes to surface, such as the fact that many of the athletes were dealing with adversity from home, which was pertinent for gaining insight into the athletes' motivational response patterns, but has not been considered in the broader achievement motivation research. A second round of deductive coding was performed based on a priori codes derived from relevant AGPT and Caring research (Merriam, 2009). In the third phase, inductive and deductive codes were integrated and categorized by primary themes and sub-themes. In line with Braun and Clarke's (2006) fourth phase of thematic analysis, the researcher met with his co-investigator to refine the themes. In this meeting the investigators agreed upon a final list of the most relevant themes to report based on the research objectives, which comprised the fifth phase. Lastly, during the sixth phase of analysis the themes were incorporated into a final write up of the article and shared with the participants to evaluate their accuracy.

Trustworthiness. Multiple strategies were used to ensure that the way the researcher derived meaning from the data was trustworthy. Strategies to enhance trustworthiness included open-ended questioning to gain insight into the participants' points of view; member checks, where participants were provided with copies of interview transcripts and asked to provide reactions, corrections, or additional insight; and a peer review process where the researchers met to discuss and agree upon final themes (Marshall & Rossman, 2013). The final themes were also shared with the participants to gauge if they accurately reflected the participants' experiences and perspectives.

Protocol

Once Institutional Review Board (IRB) approval was granted from both the research site and the investigator's home institution, the researcher met with the head coach two weeks prior to the end of their spring season to define the parameters of the assessment. During this meeting, logistics for conducting the assessment were discussed, which included providing the coach with a packet of possible assessment instruments (questionnaires and interview questions) along with a description of what the instruments intended to measure. Additionally, the head coach's input was sought to better understand what she wanted to learn about her team from the assessment.

The researcher also met with the athletes one week prior to the conclusion of spring season. In this meeting, he described his background, research interests, how the information collected would be used, how the athletes and coach could participate in the research process, and the informed consent procedures were described (Marshall & Rossman, 2013). Athletes were assured that their participation was strictly voluntary, that they could refuse to participate and/or withdraw at any time, and that their responses would be kept confidential and would not affect their status on the team. It is important to note that the head coach expressed her support for the

assessment during this meeting. The athletes and coach all agreed to participate and informed consent was secured. Interviews with each athlete took place on site over the next three consecutive days and lasted approximately 30 minutes each. Further, the researcher informally observed the team's final spring practice and tournament match to become more familiar with the context in which they engaged in volleyball.

Findings and Discussion

The purpose of this study was to assess the motivational climate for an all Native American collegiate volleyball program. Analysis from the interviews with the athletes revealed the five following themes: (a) overcoming challenges, (b) why I play volleyball, (c) defining success in volleyball, (d) motivational preferences, (e) a team in transition, and (f) we're skilled, but need more team bonding. In the following section, the primary themes are described, discussed, and illustrative quotes are provided.

Overcoming Challenges

During the researcher's introduction to the team, he discussed his tribal affiliation, background, and intended purposes for wanting to work with the team. This personal disclosure was considered to be an important first step in building trust and rapport with the participants. To continue this process, the researcher sought to understand more about the participants' background during the interviews. In response to the first interview question, "What would be important for me to know about your background to better understand you?" a number of athletes indicated that they were dealing with adversity from home. For reasons that are historical (allotment of land) and situational (limited access), Native American communities have been and continue to be disproportionately affected by a range of negative health, social, and economic conditions (CDC Health Disparities & Inequalities Report, 2013). These disparities

were reflected in the narratives that the athletes provided. While their challenges varied, seven of the twelve athletes expressed hardships associated with a family history of substance abuse. For instance, Jane indicated,

My background has been kind of rough...I came from a single mother. From like my junior to senior year there was a lot of family deaths going on. My mom was going through a lot because my father passed away that year so she kind of went crazy. She didn't know how to grieve I guess, so that took its toll on me. I felt like I was the mom for my siblings. She's an alcoholic, um, I come from a family where everybody drinks except my grandma. It's taken over a lot of their lives.

Nissa also emphasized an upbringing that was shaped by substance abuse and the loss of a parental figure, explaining,

I come from basically nothing, I raised myself, my dad died, my mom was alcohol and drug addicted and she didn't take care of me so I bounced from family to family. So therefore I grew up pretty fast and um, I guess that really shaped who I am.

It was clear from the interviews that the hardships the athletes experienced were not isolated events from the past, but were ongoing stressors that affected their day-to-day living. For instance, Maggie described her current circumstances:

My mom drinks a lot and she has been in and out of jail since my sophomore year in high school. That's when she was first gone for like a really long time. And then she came back and it has kind of been weird since then. And my sister has been downhill from there. My mom and them are always fighting and she has to deal with it all by herself and I am all the way here.... I'm afraid of what's going to happen to them. Like I want to be mad at my mom so many times, but I'm just afraid I will loose her and be mad. And then my sister, oh my god that girl. Like I don't even know what to say to them, like I'm here.

In a similar vein, Raven described a strained relationship with her mother and ongoing concern for a younger sibling,

Recently my mom stopped drinking so she has been sober for like four months, but all my life it's just been really bad. She is an alcoholic. She has been to rehab like twice, but never finished, so that was always hard on my part because she was not there at meetings and she was never giving me support I wanted or deserved. Even my younger brother recently lost his father to alcohol, and he's like my dad too, he is my step dad. So my brother is trying to overcome it and he is starting to realize his father isn't there. Me and

my mom are trying to figure out that problem, but then there is the alcohol problem with my mom that's in the way of our relationship.

It was significant that athletes were willing to share difficult aspects of their personal history in our interviews; however, many of them made it clear that they did not typically discuss these issues with others. Nissa commented, "I kind of isolate myself away from everything because there are certain things I go through and am going through that I don't think other people understand." Patricia explained that she suffered from post-traumatic-stress because of an incident from her past, but clarified, "I don't tell a lot of people because I just don't like having pity, I don't want it; I don't want to be a victim anymore. I don't want to be looked at like that either." Similarly, Jane commented,

That was hard just telling you because I haven't talked about that kind of personal stuff and my coach doesn't know any of that, but I don't seek sympathy and I don't seek attention for that kind of stuff. I don't want people to feel sorry for me or anything.

Although Jane did not share parts of her personal history with the coach, the coach was well aware that many of her athletes were dealing with ongoing hardships. The coach explained,

I usually ask questions about, like, what is going on and then there is a breakdown, crying, and the story comes out...It is exhausting and I do want to be there to help them, but some things I don't know how to help. And some of them need counselors beyond my abilities that I can really offer.

While it is not uncommon for coaches to serve a variety of capacities, including surrogate counselors, this coach's comments illuminate how complex the task was to support athletes as they navigated ongoing hardships. Like the coach, many of the challenges that the athletes expressed were beyond the boundaries of the researcher's professional competence. Since the researcher was planning to fully participate in the team's upcoming season, having a sense of the athletes' backgrounds was considered essential to developing a heightened responsiveness to their varied need. Further, this important background information would help the researcher

develop a network of local professionals that he could make appropriate referrals to throughout the collaboration if necessary (AASP Ethical Code, 2004).

Despite the seriousness and difficulty of life circumstances that were described, it is important to acknowledge that most of these athletes were functioning at a high level in school and on the volleyball court. For instance, at the end of the spring semester, multiple athletes carried 4.0 grade point averages and all the athletes were academically on track to graduate. Although a majority of the athletes indicated that they were coping with some type of adversity, there were several Native American athletes on the team that did not describe experiencing any hardships presently or in the past. One of these athletes provided sound advice for professionals planning to work with Native American athletes. In Penelope's response to the question "What would be important for me to know about your background to better understand you?" she stated,

Probably how diverse we are. We all come from different areas and even our experience, especially at our levels, and even in certain situations, how we adapt to what is going on around us. We are all different; I guess our mindsets are different. And yeah, that's it, keeping that open.

Penelope raised an important point. Native Americans have historically been misrepresented as a homogenous group when there are hundreds of different Native American tribes in the United States, each having its own distinct cultural orientation. Therefore, working with any inter-tribal Native American athletic team such as this, there will most likely be as many similarities as there are differences between the participants. While many of these athletes shared similarities with regard to a tumultuous upbringing, the researchers were cautious not to engage in sensitive stereotyping or draw inferences about these athletes or Native Americans generally based on this tendency. We encourage the same level of thoughtfulness from our readers.

Why I Play Volleyball

In addition to gaining insight into the athletes' backgrounds, it was important to explore their participation motives or self-described reasons for playing volleyball. Several common participation motives emerged, such as enjoyment and social status, but the most prominent motive described was that volleyball provided an outlet. For instance, when Nissa was asked, "Why do you play volleyball?" she responded,

An outlet. Like I said I was brought up with nothing and that made me angry as a child, like very angry and I was a bully for a while and then I met this teacher who like changed my whole perspective on it. She asked me about my story and I told her, like cause I'm very honest, so I told her and she was like, "You know what, I know you're mad, but that's not the way to be. You need to find an outlet; you need to do something." I got into drawing and all this and then my teacher talked to my grandparents and she was like, "Well, she needs an outlet cause this anger is building up and she's turning into something that she's not, because she's a smart girl." So, they put me in boxing and I liked that, but my grandma didn't like the whole violent thing, like how it caused me to start fighting, like sticking up to people, you know. So they're like, "Well, an alternative is a volleyball club for Natives." So, I got into the volleyball club and then, I don't know, my whole life changed and it felt like I had a place, because when you play volleyball you have a sense of belonging, so I felt like I belonged, and I had love like from my team and my coach.

Nissa's account highlights how a caring sport environment provided her an important social context for prosocial involvement, a connection that has been made in previous research with underserved youth (Gould, Flett, & Lauer, 2012; Newton et al., 2007).

Other athletes indicated that their participation in volleyball offered them an essential outlet for stress. For example, Jane commented, "Volleyball has helped a lot, umm, emotionally; it's a big stress reliever." Another athlete explained, "If there is something going on at home then it was always volleyball that could just take everything off my mind. It's really nice to know that I can focus on it and not worry about anything else." Similarly, Tasha described,

When it's not my day I'm always excited to go to practice where I can just like cool off and blow everything off. Going to practice is just a place I can be where I don't have to think of anything.

Several other athletes indicated that having fun in combination with stress relief was the reason they continued to play volleyball. For instance, Penelope stated, “I like it! I mean its weird because you know how some girls say they love it? I don't know if I love it, but I do enjoy it. It is a way to clear my head and its fun.” Comparably, Raven commented, “If I’m having a stressful day, me and Maggie will be just like, ‘ok lets go play’ and just have fun doing that.” The stress relief that volleyball was providing these athletes is consistent with previous research with collegiate athletes, which suggests that collegiate athletic participation can buffer stress by providing a distraction, which appeared to be the case for many of these athletes (Kimball & Freysinger, 2003; Kleiber, Hutchinson, & Williams, 2002). Overall, exploring why these athletes played volleyball provided the investigators with basic starting point for exploring these athletes motivation for volleyball.

Defining Success in Volleyball

Because sport is a culturally situated phenomenon, with diverse cultural groups assigning different meanings for sport engagement, it was important to explore the ways that these collegiate athletes defined success for themselves in volleyball (Gano-Overway & Duda, 1999). According to Nicholls, (1989) how individuals define success in an achievement situation revealed their purpose for achievement striving. Gaining insight into how these athletes defined success in volleyball and comparing it to the parameters outlined in AGPT was a method employed to assess the relevancy of achievement motivation research with this program.

Consistent with an ego orientation, several athletes’ self-described definition of success in volleyball appeared to reflect an emphasis on demonstrating, rather than developing ability. For instance, one athlete explained:

I want to be known for volleyball too, like a great player. I plan to try to get the all-conference player and scholarship athlete, and I want to try and get my name on the banner. That is one of the biggest things I want to try for.

At the other end of the spectrum, another athlete's responses to the same question reflected more of a focus on developing ability or a task-orientation. For example, Jane described success in volleyball as, "To work harder, to be the best I can be. I don't see myself being like a cocky player or anything, I just want to grow and keep growing."

While some of these athletes' definitions of success were consistent with a task or ego-orientation, most of the athletes' personal definition of success in volleyball reflected a primary concern for enhancing interpersonal relationships on the team and secondary concern for task or ego goals. For instance, Lesha explained, "I would define success by respecting my teammates and becoming more comfortable with my coach. I hope to become better when I get done with my two years being here and you know bringing it back to my community." Lesha's emphasis on respecting teammates and becoming more comfortable with her coach highlights the high priority she placed on developing positive interpersonal relationships. In addition, consistent with a task-goal orientation, Lesha also described wanting to become better at volleyball; however, her desire to improve appeared to be tied to the future aspiration to bring volleyball to her community.

While acknowledging that winning was important, Raven's definition of success in volleyball also emphasized interpersonal relationships and improvement. Raven explained,

I guess winning is a big part, everyone wants to win, but I really look at the other stuff, like with the team, I always try to make sure the team is close. Coming from my recent high school team we weren't always the winning team...but it got me focused on more of the other things, like making my improvement and also the team, how I could help them get together and improve our chemistry and stuff because I really think that's a big part.

In a similar vein, Maggie's description of success revealed her priority for helping teammates over more ego-oriented goals. Maggie defined success in volleyball as, "Helping as much as I can. It doesn't really bother me if someone is better than me. It's ok with me as long as I know I am helping in some way, like contributing to the team."

These athletes' comments reveal the high priority they placed on developing positive interpersonal relationships with their teammates. Interestingly, the interpersonal qualities that the athletes emphasized within their definitions of success, such as respecting teammates and ensuring the team is close, were indicative of the characteristics underlying a caring climate. While caring has been conceived as a distinct feature of the climate, it has not been considered to comprise a goal of action (goal-orientation) that energizes behavior. Clearly, these athletes' comments reflect that they valued being part of a team where the members cared for one another. As such, it is reasonable to suggest that they may have been motivated out of a sense to caring for each other.

A possible explanation for these athletes tendency to focus on relationships within their definition of success may be related to the collectivistic cultural orientation of their respective tribal communities. While these athletes did not belong to a homogenous Native American group, most of them did come from tribal communities that can be described as more collectivistic than individualistic in orientation. Put simply, the continuum of collectivism-individualism represents the degree to which a culture emphasizes interdependent relations (collectivistic) versus self-actualization (individualistic) (Schinke & Hanrahan, 2009). In another study exploring the goal orientations of African American athletes, Gano-Overway and Duda concluded that athletes "come to the playing field with a tendency toward a particular motivational perspective that is in line with their cultural values" (1999; p. 559). Consistent with

Gano-Overway and Duda's view, it is reasonable to suggest that the collectivistic orientation of these Native American athletes' communities would have helped shaped the way that they conceptualized success in volleyball.

Motivational Preferences

To explore the athletes' motivational preferences, the athletes were asked, "How can someone like a coach or teammate best motivate you?" and "What are your thoughts about how to best motivate your teammates?" Overall, the athletes' responses to the questioning revealed their preference for a task-involving motivational approach. For instance, multiple athletes indicated that they wanted feedback that was directed at their improvement. Angela stated that to motivate her, it was important to discuss, "Goals, like this is where you want to be so this is what you have to do to get there. Just the thought of it and bringing it up is motivating to me." Comparably, Raven preferred a coach who would, in her words, "Tell me or tell a person how much potential they have and if they keep working they could like grow into something more. I'm thinking that is one of my best motivations from a coach." While Angela and Raven clearly wanted feedback that was focused on their improvement, Caitlin indicated that it was the provision of technical instruction that supplied her with motivation to improve.

Just like to keep critiquing me in a sense. If you see something, correct me, and try to talk to me, like providing insight on what I can create if I keep working. That just is motivating.

Apparent in these athletes' responses was that they wanted feedback that was focused on their improvement, which is consistent with the overriding goal of action within a task-involving climate (Nicholls, 1989). Also in line with the promotion of a task-involving climate, multiple athletes expressed a preference for mistake-contingent encouragement and instruction. For example, Suzanne explained:

If there's a problem, come up to me and be like, "Hey Suzanne, you're not doing what you need to do right now." And more of a talking tone, not a scolding tone. And not in front of everybody either because sometimes that gets embarrassing too. So if it's more on a one on one basis.

Explicit in Suzanne's comments was her appeal for an approach for responding to mistakes that was supportive as well as constructive. Conversely, Suzanne described a punitive method for responding to mistakes that was detrimental to her play and sense of well-being:

I don't like yelling. I don't take that well. I can handle it if a coach is a yeller or I'm in trouble, but sometimes it doesn't help me. It makes me feel like I'm screwing up and then I feel like "ah I messed up, like okay, I get it, I'm messing up. I'm sorry." And then I get frazzled. And then after that it gets hard for me to get my self-esteem back up. That's what it is. It kind of hurts my self-esteem.

Past research in sport has linked perceptions of an ego-involving climate with lower self-reports of self-esteem (Harwood et al., 2015). Reinboth and Duda (2004) reasoned that ego-involving cues that emphasized social comparisons and normative standing would inevitably increase the likelihood that athletes would focus on the inadequacy or adequacy of their ability, which in turn, would have serious consequences for how they processed their self-worth (i.e., self-esteem). In line with theoretical predictions outlined in AGPT, Suzanne's comments highlight how mistake-contingent punishment, another defining feature of a ego-involving climate, had deleterious effects on her self-esteem.

Similarly, Tasha expressed a preference for feedback that corresponded with a task-involving motivational approach. Tasha explained that to remain motivated after an undesirable performance she needed, "Encouragement to keep trying, that's about it or after every mistake we come in and talk in a little circle for just a few seconds and encourage each other to play better the next time." When Tasha was prompted to describe how encouragement would help her respond after making a mistake, she indicated, "My energy level would get a boost if they did a

little more encouragement on the court; that would make me want to push my self more, but getting negative feedback- it just puts me down a little.”

It was clear from the athletes’ responses that they preferred a positive and constructive approach for responding to mistakes. Their preferences were in line with the theoretical position outlined in AGPT, which posits that more adaptive achievement-related strategies will ensue in environments where mistakes are viewed as a normal part of the learning process. The athletes’ comments also correspond to a substantial body of literature that has linked mistake contingent encouragement and instruction with a range of beneficial outcomes, including high levels of perceived competence, self-esteem, enjoyment, and lower levels of anxiety (Black & Weiss, 1992; Conroy & Coatsworth, 2006; Smith et al., 2007; Smoll, Smith, Barnett, & Everett, 1993). Overall, this line of questioning revealed that most of these Native American athletes’ motivational preferences were consistent with recommendations outlined in AGPT.

A Team in Transition

In discussing the status of current team dynamics, many athletes contrasted what the team was like during the fall season with the current spring team. According to a number of athletes, the atmosphere on the team had improved in this time frame because several players had moved on from the program. Making this point, Raven indicated,

Everyone is in good standing with each other, not like in the past. The past was bad, it was kind of frustrating; like it was mostly like the older ones that...looked down on us and stuff and that made it kind of frustrating throughout the whole season.

Jane provided additional details on the changes that the team had recently undergone:

I’m closer to them (teammates) this year than I have been this previous season. A lot of older players were kind of rude and they weren’t respectful enough, so a lot of the teammates that I came in with didn’t bond with them I guess. They didn’t try to get to know them, but who would want to with that kind of attitude, you know?

Maggie also contrasted what the team was like in the past with the current team, but conveyed an optimistic outlook in regard to the future direction of the program:

How it was before, I feel like its going to be way different this next year because the older girls directed everything and made us all do certain things and they weren't open to everybody. Since they (older players) are gone, it's just the younger ones that are left, and everyone is real cool with each other. So I think it's going to come together a lot.

It was clear that there was an unhealthy division between some of the older and younger players on the previous fall team. Jane went onto explain that the division created, "Cliques, you had the older players and you had the girls who kept to themselves." This environment had deleterious effects for multiple players. For instance, Nissa commented, "Previous players really intimidated me, like telling me on the sideline, "You're not going to get playing time, you're a freshman!" When Nissa was prompted to describe how these older players comments affecter her, she stated, "I kind of just stepped back and took in what they said, 'You're a freshman, you're not going to play.' So my level of work just, you know, sidelined basically and I just accepted it."

The negative manner in which these seniors purportedly devalued Nissa's contribution to the team based on her lack of experience is consistent with an ego-involving climate, or situation where the most able athletes are treated preferentially. From an AGPT perspective, it makes sense that this type of situation would have a negative effect on Nissa's motivation, especially if she accepted the seniors' position that she was too inexperienced to play. AGPT outlines that fostering adaptive motivation in sport is in part contingent upon making all team members feel like they play an important role, which from Nissa's perspective, was clearly not the case.

Maggie's experience on the previous team created a situation where she was unsure if she wanted to continue playing. Maggie described,

My first year here I was kind of like, I didn't want to play anymore for a while. They were mean and then other people were like, well it's just your first year of college sports. My friend's dad was like, "I played college football and they used to mess with me the

first year, but it gets better and the years go on and everybody is cool with each other after that.” But it was so hard. I didn’t want to do anything.

While probably given with the best of intentions, the advice Maggie received from the former collegiate athlete normalized the negative behavior that was causing her to contemplate quitting. When Maggie was prompted to describe in greater detail the dynamics on the previous team, she described that it was

Not supportive I guess. They [seniors] expected us to know stuff they have learned over four years, you know? And they wouldn’t really show us; they were just like, “You’re supposed to do this!” It made me not want to go to practice or lift or anything. I red shirted my first year and after that I didn’t know if I wanted to play anymore.

The lack of support and intra-team conflict that Maggie perceived is theoretically consistent with a motivational climate that is more ego-involved. Previous research has shown that this type of environment is associated with a range of maladaptive achievement strategies that include lower levels of sport commitment and stronger intentions of dropping out (Duda & Hall, 2001; Fry & Ganoverway, 2010). As such, one could anticipate that the lack of support and intra-team conflict that Maggie perceived would have undermined her commitment to the program and heightened her disposition toward discontinuing participation, like she suggested.

Past motivational climate intervention research has mainly focused on the role of coaches in creating the motivational climate, the role of peers has received far less attention. While research on the athlete’s role in shaping the motivational climate is limited, studies targeting this topic have revealed that like coaches, athletes do wield a powerful influence over their peers’ perceptions of the climate (Ntoumanis & Vasou, 2005; Vazou, Ntoumanis, & Duda, 2005). In fact, the athletes’ comments in this section highlight the influential role that their peers played in shaping the motivational climate on their prior team. This is not to say that the head coach did not also influence the motivational climate on this team, but overall, analysis of the interviews

revealed that a majority of the players approved of her coaching approach. The more salient theme to emerge from this line of questioning was that the former players contributed to creating an environment that could be described as less supportive and more ego-involving.

We're Skilled, but Need More Team Bonding

In the final questions of the interview, the athletes were asked to assess the team's strengths and areas for future improvement. The question concerning strengths was proposed to solicit information that would help us develop a motivational climate program that built upon team strengths. Further, the question concerning improvement was directed at gaining information that could be used to develop goals for the motivational climate collaboration that were from the athletes' perspective.

A number of team strengths were considered by the athletes, which included, but were not limited to, commitment to a common goal, experience, and offense. Nevertheless, the most prominent strength discussed was the team's high skill level. Nissa explained, "I think skill wise, that's the strength of the team." Maggie too, asserted that the team's greatest strength was, "I think just like our skill level." Similarly, when Rachel was asked, "What is this team's greatest strength?" she explained, "I guess our skill level is better and I think we know how to play, but we just need to incorporate it all together." While Rachel illuminated that the team needed to incorporate all their skills on the court, many of the other athletes indicated that the team needed to have a stronger connection off the court. For instance, Caitlin explained,

We'll be together and we'll create our bonds, but then again we'll separate and we'll go back to our little cliques and we'll stay distant for a while, especially out of season. I mean we'll still see each other, but we could do more together in the off-season.

Rachel also indicated that the team could be closer, especially in the off-season. In response to the question, "What is one area that the team could improve upon?" Rachel explained,

I'd say by doing team bonding, because everybody just seems to like do their own thing after, like off the court. I mean that's cool and I don't mind, but I think we could use that extra time to come together.

Expressing a desire for a stronger connection with teammates, Nissa explained:

We all should have a connection and I feel like we don't have that as a team. A lot of people would rather go out with one or two people on the team, rather than, do something together and like socializing... As a volleyball player, I want to have the team be as one.

Like many of the athletes on this team, Suzanne perceived a lack of cohesion with her teammates, explaining, "When it comes to the team, I don't really associate with a lot of them. I'm close with Jane. She's the only one I'd reach out to for anything." Suzanne went on to offer more insight on the type of relationships she would prefer to have with her teammates, explaining, "I like to be able to know that I can go to them for anything. Yeah, just to know that they kind of have my back."

Responding to the athletes' tendency to express dissatisfaction with team cohesiveness, the investigator prompted the athletes to offer recommendations that could be integrated to enhance relationships across the team. Many of the athletes' ideas focused on increased opportunities to develop social bonds with their teammates off the court. For instance, Patricia recommended, "I think we should just do like a lot more team bonding stuff, like we could all like go do something like laser tag." Similarly, Lesha recommended, "One thing that I would really like to see though, is us having a group session maybe one weekend we would hang out and do something other than volleyball... like a get together." Raven advocated for hands on team bonding activities versus sitting in a class:

I like having team bonding through like activities. There's this one place we went to in high school its called Broken Arrow, it's like a bible camp. They were really trying to show us team bonding and they did that through these games that in the end showed the lesson that you had to work together to get this done. Yeah, this group is really wanting to learn through hands on activities, than like sitting in a class or something."

In team sport, success is often determined by a team's ability to combine the skills of individuals and direct them toward a common goal. Evident in these athletes' comments was the view that they were skilled enough to be successful; however, there was consensus that the team needed to develop stronger social bonds in order to put their individual skills to work for the benefit of everyone. In accordance with the athletes' emphasis on developing stronger social bonds, a substantial body of research has shown that increased perceptions of social and task cohesion are associated with better sport performances (Carron, Colman, Wheeler, & Stevens, 2002).

Conclusion

In summary, the purpose of this study was to qualitatively assess the motivational climate for an all Native American collegiate volleyball program. To the best of the author's knowledge, this study represents the first attempt to consider the role of assessment in integrating motivational climate research into practice. Consistent with the strengths of a qualitative approach, direct quotes from the athletes illuminated how multiple factors, including caring, task, and ego-involving features of the climate, contributed to their motivation in volleyball.

Interviews with the athletes also uncovered that factors beyond the motivational climate were important to consider. For instance, many of athletes indicated that they were navigating ongoing hardships. Gaining an empathetic understanding of the types of challenges that these athletes were experiencing while attending college and playing volleyball was considered imperative for building trusting relationships and developing a heightened responsiveness to the athletes' individual needs. This was significant, given that the researcher would be providing sport psychology services to the team during their upcoming season. Since the researcher was not a licensed psychologist, developing a referral network of local professionals to offer support to the student-athletes that were presenting major challenges was considered paramount.

A majority of the athletes also indicated that volleyball provided them an important outlet for stress. In view of this, designing a motivational climate program that aimed to enhance the stress relief that volleyball was providing, while also decreasing, where possible, the stress inducing aspects of participation, was a key consideration for the collaboration. Research has consistently shown a positive relationship between perceptions of a task-involving climate and reduced levels of stress and anxiety. Conversely, perceptions of an ego-involving climate have been linked to increased levels of stress and anxiety (Smith et al., 2007). Therefore, the provision of a task-involving climate and de-emphasis on ego-involving conditions was the first major recommendation to result from this assessment. Consistent with the recommendation for fostering a task-involving climate was the athletes' tendency to express a preference for feedback that was directed at their individual improvement and mistake contingent encouragement and instruction.

While the athletes' motivational preferences aligned with the defining features of task-involving climate, when defining success in volleyball, many of their responses reflected a primary concern for developing positive interpersonal relationships with their teammates and a secondary concern for task and ego goals. Though it is presently unclear if a relational goal orientation exists apart from a dichotomous task and ego goal framework, it was evident that developing positive interpersonal relationships with teammates was a primary goal action for many of these athletes. Another motivational model, Self-Determination Theory (SDT) posits that individuals have an innate psychological need to feel connected to others and have a sense of belonging within their community (Deci & Ryan, 2008). Correspondingly, athletes' perceptions of a caring climate have been consistently linked to a number of positive motivational outcomes (Fry & Gano-Overway, 2010; Iwasaki & Fry 2013). Given the priority these athletes placed on

developing quality relationships with their teammates and the clear evidence that fostering a caring climate is related to enhanced peer relationships, recommendations based on this assessment included strategies for fostering caring relationships. Congruent with this recommendation were the athletes' tendency to express a desire for strengthening bonds with teammates in response to the question concerning an area for future improvement.

As aforementioned, past motivational climate research has targeted coaching behaviors through brief educational sessions; however, many of the athletes' in this study emphasized the influential role that their peers played in shaping the quality of their volleyball experiences. Thus, any plan to optimize the motivational climate for this team would have to account for the athletes as well as the coach's role in contributing to the motivational climate. Providing the athletes with opportunities to engage in activities that could help them foster more caring relationships with their teammates and enhance their task-involvement in volleyball was considered essential to this collaborative process. Example athlete-centered recommendations included, but were not limited to, their participation in sport psychology sessions everyday over the course of the two-week preseason, and two times a week during their 12-week competitive season. It was proposed that the sport psychology sessions be lead by the researcher and target teambuilding/bonding at the start of the season and incorporate task-involving strategies as the season progressed. Additionally, it was recommended that the athletes complete a self-reflection log, termed a success log (Appendix B), at the conclusion of one practice a week over the 12-week season. Based on AGPT and caring frameworks, the success log would prompt athletes to describe one personal highlight from the day's practice, one highlight they observed in a teammate, an area in their game targeted for improvement, and one thing they could do that would lead to their desired improvement. In addition, the success log also prompted the athletes

to rate themselves on their personal effort as well as their support of teammates and coaches. While it is beyond the scope of this article to discuss all the recommendations that were based on the assessment findings, additional details concerning the activities that comprised the motivational climate program are discussed in a second study.

The American Psychological Association (APA, 2006) defines evidence-based practices in psychology (EBPP) as “the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and, preferences” (p. 273). What the EBPP definition clearly recognizes is that psychological services, to include interventions or collaborative projects such as this, will be most effective when they are responsive to contextual factors, such as the participants’ strengths, challenges, culture, and preferences. While previous motivational climate intervention research has employed the best available research with clinical expertise, the extant research has not explored the important role that context, culture, and preference play in integrating this research into natural sport settings. Consistent with the EBPP framework, this qualitative assessment provided a foundation of contextual knowledge that was considered essential for developing a motivational climate program that was culturally appropriate and contextually relevant. Additionally, the researchers were able to rely on the most current literature to interpret the assessment results in a manner that honored the participants’ voices and satisfied the standards of science. It follows that the context-specific exploration of the motivational climate on this collegiate Native American volleyball program did not produce knowledge that can necessarily be generalized to other sport settings. What this study did highlight was that an assessment was a valuable instrument in setting the stage to integrate motivational climate research into practice.

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Abstract

Employing an action research approach, this study explored the effects of a motivational climate program based on a pre-assessment, Achievement Goal Perspective Theory (AGPT; Nicholls, 1989), and a caring framework (Newton et al., 2007) between a Native American collegiate volleyball program and sport psychology researchers. At the end of the volleyball program's spring season, the athletes and head coach participated in a mixed-method assessment of their motivational climate. Findings from the assessment revealed that the team could benefit from fostering a more caring and task-involving climate. In turn, during the fall season, the researcher served as the team's sport psychology practitioner, providing education and support to the head coach and athletes to optimize their motivational climate. Interviews were conducted with the head coach and athletes during the preseason, mid-season, and at the conclusion of the season. The athletes also completed a motivational climate survey at the end of their preseason and at the conclusion of the season. This study reports on the head coach and athletes' experiences of participating in the motivational climate program over the course of a season. The findings revealed that our collective efforts to foster a caring and task-involving climate were effective, but challenged due to a range of external factors.

Motivational Climate Collaboration between a Collegiate Native American Volleyball Program and Sport Psychology Researchers

There is a burgeoning body of research indicating that the motivational climate can significantly influence the functioning of athletes and their teams (Duda, 2013; Harwood, Keegan, Smith, & Raine, 2015). Research indicates that athletes who observe caring (i.e., supportive) and task-involving (i.e., focus on personal effort and improvement) cues on their teams report a number of positive psychosocial outcomes including, increased perceived competence, enjoyment, commitment, and team cohesion (Boyd, Kim, Ensari, & Yin, 2014; Fry & Gano-Overway, 2010; Harwood et al., 2015). While there is evidence that motivational climate interventions can translate into numerous benefits for athletes, to date, this research has been quantitatively oriented and has narrowly targeted youth (Cecchini, Fernandez-Rio, Mendez-Gimenez, Cecchini, & Martins, 2014; McLaren, Eys, & Murray, 2014; Smith, Smoll, & Cumming, 2007; Theeboom, Knop, & Weiss 1995). There is an obvious need to employ diverse research methods, such as action research, to investigate the process of integrating motivational climate theory/research to a broader array of athletes, to include collegiate athletes. Using an action research design, this study explored the efforts of coaches, athletes, and sport psychology researchers in collaborating to optimize the motivational climate for an all-Native American collegiate volleyball program over the course of a season. More specifically, this study reports on the athletes and head coach's perceptions of the motivational climate collaboration at the beginning, middle, and conclusion of their season.

Motivational Climate

According to AGPT, athletes can perceive the motivational climate on their team as being task- or ego-involving (Newton, Duda, & Yin, 2000; Seifriz, Duda, & Chi, 1992). In a task-

involving climate, athletes perceive that the emphasis is on giving high effort, improving, cooperating, having every athlete play an important role, and treating mistakes as part of the learning process. In contrast, in an ego-involving climate, athletes' perceive that the most talented athletes are favored, rivalry amongst team members is encouraged, and mistakes are punished (Seifriz et al., 1992). A recent review of AGPT research indicated that perceptions of a task-involving climate have been consistently associated with a number of adaptive psychosocial responses, including increased perceived competence, positive affect, intrinsic motivation, pro-social functioning, positive performance assessments, and adaptive practice/performance approaches relative to perceptions of a ego-involving climate (for full review, see Harwood et al., 2015). These findings are in accordance with the theoretical predictions of AGPT, namely that the promotion of a task-involving climate and de-emphasis on ego-involving climate is the key to fostering long-term motivation (Nicholls, 1989).

Recently, the provision of a caring climate has garnered increasing support in the sport psychology literature too. Grounded in educational philosopher Nel Nodding's (1984) notion of care, colleagues Newton, Watson, Gano-Overway, Fry, Kim, and Magyar (2007) developed a caring climate framework to explore the relational aspects of the motivational climate. They defined a caring climate as "the extent to which individuals consistently perceive a particular setting to be interpersonally inviting, safe, supportive, and able to provide the experience of being valued and respected" (Newton et al., 2007, p. 70). Research indicates that athletes' perceptions of a caring climate are related to a number of desirable psychosocial responses, including increased effort, enjoyment, and commitment to sport (Fry & Gano-Overway, 2010; Iwasaki & Fry, 2013; Newton et al., 2007).

Motivational Climate Interventions

The earliest motivational climate interventions in sport were based on Epstein's (1989) TARGET criteria. The TARGET acronym refers to fostering an environment that includes relevant *tasks*; giving *authority* to participants to make decisions concerning tasks; *recognition* for effort and improvement; *grouping* individuals based on interests, not ability; *evaluations* based on effort and improvement; and allowing adequate *time* for participants to complete tasks (Ames, 1992; Epstein, 1989; Roberts & Treasure, 2012). TARGET interventions have revealed that trained coaches' athletes report higher levels of enjoyment, improved motor skills, greater persistence, and increased effort when contrasted with athletes in a control group (Cecchini et al., 2014; Theebomb et al., 1995). Smith and Smoll's (2007) Mastery Approach to Coaching (MAC) has been used to inform several other motivational climate interventions. Based in part on AGPT, the MAC protocol consists of providing a brief training to coaches (one 75-minute session) on how to foster a task-involving climate and de-emphasize ego-involving conditions. MAC interventions have yielded positive results, showing that athletes of trained coaches report less anxiety, increased task orientation, and greater team cohesion than their control group counterparts (McLaren et al., 2015; Smith et al., 2007).

Taken together, motivational climate interventions have made substantial contribution to AGPT research and to the broader coaching education literature; however, there are a number of questions that have been left unanswered. For instance, the quasi-experimental approach of comparing the responses of trained coaches' athletes to untrained coaches' athletes' pre and post intervention does not explain the factors that shape the process in which changes in coaching behavior, coach-athlete relationships, and athletes' perceptions of the motivational climate occurred. Further, these interventions have relied on employing a prescribed coaching educational program without specifically considering the individual characteristics of the setting

or participants. The American Psychological Association (APA; 2006) has outlined that in order for psychological services (i.e., interventions) to be considered evidenced based practices, they must account for the context of participant's "characteristics, culture, and preferences" (p. 273). Considering the participants' background is especially important when integrating motivational climate research with culturally diverse participants, as was the case in this study. Another limitation of motivational climate intervention research is that they have narrowly targeted youth sport. More research is needed that includes a more diverse range of competitive levels, including college age athletes.

Motivational Climate and College-Age Athletes

While much of the extant motivational climate research has targeted youth sport, there is preliminary evidence that the motivational climate is a relevant construct for understanding the motivation of college age athletes. For example, Pensgaard and Roberts (2002) found that Norwegian athletes, aged 19-24, at the 1994 Winter Olympic Games expressed a preference for a training climate that was caring and task-involving. Further, the Norwegian athletes' perceptions of an ego-involving climate were associated with higher levels of cognitive sources of distress, viewing coaches and teammates as sources of distress, and total distress relative to athletes that perceived a task-involving climate (Pensgaard & Roberts, 2000).

Reinboth and Duda (2006) investigated the relationship between British university athletes' perceptions of the motivational climate and their satisfaction of basic psychological needs for autonomy, competence, and relatedness, which in turn, were hypothesized to predict their subjective vitality. Results indicated that an increase in the athletes' perceptions of a task-involving climate positively predicted an increased satisfaction of their basic psychological needs, which positively predicted an increase in their subjective vitality (Reinboth & Duda,

2006). Another study conducted with NCAA Division-I college athletes from multiple universities in the United States found that their perceptions of a task-involving climate positively predicted their task and social cohesion, while perceptions of an ego-involving climate were associated with lower levels of task cohesion and had no significant association to social cohesion (Boyd et al., 2014).

These studies provide evidence that the concept of a caring, task-, and ego-involving motivational climate has relevance for college-athletes. The next logical step in this line of inquiry is to investigate strategies for optimizing the motivational climate within college athletic programs. Claunch and Fry (in press) conducted one such motivational climate collaboration with a Native American collegiate football program with positive results. Qualitative data revealed three of eight coaches were originally resistant to adopting a more caring and task-involving coaching approach because of their previous athletic experiences in an ego-involving climate. These coaches' normalization of an ego-involving climate was initially a barrier that prevented them from seeing the value of taking a caring and task-involving approach to coaching. However, over the course of the season the coaches were presented with opportunities to reflect on their coaching philosophies and experiment with facilitating motivation through a more caring and task-involving approach. Overall, the study revealed that the motivational climate collaboration had a transformative effect on the three coaches as they noted improved relationships and motivational responses from their athletes (Claunch & Fry, in press). The current study builds on this research and adds the principles of action research to guide and strengthen the efforts of the researchers to work alongside the coaches and athletes in optimizing their motivational climate.

Conception of the present study began when the head coach reached out to the primary researcher indicating that her team was not maximizing its potential on the court. Based on the challenges the coach described, the researcher recommended that the team participate in a mixed-method assessment of their overall motivational climate. Findings from the comprehensive assessment revealed that the Native American collegiate athletes preferred a team environment that fostered positive interpersonal relationships, task-involvement, and deemphasized ego-involving conditions. Consistent with the evidenced based framework, the researchers used the findings of the assessment along with current sport psychology research to tailor a motivational climate program that was culturally appropriate and contextually relevant. The purpose of this study was to explore the athletes and head coach's experiences of participating in a season long motivational climate collaboration with sport psychology researchers.

Method

Action research in sport is oriented toward a cycle of activities taken by organizational insiders and organizational outsiders to improve a situation and empower organizational membership (Gilbourne & Richardson, 2005; Herr & Anderson, 2005). In this study, the sport psychology researcher represented the outsider and the coaches and athletes represented insiders, while the situation to be improved was the volleyball program's motivational climate. In support of the participants' cultural autonomy, it was suggested that the most ethical approach for optimizing the Native American volleyball program's motivational climate was for the primary investigator to form a collaborative partnership with the coaching staff and athletes using the principles of action research. Empowering participants to generate practical solutions to problems that are significant to them is a key strength of action research (Herr & Anderson,

2005). Traditionally, Native Americans have not been afforded opportunities to take an active role in participating in research that was intended to benefit them (Smith, 1999). However, in the current era of Native American self-determination (1960-present), there are increasing calls for collaborative research practices that engage Native American participants as partners in research, and not merely as subjects (Smith, 1999).

Design

A mixed-method action research approach utilizing qualitative and quantitative methods was employed to provide a thorough exploration into 15 athletes and their head coach's experiences of participating in a motivational climate collaboration (Creswell, 2014). More specifically, this study used a sequential exploratory design in which the results from the quantitative analysis were integrated with the qualitative data to enrich the qualitative findings (Jones, Brown, & Holloway, 2013). Priority was given to the qualitative data to help ensure that the participants' voices were appropriately represented in the study.

Participants

Head Coach. The participating head coach was a former NCAA Division-1 volleyball player and had over 12 years of coaching experience, including nine years of head coaching experience at multiple levels, including NCAA Division-1, NAIA Division-2, and high school. The head coach was entering her sixth season with the team. In addition to the head coach's responsibilities in directing all aspects of the volleyball program, she was also a full time faculty member at the university, and had an active family life that included parenting multiple school-aged children.

Athletes. A total of 15 athletes participated in the study. Seven of the athletes were in their first year with the program, three athletes were in their second year, one athlete was in her third year,

and four athletes were in their fourth year. It is important to note that only four players on this roster had received significant playing time at the collegiate level. With the other eleven players having relatively no college playing experience, the team was considered by the coach and the older athletes on the team to be young. The athletes all self-identified as Native American, but along with the coaches, came from diverse tribes and circumstances. For confidentiality purposes, limited descriptive information about the participants was included in the study. The participants are referred to by pseudonyms of their own choosing throughout the study.

Researcher/Sport Psychology Practitioner. The researcher was an enrolled member of the Puyallup Tribe, a former collegiate-athlete, former coach, and was in his fourth year of doctoral training in sport psychology at the time of this study. His Native American heritage helped him build a working research relationship with the Native American participants. While acknowledging this upfront, he did not take their shared Native American background for granted. The researcher was aware that the volleyball program's head coach and athletes had diverse backgrounds. To this point, there are 566 different federally recognized Native American tribes, each having distinct beliefs and practices. The volleyball program reflected that diversity, as its 16 participants (coach and athletes) represented over eight different tribal nations.

In accordance with an action research approach, the researcher had the dual roles of sport psychology practitioner and the primary instrument in collecting and analyzing data (Gilbourne & Richardson, 2005). The researcher's role as the team's sport psychology practitioner entailed providing sport psychology education to the participants as well as being an active participant in all team activities, including meetings, training sessions, and competitive matches. In his role as a researcher, he did not assume complete objectivity or insider status with the volleyball team, but tried to identify and monitor how his personal biases affected his relationships with the

participants and affected the way he interpreted their responses (Merriam, 2009). In addition, the researcher took steps to consider how his presence in the setting affected team dynamics and the participants' responses. This monitoring was accomplished through reflexive journaling and by speaking to a team of critical colleagues weekly about what the researcher was experiencing in the setting (Merriam, 2009).

Data Collection

Multiple methods for data collection were used over the course of the motivational climate collaboration. The data collection strategies comprised semi-structured interviews, the researcher's field-note journal, and questionnaires. Semi-structured interviews were conducted with the athletes during three time points: end of the two-week preseason, mid-season, and at the conclusion of the season. All the semi-structured interviews were conducted on site and typically lasted 15-30 minutes each and were audio recorded and later transcribed verbatim (Merriam, 2009). Participants were provided with copies of their transcriptions to verify the accuracy of their statements and to insure their views were adequately expressed (Merriam, 2002). In addition, notes and reflections based on the researcher's interactions with the coach and athletes were collected in a field note journal. The field notes were transcribed and integrated with data from the interviews to provide a more thorough account of the motivational climate collaboration (Maxwell, 2005). At the conclusion of the season, the athletes were also invited to complete a series of quantitative measures that they had completed during the spring and at the end of the fall preseason. The quantitative measures are described below.

Perceived Motivational Climate in Sport Questionnaire. To assess the motivational climate on the team, the athletes and coaches completed the 21-item Perceived Motivational Climate in Sport Questionnaire (PMCSQ; Seifriz et al., 1992) (Appendix C). The PMCSQ measured the

extent that participants' perceived a task- or ego-involving climate on their team. Sample items included the following: "On my team, each player feels like they have an important role" (task-involving climate) and "On my team, the coach favors some athletes" (ego-involving climate). The questionnaire uses a 5-point Likert scale, with options ranging from 1 (strongly disagree) to 5 (strongly agree). Previous research has supported the reliability and validity of the PMCSQ (Seifriz et al., 1992)

Caring Climate Scale. The Caring Climate Scale (CCS; Newton et al., 2007) (Appendix D) is a 13-item scale that assesses the degree to which athletes perceive caring behaviors on their team. Sample items include "On my team, the players are treated with respect" and "On my team, the coaches listen to team members." Responses were indicated on a 5-point Likert scale, with options ranging from 1 (strongly disagree) to 5 (strongly agree). Previous research has supported the reliability and validity of the CCS (Newton et al., 2007).

Data Analysis

Braun and Clarke's (2006) six-phase method for thematically analyzing qualitative data was used in the analysis of the transcripts. After the season, the researcher transcribed audio recordings of the interviews and read through them several times to become familiar with the data set (phase 1). To begin to generate initial codes (phase 2), the researcher searched the transcription for a priori codes that were based on relevant AGPT and caring research (Maxwell, 2005). In a second round of coding, the researcher reread the transcripts searching for codes that were not necessarily related to AGPT or the caring literature. This second round of inductive analysis allowed new and emergent themes to surface that were relevant to the participants' experiences, but unrelated to the broader AGPT and caring literature. Next, the researcher integrated the deductive and inductive codes, searching for similarities, relationships, and themes

amongst them (phase 3). During the third phase, the codes were organized and grouped based on their relationships to other codes and given a sub-theme description. During the fourth phase of analysis, the investigators joined together to mutually discuss and decide what themes most accurately represented the data set as a whole and what codes were most appropriate to report based on the research objectives. During the fifth phase of thematic analysis, the researchers worked together to identify how each theme related to the larger story that the researchers were attempting to tell with their data and how the themes related to their research objectives (Braun & Clarke, 2006). The sixth and final phase involved the final write up of the article.

Statistical analysis of the questionnaire data was conducted using SPSS software. Descriptive statistics, which included means and standard deviations, are reported in Table 1. Further, the quantitative results are integrated with the qualitative findings to offer additional insight into the participants' perceptions of their team climate.

Trustworthiness. To ensure that the way the researchers derived meaning from the data was trustworthy, several strategies were employed. First, the athletes' responses to open-ended interview questions were prioritized. The open-ended questioning allowed athletes to speak in their own language and from their own point of view (Maxwell, 2005). Once the interview data was transcribed, the athletes and head coach were given copies of the transcripts to conduct a member check (Merriam, 2009). There was a peer review process that was conducted between the investigators, in which the qualitative and quantitative data was discussed and the final themes were mutually agreed upon (Marshall & Rossman, 2013). This study also collected data from multiple sources. This included gathering data from interviews with the head coach and athletes multiple times over the course of the season as well as the athletes' participation in motivational climate questionnaires at different time points during the season. Triangulating the

motivational climate data from multiple vantage points, such as the coach's point of view versus the athletes, or juxtaposing questionnaire results with the thematic analysis of interviews provided a more thorough investigation of the motivational climate than could have been accomplished by any one method (Maxwell, 2005). Lastly, a final write up of the manuscript was shared with the participants and they were invited to provide reactions, corrections, and additional insights (Merriam, 2009).

Procedure

Preseason Phase. Assessment results from the spring revealed that the athletes had a strong desire to improve interpersonal relationships on their team. In accordance with the athletes' requests and in line with fostering a more caring and task-involving climate, the researchers targeted theory-based team building/bonding activities throughout the preseason. It is important to note that technical jargon associated with AGPT and a caring climate framework (e.g., task, ego, motivational climate) were not used by the researcher in his work with the athletes. While it is beyond the scope of this article to describe all the strategies employed, a brief description of a few activities are included to give the reader a better sense of what took place. For instance, to deliberately foster a caring climate from day one, the head coach and sport psychology researcher officially welcomed the five incoming freshmen and ten returners to campus and helped them move in to their dorm rooms. Following the collaborative move in, a meeting for the entire team ensued at the head coach's house, in which the team was welcomed and each athlete was partnered with a fall sister. Fall sisters were the head coach's idea and involved the most experienced players on the team, partnering with a new or less experienced member of the team to provide ongoing mentoring and friendship over the course of the season. Partnering with fall

sisters to accomplish particular tasks, such as warming up for practice, was a recurring strategy used throughout the season to foster positive team relationships.

Over the course of the two-week preseason, the athletes participated in an hour-long team-building/bonding activity every day except for Sunday. The team-building/bonding activities were led by the researcher and directed at helping the athletes get to know each-other, increase understanding of where each athlete was coming from, improve communication, and establish positive team norms. For instance, one such activity included a team bingo, in which the athletes interacted with their teammates by asking them questions about their backgrounds so they could sign off on their bingo sheet (Appendix E). Another activity was based on the assessment, in which an athlete suggested that the team play laser tag together. The athletes were paired up with their fall sisters and taken to a large arcade where they were able to participate in a wide variety of activities, to include laser tag. At the conclusion of the preseason, each athlete participated in an interview and completed a motivational climate questionnaire.

Additionally, the investigators provided a two-hour educational workshop based on relevant AGPT and caring research for the head coach. The workshop consisted of an overview of AGPT and caring research, quotes from famous Native American athletes that reflected caring, task, and ego goal orientations, prompts to have the coach reflect on her own coaching philosophy in view of the research, and discussed strategies to foster a caring and task-involving motivational climate within the volleyball program.

In-Season Phase. During the competitive season, the researcher was allotted twenty minutes prior to the start of each practice to conduct educational activities with the athletes. The educational activities varied and included, but were not limited to, team building/bonding, goal setting, guided imagery, diaphragmatic breathing, traditional Native American stories,

motivational videos, and inspirational quotes. While the educational activities comprised a wide range of psychological skills, each activity was consistent with AGPT and a caring climate framework. For instance, the guided imagery entailed having the athletes visualize giving their maximum effort during training, celebrating their teammate's accomplishments, and supporting their teammates after they made mistakes (Appendix F). Ten minutes was set-aside at the conclusion of each practice to have the athletes reflect in a success log (Appendix B). Rooted in AGPT and caring practices, the success log prompted the athletes to describe one personal highlight from the day's practice, one highlight they observed in a teammate, an area in their game targeted for improvement, and one thing they could do that would lead to their desired improvement. The success log also prompted the athletes to rate themselves on their personal effort as well as their support of teammates and coaches.

Similar to the athletes, the head coach was asked to monitor her own behavior by completing a self-reflection form (Appendix G) at the conclusion of one practice a week over the course of the 12-week competitive season. The form was in part based on the MAC protocol, which includes a form that prompts coaches to reflect on their task-involving coaching behaviors (Smith & Smoll, 2012). The MAC form was adapted for this study to have the head coach reflect on both task-involving and caring coaching behaviors. In addition, the head coach was asked to meet with the researcher once a week for ten minutes at the conclusion of practice to discuss the self-reflection and to assess if any adjustments to the motivational climate program needed to take place.

Post-Season Phase. At the conclusion of the season, all the athletes and the head coach participated in a final evaluation of the motivational climate collaboration. This included interviewing the head coach and each athlete, and the athletes completing the same motivational

climate questionnaire that they had completed at the end of their spring season as well as the end of the preseason.

Findings and Discussion

The purpose of this study was to explore a Native American collegiate volleyball program's participation in a season long motivational climate collaboration with sport psychology researchers. The thematic analysis is organized around the athletes and head coach's perceptions of the motivational climate collaboration at the end of the two-week preseason, mid-season, and end of the season. The following themes are described and discussed with accompanying sub-themes (a) preseason bliss, (b) the mid-season slump, and (c) the final evaluation.

Preseason Bliss

In this study, the preseason provided an ideal situation to implement the motivational climate program. The preseason was scheduled two-weeks prior to the beginning of university classes, which allowed the athletes and coaches to devote more of their time and energy to volleyball than would be permitted once classes began. The two-week preseason schedule included two ninety-minute practices a day, plus sixty minutes of team building/bonding activities with the researcher, excluding Sundays. Another advantage of introducing the motivational climate program at the start of the season was that five new players were joining the program and it had been over three months since most of the ten returning athletes had been around each other. As such, the influx of new athletes coupled with the break that the returning athletes had from one another provided a fresh start for cultivating caring relationships and task-involvement.

The assessment conducted during the spring revealed that when nine out of the ten returning upperclassmen had arrived to campus as freshmen, it took them a considerable amount of time to adjust and feel accepted in the volleyball program. For instance, Caitlin indicated that as a

freshman it took most of her first semester before she felt comfortable around her new teammates, explaining that the upperclassmen athletes initially met her with “blank stares and awkward silences.” In speaking about her incoming freshman experience, Angela explained, “The first semester wasn’t too good. Like, I wanted to go home ‘cause everybody was just so, like mean.” In view of the assessment findings, and in line with the guiding theories, the head coach and sport psychology practitioner took a number of pragmatic steps to intentionally establish an environment in which every athlete would feel supported from the outset of the preseason.

Returners Perceive Changes in the Climate

The collaborative efforts of the head coach and sport psychology practitioner to foster a more caring and task-involving climate did not go unnoticed. For instance, eight out of the ten returning athletes indicated that at the end of the two-week preseason, their experience was noticeably different from past preseason camps. Making this point, a returning starter named Jane conveyed:

I could say it’s completely different from last year, there’s a lot more support. Its more, there’s no, there’s not as much anger as there was before. There wasn’t that scared of messing up feeling. It’s more of like, “Okay, we got the next one” kind of thing, so I feel like we’re growing.

Jane’s reference to perceiving more support and less anger signaled to the researchers that in the early stages of the season, she could perceive a more positive climate on the team. In addition, Jane’s perspective that there was less fear and more encouragement around mistakes was in line with the task-involving approach that was being emphasized by the head coach during practice sessions and by the sport psychology practitioner/researcher during team bonding activities.

Maggie was entering her third year with the program and had redshirted her first year and received limited playing time in her second year. Like Jane, Maggie contrasted what the current

preseason was like compared to previous preseasons, stating: “It’s going good, it’s fun, it’s way different...everybody gets along, and I think we’re comfortable it seems like.” In speaking about her previous preseason experiences, Maggie stated the following:

I used to be nervous all the time and really wouldn’t want to say anything because it was scary. They [upperclassmen] were like intimidating and...I feel like they would yell a lot. Like if you messed up, it was all your fault. But now it’s a little better, everybody has patience with each other... If someone messes up they know it happens, so it’s ok to shake it off.

The manner in which Maggie described being intimidated, yelled at, and subsequently “nervous all the time” was consistent with previous research relative to an ego-involving climate; namely that anxiety will likely be induced in an environment where athletes are punished for making mistakes (Smith et al., 2007). Conversely, Maggie’s observations that on the current team athletes were getting along, comfortable, patient with each another, and shaking off mistakes provided important indications that the caring and task-involving approach the head coach and sport psychology practitioner/researcher were taking over the course of the preseason were resulting in positive changes that were consistent with our collaborative goals.

Raven was entering her junior year and was identified by the head coach as one of the most skilled and experienced athletes on the team. Similar to the aforementioned athletes, Raven painted a picture of a current team environment that was more supportive and cooperative than in past years:

I think everyone gets along more and there’s no frustration on the court when we’re playing. No one is getting mad at each other, or blaming each other for something, or getting down on themselves. It’s like everyone is supporting each other and I think that’s what makes practice comfortable for everyone.

Raven’s description of a team climate where there was no frustration, no blaming, and the athletes did not get down on themselves was distinctively different from the quarrelsome situation that the head coach had described the previous fall season, when she initially reached

out to the researcher. Raven and the other returning athletes' comments highlight that the team environment was evolving through the preseason to reflect the caring and task-involving characteristics that the head coach and sport psychology researcher/practitioner were targeting.

Explanations for Changes in the Climate

Rachel was entering her junior season and when she was asked at the end of the two-week preseason, "How is the season going so far?" she explained:

I feel its better than how we started last year or when we were freshmen because we're getting to know each other. We didn't do that before so I guess it's like making things a lot easier; there's better communication.

Reflecting back on previous seasons, Rachel stated, "There was always tension." When prompted to describe what factors were contributing to less tension, Rachel responded,

I guess being open and like our little conversations that we have and activities that help us get to know each other. Like opening up how we do, we start trusting each other, so like we can trust each other on the court, you know.

Rachel's comments highlight the value she attributed to team bonding activities like Paseo (Appendix H), which prompted athletes to explore and share parts of their personal history with each other. It is important to note that the spring assessment revealed that most of the returning athletes didn't typically share aspects of their personal life with anyone. Facilitating structured team-bonding activities was one approach employed by the sport psychology practitioner/researcher to provide the athletes a non-threatening opportunity to engage in meaningful conversations with one another and potentially open the way for increased social interaction over the course of the season.

Another assessment finding revealed that the athletes wanted to engage in hands on team bonding that took place outside of the classroom and away from the volleyball court. As a result, a number of less structured team bonding activities were implemented during the preseason.

Several athletes indicated that they valued these opportunities to interact with their teammates, such as Caitlin, who expressed, “I think the whole fall sister thing, like with the whole bonding trip down to the arcade, it was really good because it allowed us to interact.” Caitlin described the difference between the type of relationships that were being formed during the current preseason, compared to previous years when the upperclassmen had, in her words, “already formed groups with each other, like they already found who they’re good friends with, but I think this year, we’re really able to connect with one another opposed to just someone we’re familiar with.” Caitlin’s comments corresponded with information gathered during the assessment, in which multiple athletes complained about cliquish behavior on the team. While a majority of the returning athletes viewed cliques as a major team problem and had expressed a desire to be more inclusive with each other, it appeared that the emphasis on fostering a caring climate through team bonding activities helped give them permission to do so.

In addition to the benefits that the athletes associated with team bonding activities, three returning athletes indicated that they noticed significant changes in their head coach’s coaching approach during the preseason. For instance, Maggie stated the following about her coach:

She doesn’t really yell as much. Or like if she corrected them [athletes] and if they weren’t doing it right she would keep at them and at them and at them until, like, they just couldn’t take it anymore or like got mad or frustrated. But she doesn’t do that anymore at all really. She seems more calm.

Comparably, Jane described changes in her coach’s approach, “She doesn’t get as mad as easy and she doesn’t really have to talk as much...it just definitely feels more positive than anything I would say.” Maggie and Jane’s observations that their head coach appeared to be less reactive, calmer, and more positive overall were in line with our goal to foster more caring and task-involving coaching behaviors and deemphasize ego-involving one’s, like mistake contingent

punishment. Raven also commented on differences in the head coach's approach during the preseason, stating:

I think she is coaching us differently...coach gets to the main thing, but in other years she would try to make you figure it out, so it was kind of hard to know what she wanted. Like if we were practicing our plays, like Navajo, she would be telling us what the play is and we would just have to know. I didn't know how to do the slide or anything and she just expected me to. This year is different because she actually teaches us. She gets deeper in what to learn. I think that's what I like about it.

Raven's perception that the coach was taking more time to teach the athletes over the course of the preseason appeared to be consistent with structuring an environment that fostered learning and improvement, the primary goal within a task-involving climate. Another possible contribution to changes in coaching behavior could have been the head coach's recognition that five incoming freshmen and six of the returning athletes had relatively no college playing experience. With only four returning players having college game experience, it would make sense that the coach would have been more thorough in teaching the basic skills and team strategies, compared to seasons when she had a larger and more experienced upper class. All in all, these returning athletes noticed that their head coach was less reactive and more positive during the present preseason compared to their previous preseason experiences, which was consistent with caring and task-involving coaching behaviors that were emphasized during the coaching workshop.

While athletes were picking up on changes to the team's climate, some returners also recognized early in the season that the team was not executing at the same proficiency that they had in previous years because of their lack of experience. Making this point a returning athlete commented, "I think last year we were playing at a higher level than this year because we had a lot of returners so we were already used to playing with each other, but now we're starting to rebuild again." The team's youth would certainly shape the quality of their play over the course

of the season, but it also likely allowed new team leaders to emerge. For instance, many of the returning athletes had indicated that most of the negativity from the previous season stemmed from upperclassmen that had moved on from the program. While these upperclassmen's experience and abilities would be missed, their departure most likely helped the head coach, athletes, and sport psychology practitioner/researcher alter the team culture. To this point, Suzanne viewed the influx of incoming freshmen more positively, stating:

The girls coming in are new so they don't have any negativity from the past experiences. They do not know any of that, so all they see is positivity that we are trying to bring in. I think a lot of us returners are trying to embrace the positivity and like talking, and cheering more than we used to and meaning it though. So, maybe we did it last year, but maybe it wasn't as meaningful.

The culminating factors that led to changes to the team climate established a situation where, in the words of one incoming freshman,

It's been really welcoming. Making friends right away and becoming close to the team with team bonding has helped a lot. There are times when I miss home a lot, but I'm here [practice] and it all goes away. I didn't think the conditioning was going to be that hard, but it really was the first couple of days we were here... and with what all the coaches are doing with the program, it helps a lot to have the support.

This incoming freshman appeared to perceive that the preseason atmosphere was welcoming and supportive as well as physically and mentally demanding. Her freshman experience was substantially different from any of the freshman experiences described by the upperclassmen on the team. Consistent with these qualitative findings, statistical analysis of questionnaire data revealed that the returning athletes across the team perceived a more caring and task-involving climate during the two-week preseason than they did at the conclusion of the spring season (see Table 1). While results from spring analysis suggested that there was not a clear distinction between the athletes' perception of a caring and task-involving climate versus an ego-involving climate on the team (i.e., values for caring, task, and ego-involving climates were relatively close

together), the preseason data showed a clearer demarcation amongst the climate scores (see Table 1). Additionally, between the spring and fall, task and caring climate scores increased by approximately one third of a point while ego-involving climate scores decreased by nearly the same value. The quantitative data supports the athletes' qualitative accounts of their preseason experiences and highlights that their perceptions of the motivational climate were evolving over the course of the two-week preseason.

The Mid-Season Slump

During the early stages of the season, the head coach complimented her team multiple times in regard to their attitudes and approaches to play. For instance, after the opening game of the season in which the team lost a close match, three sets to two, to a premier volleyball program, the head coach commented to the researcher,

Versus a tough team in previous years we would have started strong, but the errors would have created tension between the players and we would have been blown out in the later games. This year we started slower, but as the match progressed, we stuck together and played better and better.

Consistent with this sentiment, the following weekend the team played in its first tournament and split their matches, beating two teams and losing to two teams. After the matches, the head coach was complimentary with her players, explaining:

A referee came over and asked, "What conference do you belong to? I remember seeing your team in the past, but not like this." The opposing coach also said, "Your girls are good and have improved a lot, but most of all I like their attitudes." I loved hearing these positive comments about our team this weekend and I told the coach, "Tell my assistant because he's doing his dissertation with the team and it's helping."

As shown by the head coach's comments, she perceived in the early parts of the season that her team reflected a positive attitude and appeared to cope with mistakes in a more constructive manner than was the case in recent seasons. Further, the coach's comments suggest that she

connected the positive changes on the team to our collaborative efforts to optimize the motivational climate.

The Losing Streak

While the team began the season with a strong performance at their first tournament, after the two-win, two-loss tourney split, the team lost the next 13 matches in a row. The losing streak lasted nearly three weeks and brought the team to the middle of their season. It is important to keep in perspective that during the slump, there were many factors that were outside the athletes, head coach, and sport psychology practitioner/researcher's control, such as the team's experience level and the quality of their opponents. For instance, losing three of six starters from the previous year created a situation where three players with relatively no college playing experience had to start in their place. Further, during the current season, the team played multiple teams that were nationally ranked, including the defending national champions. The combined winning percentage of their current opponents was 56% compared to their opponents from last year, which had a combined winning percentage of 46%. When interviews were conducted with the athletes in the middle of the season, the athletes' grappled with the reoccurring losses. For instance, when Angela was asked, "How is the season going?" she commented:

I think our team chemistry is like there. I don't know, I think we do so good and then it just starts dying toward the end of the match. I don't know if it's because we're tired or I don't know. That's what I've been trying to figure out this whole time too. And then I've asked the audience too and they say we're good and stuff, it's just toward the end of games, we just die down.

In a similar vein, Maggie was also confounded about the losing streak, explaining,

I think it's kind of like in the middle, like flat, I don't know. [pause] Everybody's like, I don't know, it's weird, like we felt super close at the beginning and everything is just kind of like, going down. It's weird.

Angela and Maggie's comments reflected a larger sentiment on the team in which the athletes struggled to make sense out of why they were not winning more of their matches. Many of the returners had invested a considerable amount of time training for the season and expected their team to play well. These athletes were justifiably upset when the scoreboard at the end of matches did not reflect the result that they had desired. Their reactions to the losses were in line with the extant research, which shows that losing does have negative affective and motivational consequences for athletes (Smoll, Smith, & Curtis, 1978; Wilson & Kerr, 1999).

In the short term, the team could not drastically transform their skill level or the skill level of their opponents; however, the athletes were encouraged to focus on what they could control. In keeping with the evidence based strategies that were guiding the collaboration, during the losing streak, the head coach and sport psychology practitioner/researcher refocused athletes on developing task-relevant skills, continuously highlighted what the team was doing well, encouraged the athletes to learn from their experiences, and emphasized the process of improving over the course of the season. One example of emphasizing these task-involving principles occurred after a loss to a team ranked 10th nationally. After the game, the head coach avidly stressed to her team,

Were so close, don't look at the win/loss column. You are playing really good teams and you're right there. The question is how do we string everything that we're doing well together throughout an entire match? If I had a highlight of all the good stuff you're doing it would be awesome. I could find a highlight from each of you. I know you can do it and it's my job to help you and I will continue to think about how I can set up practices to make us better.

Slumping is Bigger than Volleyball

The spring assessment revealed that most of the athletes on the team were dealing with challenges at home that continued to affect them while they were at college. Adverse social, health, and economic conditions disproportionately affect the Native American communities and

many of these disparities were reflected in the challenges that the athletes experienced over the course of the season (CDC Health Disparities & Inequalities Report, 2013). For instance, during the mid-season interview, Jane explained, “I’m not going to lie, like school and family stuff has come up. Like, I want us to win, but at the same time I have family in the back of my mind right now.” Jane provided more insight into the complex reality of what she was grappling with:

My mom’s still grieving with my grandmother because she passed away in March and I’m still having troubles with it too. When I went home I was the strong one to lean on. And she’s [mom] an alcoholic so she’s drinking a lot and it’s been rough on her. I feel like being away doesn’t really do anything because she says it’s not the same because I’m not there. It’s like she needs me there. I don’t really like to put my problems out there, like I don’t seek sympathy, but I have been able to talk with close friends like Caitlin, and I’m talking about it more in a healthy manner. But it has made me want to drink in a sense, but I know I shouldn’t. It’s just a lot of stress right now and it’s getting tough.

Rachel disclosed that she was also using alcohol to cope with family problems and that the current situation was negatively affecting her grades in class and attitude on the court,

I use to be focused and now I’m not. I use to be an A student; well, I have a B right now in most of my classes, but I don’t know. I just think more about a lot of stuff rather than what I should be doing. I guess the whole thing is affecting my demeanor. You would see me in the beginning, I was like always cheerful and everything and now I am kind of like, I guess letting it get the best of me.

In describing the events that led up to the present situation, Rachel explained,

My parents were divorced when I was out here during freshman year. So it’s just like out of nowhere. Then next thing you know my parents are moving on... I should be talking to my parents about it, but all they care about is that they make sure I know they are happy or whatever. So I don’t really talk to them, but it really hurts like deep down because I don’t get it all. I would go drinking to cope with it. So then last year I stayed away from it because Jamie was like alcohol free so I was always with her. And like now it’s hard because she’s not around.

These athletes’ comments clearly highlight how issues in their personal lives adversely affected their motivation on the court and in the classroom. It was evident that Jane, Rachel, and other athletes not mentioned were unsure about how to deal with these negative events and turned to some maladaptive coping measures. While substance use is commonly viewed as an integral part

of the higher education experience, alcohol use appeared to be making some of these athletes' difficult circumstances worse. The challenges became so great for Rachel that she returned home to be with family for three days and missed a weekend tournament. Similar to Rachel, Suzanne asked the head coach and team for permission to go home because of the stress associated with recent negative events. Suzanne addressed the team prior to practice one day and explained,

I have to go home to recharge myself. I've had a rough time at school lately and things are not good at home. I almost left school this last weekend, but taking the advice of my grandma, she said come home for the weekend, recharge, and remember why you're going to school in the first place.

Although the spring assessment revealed that volleyball provided many of the athletes on this team with an essential outlet for stress, it appeared that the high levels of distress that some of these athletes were experiencing diminished the stress buffering benefits that volleyball had previously provided. In view of these challenges, the sport psychology practitioner/researcher checked in with these athletes more regularly, encouraged them to get professional help from campus resources, and introduced the team to stress-management techniques such as, diaphragmatic breathing, sharing exercises, and journaling. Although a referral network of mental health professionals was made available to the team, in general, the athletes were uncomfortable with the notion of seeking help for issues that they perceived they could handle on their own. The stigma associated with seeking mental health services that was present on this team was not dissimilar from what other researchers have found in general studies of college student-athletes attitudes toward help seeking (Vogel, Wade, Hackler, 2007). In response to this ongoing predicament, the researcher provided the athletes with the contact information of local campus and off-campus mental health services and was an advocate for the profession. The intent of these efforts was to inform the athletes that there was a support network in place to help

them and to reduce the stigma that many of them appeared to associate with the mental health profession.

The sport psychology practitioner/researcher and head coach also tried to be acutely responsive to the athletes when in their presence. They exemplified this type of responsiveness at a practice in which the head coach invited the researcher to join her in speaking to a redshirt freshman that lacked effort and had a negative attitude during the day's training. Leading into the meeting the head coach told the researcher that she was considering dismissing this athlete from the team. In response, the researcher recommended that the head coach get the athlete's side of the story before making any final determinations. In the meeting, the head coach opened the conversation by asking the athlete, "What was going on with you today?" and the athlete immediately broke down. After a few minutes of intense crying the athlete regained her composure and explained that her mother had been texting her prior to practice to update her about her brother who had recently been incarcerated and was facing substantial jail time. The athlete expressed remorse for the way that she had behaved at practice, but indicated that she was unsure of what to do. The head coach affirmed the athlete in that moment, stating,

Thank you for sharing this with us because to be honest I misread you today. I thought you were being lazy in the drills and you give looks sometimes that are piercing so it seemed like there was lot of attitude coming from you. I can't imagine what it's like to be carrying that with you, but if you talk to me I will try to understand. But you need to let us know. Okay?

The head coach could have easily responded to this athlete's apparent 'lack of effort' and 'bad attitude' negatively. Consistent with Nodding's (1984) notion of caring, the head coach instead engrossed herself in what the athlete was trying to express and displaced her own personal motives. It appeared that the coach's caring response to the athlete's off-putting behavior had a positive affect. For instance, over the following practices, the researcher and head coach noticed

and discussed that even though the challenges in this athlete's life had not changed considerably, she displayed a more positive attitude and higher effort at practices.

The Final Evaluation

A day after the last game of the season, the head coach and all 15 athletes each participated in a 30-minute interview and the athletes completed a motivational climate questionnaire. During the interview the head coach and athletes were asked a series of questions to gain insight into their experiences during the season.

Getting over the humps

The head coach and nearly all the athletes were consistent in the view that although the reoccurring losses were difficult to deal with, the team remained united and never gave up. For instance, Andi explained, "We were able to achieve, like getting over the humps of like losing a lot, like still wanting to play the next game. I mean we haven't exactly given up." Along the same lines, Jennie expressed,

We accomplished team unity, like being there for each other when things got really bad. Especially because we didn't have that good of a record, like, nobody quit or nobody, like, turned against each other. We formed, like, a tight bond for next season.

Jane provided more insight into the team's resilient response to repeated setbacks:

With our record, I could see how it could get a lot of people mad or a lot of people like really frustrated that we were losing games and stuff. But, you could tell that we continued to try hard and stuff, so there was a lot of a growth and it was a life lesson in a way.

Recurrent losing was equally difficult for the head coach, but like the athletes, she perceived that her team had grown stronger over the course of the season:

Really, I think hopefully they understand what resilience means. This was a really tough season because we didn't win many games. This was like the worst record I've had even, but...there's been a lot of great growth through the season and through the process.

Even though research has linked losing with adverse motivational consequences, the comments in this section encapsulates the notion that despite being disappointed by recurrent losses, the athletes continued to support each other, try hard, and improve (Wilson & Kerr, 1999). These athletes' adaptive responses to the less than desirable set of circumstances may have been related to their perception of a task-involving climate. For instance, not only did the athletes and coach's comments suggest that the team remained task-involved, but the end of the season questionnaire data showed that the team reported perceiving a highly task-involving climate compared to their perception of a neutral ego-involving climate (see Table 1). These findings are in line with the theoretical predictions of AGPT; namely that focusing athletes on task-involving aspects of participation, such as their personal effort, gives them control, which in turn can help them persist in the face of failure (Weinberg & Gould, 2015). Concurring with these findings, a study with youth basketball players found that athletes' perceptions of the motivational climate were a stronger and more consistent predictor of motivational response patterns than their won-lost record (Cumming, Smoll, Smith, & Grossbard, 2007). The study with youth basketball players along with these athletes' responses, highlight that it is possible for the athletes to remain motivated despite losing, given the provision of a highly task-involving climate.

Enhancing motivation

It was important to learn from the participants firsthand what factors helped enhance motivation over the course of the season. For example, nearly every athlete indicated that the unconditional support that they received from their head coach made a major difference. Jennie was a freshman that received minimal playing time, but perceived that her coach genuinely supported all the players:

I know some coaches would probably be at the point of like yelling and screaming right now, but she's doing her best to support us and encourage us and believe in us. Like last

game when she was telling Penelope and Rachel that, “I believe in you and you have to believe in yourself.” For me, that’s the way she thinks about everybody and how she wants the best for everybody.

Comparably, Jane, a returning starter, seemed surprised that her coach did not respond more negatively to the adverse circumstance, stating, “Coach could have easily made us run and gave us consequences, but she didn’t, she just talked with us. She constantly had faith in us and reminded us that our record didn’t matter.” Similar to Jane, one of the redshirt players that practiced, but was not eligible to play in the games, commented that her coach continued to be highly supportive after the losses, stating: “She tried to motivate us to keep going even after every loss . . . that we had to just keep pushing ourselves because she knows that we can do it. I think we can too.”

Jennie, Jane, and Tasha’s comments suggest that the head coach’s ability to convey confidence in her athletes and make them feel supported had a motivating effect. Supplemental to the athletes’ comments, statistical analysis of their questionnaire data revealed that the athletes’ perception of a caring climate was high at the conclusion of the season (see Table 1). Conceptually these qualitative and quantitative findings are in line with a caring climate framework; namely that fostering an environment where athletes feel cared for is one of the keys to sustaining long-term motivation (Newton et al., 2007). Furthermore, these comments underscore that the head coach’s support was not conditional or based on the athlete’s status or ability level, which is a defining feature of an ego-involving climate. For instance, Jane was one of the most skilled and experienced players on the team while Jennie and Tasha were emerging, but inexperienced freshmen. It was clear that regardless of experience level, athletes’ across the team viewed their coach as highly supportive.

During the interviews, the athletes also indicated that a number of the sport psychology activities that were implemented before practices helped enhance motivation. While a range of psychological and social skills were targeted in pre-practice educational sessions, consensus across the team was that the pre-practice team-bonding/building activities were the most helpful. For instance, multiple athletes, like Andi, suggested that the pre-practice team-bonding/building activities helped the athletes generate a positive attitude leading into the day's training:

Some of us could be having a super crappy day and then we like come in and we do this like dorky activity and then everybody is like laughing and having a good time. Its like, "ok what's next?" Let's go do this and have fun.

Similarly, Raven explained,

Like sometimes for me I'd be coming from class and be sluggish and lazy from class and then we'd end up playing a game and it ends up being really fun and you just want to participate and everything and it changes my whole mood around and by the time practice comes I'm like really happy and like I want to play.

Caitlin also perceived that the pre practice activities benefited the team, stating:

I think sometimes there would be like in a intimidating sense, like when we'd work with certain people or when it comes to like certain group things, but I think the team activities have allowed me to like really get comfortable with them so now it's just like its normal to work with.

These comments underscore the desirable psychosocial responses that the pre-practice team-bonding/building activities elicited for a majority of the athletes on this team. It is important to note that these activities were designed to be consistent with AGPT and caring research.

Therefore, when Caitlin claimed that the team-bonding/building helped eliminate intimidation and promote more comfortable relations with her teammates, it highlights how activities that were designed to foster more caring relationships achieved their aim. While research has shown that team-bonding/building is related to a range of desirable psychosocial responses, to the best

of our knowledge, this study represents the first attempt to inform team-bonding/building with AGPT and caring research to help bring about changes in the motivational climate.

Linking Findings to Future Improvements

While it was important to gain insight into what factors enhanced motivation over the course of the season, it was equally important to learn more from the athletes and head coach about what could be improved upon for the future. Interestingly, in the final week of the season, the head coach elevated the intensity of practices to a higher level than at any other point of the season. In general, the athletes indicated that they valued the more intense practices and appeared to be uncertain about why the practices had not been that intense from the beginning. For instance, Angela commented, “I wish we just had started sooner, like the practices being challenging, like how she made it towards the end. That’s what I really think she did well towards the end.” Comparably, Raven suggested, “Practices could be a little more challenging, like how they’ve been last week. I think all of us enjoyed it, but it was kind of frustrating for us that we’re doing it now instead of early on.” Raven’s desire for more challenging practices correspond to Nicholls’ (1989) view that effectively motivating others (i.e., fostering task-involvement) was in part dependent on providing individuals with optimal challenges. According to Nicholls (1989), “The consequent absence of optimal challenge would produce unequal and ineffective motivation, even in the absence of ego-involvement” (p. 152). Raven further explained,

I’m not going to like the hard practices, but it’s going to help. It’s going to make us mentally tougher through the games. I think that’s what we lacked and it’s because we don’t practice it in practice. To like get to that point, because you’ve seen our games, like at the last moment we just can’t finish. And that’s one of my biggest things that I get frustrated about too and I know that it’s because of that. Like it’s because we’re not pushing in practice.

Raven clearly perceived that having physically and mentally demanding practices was essential; especially in terms of finishing close matches, which the team did not consistently do well over the course of the season. Reflecting on the season, the head coach made a similar reference to the team's ability to finish matches, stating, "We didn't look in shape this year either. We couldn't even finish some five set matches."

On the one hand, having multiple athletes express a desire for practices that were more challenging was encouraging, because it highlighted their high task-orientation. On the other hand, it also suggested that we had not met our collaborative goal to consistently establish a practice environment that optimally challenged athletes to give their maximum effort and improve. From the perspective of the sport psychology practitioner/researcher, the difficulty in addressing the athletes' practice concerns was the lack of staff that the volleyball program had to devote to the planning and execution of volleyball practices. Multiple times over the course of the season the head coach expressed concern about the demanding reality of her schedule, which involved full-time faculty, head coaching, and family responsibilities. Making matters more difficult was the fact that the volleyball program did not have a single paid assistant coach, which is atypical for similar college volleyball teams. Therefore, coaching all positions, game strategy, and strength and conditioning responsibilities fell solely on the head coach's shoulders.

Commenting on the challenges associated with this situation, the head coach explained:

It was really difficult for me wearing many hats to stay consistent because it just takes up so much energy. Where you're hoping to have these upperclassmen that can really show what that means and to be present, and sometimes I didn't think they were always consistent.

The head coach was clearly understaffed and spread across many roles, which required that the team's upperclassmen assist in leading aspects of the volleyball program. However, many of

these upperclassmen did not appear to be prepared or willing to take on these responsibilities, which in turn frustrated the coach.

After the season the researcher and head coach met to discuss the findings from the study and to consider future directions. More specifically, we discussed the athletes' request for more challenging practices and the head coach's desire for increased athlete involvement. In view of the program's lack of assistant coaches, the head coach expressed interest in implementing a program that could, in her words, "develop athletes as extended hands of the coaching staff." The coach asked specifically if previous research in this area had been conducted. While a small number of leadership interventions targeting team captains have been carried out with positive results (Gould & Voelker, 2010; Voight, 2012), these interventions have not explored leadership development in light of this program's needs or limitations. In an ideal world, this volleyball program's resources, in terms of staffing, budget, and facilities would be consistent with their opponents, but that was not the case. The head coach explained, "When you are by yourself and there is so much that you are trying to do, you have to name your priorities. What is that priority and what can you get done?" The conundrum for this coach and many others in similar predicaments, is how can coaches do more when they have been given considerably less?

Conclusion

By many standards, the volleyball season did not go well for this team. Ideally, a range of positive performance outcomes would have accompanied our collaborative efforts to optimize the volleyball program's motivational climate. While the results did not show up in terms of the team's final winning percentage, the findings from the study did suggest that our collaborative efforts did lead to changes that enhanced the caring and task-involving nature of the team's motivational climate. Based on the athletes' responses, changes to the motivational climate

translated into improved peer and coach-athlete relationships and increased athlete resilience in the face of reoccurring setbacks. In addition to these desirable psychological and social outcomes, fostering caring relationships and task-involvement seemed to help prevent a multitude of problems that had afflicted the team in previous seasons.

While the preseason is typically a period of time focused on preparing athletes for the rigors of a competitive season, in this study it provided an ideal opportunity to implement the motivational climate program. Clearly, the extra time allocated for team bonding in the early stages of the season helped the athletes get to know each other on a more personal level, which improved their communication and trust with each other on and off the court. While a lot of work was done in the early parts of the season to establish expectations, habits, and routines that reinforced caring and task-involving behaviors, that was not the end of the story—setbacks were inevitable and athletes' motivation vacillated from day-to-day, practice-to-practice, and game-to-game. Thinking flexibly about all the external factors that affected athletes' motivation and the motivational climate over the course of the season was helpful as we experienced short and long-term setbacks. Future research may continue to investigate how external factors, such as losing streaks, negative life events, or limited resources can impact achievement motivation and the broader motivational climate. Exploring these nuances can help generate strategies that can assist sport practitioners as they navigate the often-imperfect realities embedded in sport participation.

It was evident from the athletes' statements and questionnaire data that they perceived that they were cared for. In many respects, fostering a caring climate was straightforward. For instance, being deliberate about acknowledging and affirming athletes each day, making time to thoughtfully listen and respond to them, encouraging their success, and implementing activities that helped them practice being supportive with each other was uncomplicated for the primary

investigator. Engaging the athletes in these types of caring interactions could be accomplished at any time and in any place where team members congregated (e.g., traveling to away games, classroom, and campus). For many of the abovementioned reasons, it was easier for the researcher to foster a caring climate without the assistance of the head coach.

Conversely, fostering a task-involving climate proved to be more difficult, especially from the position of a sport psychology practitioner/researcher. The athletes' request for more challenging practices at the season's end highlighted this challenge. What was clear from this work was that maintaining a task-involving climate involved more than verbally emphasizing, acknowledging, and rewarding effort, which the head coach and sport psychology practitioner/researcher frequently did. Communicating high expectations and verbally reinforcing effort were important activities, but it was apparent that elevating the task-involving nature of the climate required more work. Consistent with Nicholls' (1989) position on supporting task-involvement in others, our verbal emphasis on task-involving cues had to be coupled with a practice plan that consistently and methodically challenged athletes. Optimally challenging athletes not only necessitated that the coach be aware of the knowledge and skills that each individual athlete needed to develop, but also required that the coach have a certain level of resources (i.e., time and staff) to effectively deliver this content to athletes in an efficient manner.

Traditionally the sport psychology literature has defined a task-involving climate as a situation in which athletes perceive that effort and improvement are valued and rewarded, cooperation is encouraged, every athlete has an important role, and mistakes are viewed as part of learning process (Roberts & Treasure, 2012; Seifriz et al., 1992). What this study demonstrated was that fostering a task-involving climate also hinged on athletes being optimally challenged. Whether an athlete can perceive that effort and improvement are valued and

rewarded without being optimally challenged is undetermined; however, not assuming, but including *optimally challenging* language in the way that a task-involving climate is defined in the literature and described to coach's in the field seems appropriate. Future applied AGPT research may profitably explore strategies for fostering an athletic environment that is optimally challenging for athletes. For instance, blending the basic tenet of AGPT with coaches' tacit expertise to design drills and practice plans that optimally challenge athletes would not only provide a major contribution to AGPT, but also assist coaches, athletes, and teams striving to realize their full potential.

Given the lack of institutional support, it is highly unlikely that in the coming season, the head coach would have more time, resources, or staff to assist her in leading the volleyball program. In view of these limitations, the head coach expressed interest in developing a program to help athletes serve as peer leaders or extensions of her coaching staff. For smaller school programs such as this or other coaches going it alone, asking athletes to share in directing team activities may be a reality. The findings from this study suggest that efforts to empower athletes into positions of leadership should be accompanied by leadership education and ongoing mentorship. As has been noted, many of the upperclassmen on the team described being intimidated, alienated, and demotivated as a result of their previous teammates' authoritative and ego-involving leadership style. For these reasons, designing a leadership program that trained peer leaders to engage in caring and task-involving behaviors that were directed at optimizing their teammates' motivation versus thwarting it would be an important consideration.

Fostering a caring and task-involving climate was associated with a range of positive outcomes in this study; however, it is important to recognize the limitations of our efforts. Findings suggest that the factors affecting these athletes' motivation were multidimensional.

Social and family level factors that extended beyond the court and were more encompassing than achievement related goals adversely affected multiple athletes' motivation over the course of the season. While research has investigated the relationship between the motivational climate and psychological markers of well-being, such as anxiety and stress-levels, future research may explore how negative life events effect achievement motivation and how achievement motivation based strategies can assist athlete experiencing personal hardships.

It is important to note that the site of this study and the head coach and athletes that participated in this collaboration were not representative of the wider collegiate volleyball community. While this is a limitation in terms of the generalizability of findings, to date, Native American athletes and coaches have not been adequately represented in the sport psychology literature. They too, are worthy of our investigative efforts. The findings from this study support the promotion of a caring and task-involving climate for this particular program, adding the voices and experiences of female Native American collegiate-athletes and their coach to the motivational climate discourse. Ideally, future motivational climate research will include a more diverse sample of coaches and athletes. All in all, there are many possibilities for investigators to continue to bridge the divide between the directives of motivational climate research and the complex realities of practice.

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Extended Literature Review

Research has revealed that the motivational climate is a key factor underpinning the experience athletes have in sport, but to date, research has not thoroughly explored the process for how motivational climate theory/research can be fully integrated into real sport situations. This literature review includes an examination of motivational climate research, to include a review of relevant Achievement Goal Perspective Theory (AGPT) and caring climate research. In addition, the important role of cultural competence in sport psychology is discussed and a brief overview of the action research in sport psychology is provided.

Achievement Goal Perspective Theory

Nicholls (1992; 1989) proposed in AGPT that an individual's goal of action in achievement settings was to establish competence and avoid demonstrating incompetence. Nicholls (1989) envisioned that while pursuing competence or avoiding the demonstration of incompetence, individuals operated from one of two states of involvement, namely, task and ego. He indicated that striving from a task- or ego-involving perspective shaped the types of cognitions, affects, and behaviors that an individual experienced in achievement situations. In a state of task-involvement, individuals pursue competence by giving maximum effort, making improvements, and mastering skills. Alternatively, in a state of ego-involvement, individuals are less concerned with developing competence and are more concerned with their normative standing (1989). According to Nicholls (1989), understanding from which state of involvement (i.e. task or ego) individuals pursue competence could ultimately predict the type of motivational strategies they would adopt. AGPT outlines three factors that

influence an individual's state of involvement: cognitive development, goal orientations, and the motivational climate. The next sections provide more details on each of these important factors.

Cognitive Development

According to AGPT, competence is construed along a developmental continuum of undifferentiated to fully differentiated conceptions of ability (Nicholls, 1989).

Individuals with an undifferentiated conception of ability either cannot or choose not to employ a mature understanding of ability. From an undifferentiated perspective, ability and effort are not distinguished; so the harder one tries, the higher one concludes his/her ability to be. Nicholls (1989) maintained that all youngsters originally possess an undifferentiated conception of ability and it is this quality that bolstered their motivation to learn and try hard while young. He concluded that through a cognitive developmental process, conceptions of ability became more mature and by the age of 12, most children had acquired a fully differentiated conception of ability. From a fully differentiated perspective, effort and improvement are not necessarily the criteria used to make judgments about competence. Instead, social comparisons are used to evaluate whether one is or is not competent. More specifically, individuals with a differentiated conception of ability view ability as capacity and subsequently feel most successful when they can demonstrate their superior ability over others (Roberts, Treasure, & Conroy, 2007). Nicholls describes in AGPT that when success is defined by high ability and high ability is defined by outperforming others, then the once natural desire to develop competence out of intrinsic interests, giving high effort, and improving is undermined.

Even though Nicholls (1989) proposed that most individuals over the age of 12 had developed fully differentiated conceptions of ability, he maintained that these developments did not automatically lock individuals into the view that ability was capacity. Nicholls (1989) described in AGPT that being cognitively mature enough to distinguish between the concepts of effort and ability gave individuals a choice in selecting between a less or more differentiated conception of ability (Nicholls, 1989). This choice between a less and more differentiated conception of ability is important, as AGPT outlines that it is this choice that shapes the types of goals and actions that individuals will adopt in achievement settings.

Goal Orientations

According to Nicholls (1989), differentiated and undifferentiated conceptions of ability shape achievement-related beliefs or as he labeled them, goal orientations. He outlines two goal orientations in achievement settings, namely task and ego. According to theory, goal-orientations comprise an individual's personal philosophy of what constitutes success and failure in achievement situations (Roberts & Treasure, 2012). Nicholls (1989) suggested that task-orientation reflects a dispositional tendency to employ an undifferentiated conception of ability in achievement settings whereas an ego-orientation is based on a differentiated conception of ability. From a task-oriented perspective, individuals feel successful when they are able to make improvements through hard work and by cooperating with others. Conversely, the goal of action from an ego goal-orientation is to outperform others while expending equal or less effort (Duda & Nicholls, 1992). Nicholls (1989) held that individuals with a high ego-orientation would

judge that a superior performance while expending less effort would provide evidence of even higher ability (Nicholls, 1989).

An important attribute of AGPT is that goal orientations are orthogonal, meaning individuals can be high or low in either or both orientations (task/ego). Individuals with high task- and low ego-orientations and high task- and high ego-orientation have demonstrated the most adaptive motivational patterns in the sport psychology literature, such as persistence in the face of challenging tasks (Roberts & Treasure, 2012). It follows that as long as an individual is high in task-orientation, perceptions of ability are not a major deterring factor. Instead of using social appraisals to measure ability, individuals with a high task-orientation employ a self-referenced criteria for defining success based on their personal effort and self-improvement. It is worth noting that the self-referenced criteria for determining success gives individuals with a task-orientation complete self-determination in making judgments concerning their success and failure.

AGPT proposes that the individuals most at risk for adopting maladaptive motivational patterns are those that have a low task and low ego orientation. Individuals who embody a low task and low ego orientation are considered to perceive that their effort at a given task would not lead to improvement or success and coupled with a low ego-orientation, the individual would not be concerned about his/her normative standing. Similarly, AGPT predicts that individuals with a high ego-orientation and low task-orientation who perceive that their ability is low, will likely perceive that they will not be able to outperform others, which is how success is defined for the individual with a high ego-orientation. As a result, the individual with a high ego-orientation and low task-orientation will likely engage in avoidance strategies in order to eschew failure (Nicholls,

1989). Since individuals with a high ego-orientation define success by outperforming others, they will likely feel threatened and incompetent when they perceive that others have higher ability, which is a likely occurrence in sport (Nicholls, 1989). AGPT outlines that individuals with high ego-orientation will adopt adaptive motivational responses only when they perceive that their ability is high, because this situation presents them with an opportunity to demonstrate their superiority or when their high ego-orientation is accompanied by a high task-orientation (Duda & Nicholls, 1992). Nicholls (1989) held that the best that could be said of an ego-orientation was that it was better than having no orientation at all.

There is a substantial body of literature that has connected athletes' goal orientations (task and ego), to their motivational responses. A high task orientation has been linked to intrinsic interest, persistence, exertion of high effort, increased commitment, more enjoyment, less cheating, less burnout, and decreases in sport performance anxiety (Duda & Hall, 2001; Nichols, 1989; Roberts & Treasure, 2012). Conversely, a high ego orientation has been associated with a number of maladaptive motivational responses in athletes, such as avoidance of tasks and challenges, reduced persistence, lower enjoyment of activity, exerting minimal effort, more cheating, more burnout, and attrition; especially when individual's perceive that their competence is low (Duda & Hall, 2001; Nichols, 1989; Roberts & Treasure, 2012).

Beginning in 1989, Duda found that athletes with a high task-orientation reported that the purpose of sport was to inspire their best effort, while their highly ego-orientated counterparts reported that sport participation was a means of enhancing social status. As Duda's (1989) results suggest, task- and ego-orientations not only shape athletes' goal of

action in sport, but ultimately shaped individuals' achievement worldview, affecting their approaches to and interpretations of the sporting context (Nicholls, 1989). Goal orientations have also been linked to athletes' persistence in sport. In 2007, Cervello, Escarti, and Guzman, reported that the athletes in their study were more likely to drop out of sport when they reported a high ego-orientation along with low perceived ability. These findings are in line with Nicholls (1989) view that individuals with a high ego-orientation and low perceived ability are at risk for adopting avoidant strategies as to not demonstrate incompetence and inferior ability.

One of the most noteworthy characteristics of dispositional goal-orientations is that they are not fixed. Although athletes bring a disposition for task or ego-goal orientation to the sport domain, research has revealed that athletes' perceptions of the motivational climate ultimately influence the goal-orientations they adopt (Smoll, Smith, & Cumming, 2009). It follows that the motivational climate plays an important role in the experiences athletes have in sport, for better or worse (Fry & Gano-Overway, 2010).

Motivational Climate

According to AGPT, athletes can perceive the climate as being *task-* or *ego-involving* (Seifriz, Duda, & Chi, 1992). In a task-involving climate, athletes perceive that the team values personal effort, improvement, and cooperation among athletes. In addition, every athlete feels like he/she has an important role on the team, and mistakes in practice or competition are viewed as part of the learning process. Contrariwise, in an ego-involving climate, athletes perceive that the focus on the team is on the most talented and top-performing athletes, rivalry between teammates is fostered, and mistakes are not tolerated. Nicholls (1992) maintained that fostering a task-involving climate while de-

emphasizing ego-involving characteristics would support an individual's long-term motivation in achievement striving situations.

Associations between athletes' perception of a task-involving climate and adaptive motivational responses are well documented in the sport psychology literature. For instance, athletes who perceive a task-involving climate report higher sport commitment, greater feelings of closeness, and more positive relationships with coaches (Olympiou, Jowett, & Duda, 2008); greater personal satisfaction with performance (Balaguer, Duda, & Crespo, 1999); higher global evaluations of coaches, and greater enjoyment of the sport experience (Cumming, Smoll, Smith, & Grossbard, 2007) relative to ego-involving climates. In addition, research has revealed that athletes' perceptions of a task-involving climate are associated with their continued persistence in sport, while athletes' who perceive that their ability is low and that the athletic climate is ego-involving, have been less likely to continue their participation (for full review see Duda & Hall, 2001). Taken together, motivational climate research highlights that the situation created by significant stakeholders in sport, such as coaches, athletes, parents, and administrators shape the type of outcomes that athletes will report in sport.

Caring Climate

The concept of caring is challenging to describe. Caring's multiple dictionary definitions underscore the terms complexity. For instance, care as a noun can denote "a feeling of anxiety", while care as a verb can mean "providing for the needs of another." The concept of care is further complicated as philosophers, researchers, and writers attempt to theorize what it means to care for another and what it means to be cared for. For psychologist Rollo May (1969), caring was a state in which something mattered and

in, *On Caring*, Milton Mayeroff (1971) described caring as a pattern of relationships where the one caring is trying to help another grow. Although there are no universally agreed upon theories for caring, the scholarship has been heavily influenced by the foundational work of educational philosopher Nel Noddings. In the debut of the seminal book, *Caring*, Noddings (1984) makes a strong philosophical argument for an ethic based on caring relations in education. For Noddings (1984), to care, the one caring has to engross themselves in what the cared-for is feeling and trying to express while displacing their personal motives. For a caring relation to be complete, the cared-for has to recognize what the one caring is doing and respond positively (Gordon, Benner, & Noddings, 1996). The emphasis of the cared-for's affirmative response in the relationship moved caring discourse beyond the one caring's intentions. Noddings argues that it is not enough for teachers to profess or even believe that they care. For caring to count, the receiver of the care has to positively acknowledge and accept the caring gesture.

Noddings' caring perspective has been applied to fields as diverse as philosophy, education, nursing, law, social work, psychology, sociology, medicine, peace studies, and more recently sport (Gordon et al., 1996, Newton et al., 2007). For instance, Hellison's (2002) youth development model in physical activity emphasizes a care ethic where adult leaders "genuinely and sensitively care about each student's emotional, social, and physical health" (p. 37). Similarly, Petitpas, Cornelius, Van Raalte, and Jone's (2005) framework for fostering psychosocial development through sport participation calls for a caring community approach where caring adult mentors foster quality relationships with athletes over time. Emphasis on caring relations has not been limited to youth development studies, as Pensgaard and Roberts (2002) highlighted in their qualitative

exploration of Olympic athlete's perceptions of the motivational climate, elite athletes also express a preference for a supportive and caring climate.

Building upon Nodding's notion of care, sport psychology researchers Newton, Watson, Gano-Overway, Fry, Kim, Magyar, & Guivernau (2007) conceived a caring climate framework to explore the relational aspects of the athletic environment. These scholars defined a caring climate as "the extent to which individuals consistently perceive a particular setting to be interpersonally inviting, safe, supportive, and able to provide the experience of being valued and respected" (Newton et al., 2007, p. 290). Fry and Gano-Overway (2010) further described a caring climate as an "overarching context that is characterized by engrossment (listening, accepting, and attending), motivational displacement (honoring interests, supporting and helping achieve goals, empowering), and respect (trust, sensitivity) and, is consistent over time" (p. 295-296). Newton and colleagues (2007) developed a questionnaire entitled the Caring Climate Scale (CCS) to assess perceptions of caring within sport and physical activity settings. The CCS is administered on a Likert scale and sample items include, "On this team, the coach respects the players" and "On this team, the coaches' listen to athletes" (Newton et al., 2007). These scholars argue that a caring and task-involving climate are complimentary and if nurtured, can help optimize athletes' motivation in sport.

Perceptions of a caring climate have been linked to a number of positive motivational responses in athletes. For instance, Iwasaki and Fry (2013) found that youth basketball and volleyball players' perceptions of a caring climate along with low perceptions of an ego-involving climate were positively associated with increased levels of intrinsic motivation and greater desire for future participation. Similarly, Fry and Gano-Overway's

(2010) study with youth soccer players' revealed that athletes perceiving a caring climate on their team were more apt to report higher levels of enjoyment, more positive attitudes toward their teammates and coaches, increased engagement in caring behaviors with teammates and coaches, and greater commitment to soccer. The growing body of caring research in sport reveals that when athletes feel supported, valued, respected, and listened to by their coaches and teammates, they are more likely to enjoy their sporting experience and continue participation.

Motivational Climate Interventions

Multiple interventions devised to optimize the motivational climate in sport settings have employed Epstein's (1989) TARGET criteria (i.e., task, authority, recognition, goal, evaluation, and time) of the motivational climate. Epstein contended that individuals in a highly task-involving climate are encouraged to work on appropriate *tasks* that match their ability level; have *authority* to make decisions about which tasks to participate in; are *recognized* for working hard, improving, and working cooperatively with others; are *grouped* based on interests, not ability; are *evaluated* according to personal effort, improvement, and cooperation; and are given adequate *time* to complete tasks (Ames, 1992; Epstein, 1989; Roberts & Treasure, 2012). One intervention employing TARGET criteria of the motivational climate revealed that the athletes (14-18 years of age) of coaches trained in TARGET strategies reported higher levels of intrinsic motivation, greater persistence, higher effort, and lower levels of boredom compared to a control group (Cecchini, Fernandez-Rio, Mendez-Gimenez, Cecchini, & Martins, 2014). Theeboom, Knop, and Weiss (1995) conducted a TARGET based intervention for youth, 8-12 years of age, in a summer sports program. Their findings indicated that youth in the

task-involving condition reported significantly higher levels of enjoyment and showed improved motor skills in comparison to youth in a traditional sports program (Theebomb et al., 1995).

Smith, Smoll, and Cumming (2007) published two motivational climate interventions using the Mastery Approach to Coaching (MAC). Rooted in AGPT, the MAC protocol consisted of a one time 75-minute workshop that provided coaches with a background for understanding how to help athletes define success based on their effort, improvement, and cooperation with peers. In line with AGPT, the training encouraged coaches to provide positive reinforcement and technical instruction, and avoid negative and punishing behaviors. In the intervention, the researchers trained a group of youth basketball coaches in one league to foster MAC principles while a second group of coaches in a similar league served as a control group. The youth athletes (10-14 years of age) that played for trained coaches reported lower performance worry, somatic anxiety, and concentration disruption over the course of the season in comparison to their control counterparts (Smith et al., 2007).

In a second published study by the same researcher team, the authors' noted that the athletes (10-14 years of age) of trained coaches reported significant increases in their task orientation and significant decreases in their ego orientation across the season, while the athletes in the control group experienced no significant changes in goal orientations (Smoll, Smith, & Cumming, 2009). Another intervention using the same 75 minute coaching workshop based on the MAC protocol indicated that youth soccer players (10-18 years of age) playing for coaches trained in MAC reported higher levels of group cohesion over the course of a season, compared to athletes playing for coaches trained in

attention control strategies, and athletes playing for coaches with no training (McLaren, Eys, & Murray, 2014). These MAC interventions highlighted how a brief education for coaches resulted in a range of positive outcomes for youth athletes.

Fewer interventions have been designed to create a caring climate in the sport domain. Newton et al. (2007) conducted one such intervention where they trained the instructors of a summer sports program to create a caring climate for underserved youth participants and then compared the participants in the intervention group to a similar program that used a nationally standardized curriculum. The findings from their study revealed that the youth in the caring based program felt more cared for, were less likely to perceive an ego-involving climate, and reported greater expectation(s) for future participation than their control group counterparts.

Collectively, these interventions offer evidence that providing coaches with AGPT and caring education can help them foster a more optimal motivational climate, which, in turn, can positively influence a range of important outcomes for youth athletes. While these findings are encouraging and substantiate motivational climate research, these interventions are not without limitations. For example, the extant motivational climate interventions have only targeted youth sport programs. More research is needed that includes a wider range of competitive levels, to include adults competing in college sport. Given the amount of time college athletes spend with teammates and coaches in the sport domain, it is probable that the motivational climate may have a more profound impact on their functioning, compared to younger athletes who spend considerably less time in sport (Pensgaard & Roberts, 2002).

There is some evidence that the motivational climate is a relevant framework for exploring the motivation of college athletes. For example, Pensgaard and Roberts (2002) found that Norwegian Olympic athletes, ages 19-24, expressed a preference for a caring and task-involving climate during training. Moreover, the Olympic athletes' perceptions of an ego-involving climate were associated with higher levels of cognitive sources of distress, coach and teammates as sources of distress, and total distress relative to athletes that perceived a task-involving climate (Pensgaard & Roberts, 2000). Another study of collegiate athletes found that their perceptions of a task-involving climate positively predicted task and social cohesion, while perceptions of an ego-involving climate were associated with lower levels of task cohesion and had no significant association to social cohesion (Boyd, Mi-Sook Kim, Ensari, & Yin, 2014).

Much of the emphasis in this line of research has advocated delivering motivational climate literature to coaches in cost effective ways (Roberts & Treasure, 2012). The approach of delivering brief educational workshops to coaches assumes that the simple transferring of sport psychology research to coaches will translate into positive outcomes for athletes. While there is some evidence that this can happen, coaching education research indicates that the learning gains that coaches receive from a traditional lecture style trainings are marginal compared to coaches preferred style of learning which includes interacting and observing other coaches and reflecting on their practice (Cassidy, Jones, & Potrac, 2008). The design of motivational climate interventions should reflect coaches' learning preferences, but to date, there is not evidence that this important point has been taken into consideration.

Clearly, motivational climate studies with collegiate coaches and athletes need to be continued in field research. Further, the design of motivational climate interventions could be strengthened by using an educational model that matches coaches' preferred learning style. In addition, this line of research could include a more diverse set of data collection strategies that can explore the process involved in applying motivational climate principles to practice. Claunch and Fry conducted one such study with a Native American collegiate football program with encouraging results (in press). The term 'collaboration' was intentionally selected over the term 'intervention' in the study to emphasize the central role of the coaches in shaping motivational climate and the facilitative function of the researchers in that same process. The study highlighted how a motivational climate collaboration based on AGPT and caring principles had a transformative effect for three coaches on the staff who at the beginning of the study expressed a less caring and more ego-involving coaching philosophy.

Analysis of interviews and observations revealed that the three coaches' prior athletic experiences with ego-involving coaches shaped their coaching philosophies at the beginning of the study. In particular, the coaches' normalization of an ego-involving climate in football was based on their prior experiences with ego-involving coaches and was originally a barrier that prohibited them from seeing the value of fostering a caring and task-involving climate for their athletes. However, the collaborative design of the study fostered a process where the coaches were provided with opportunities to reflect on their coaching philosophies, participate in interactive presentations on motivational climate research, and take an active role in discussing and developing a plan to optimize the motivational climate on their football team. All in all, the study revealed that the

coaches perceived that they were better teachers, had improved relationships with their players, and viewed their roles as coaches more positively as a result of participating in the collaboration (Claunch & Fry, in press).

Cultural Competent Sport Psychology

Sports programs are multicultural spaces, connecting athletes from an array of racial, ethnic, religious, gendered, sexual-orientated, socioeconomic, and geographic backgrounds. To account for this diversity, several researchers and applied practitioners within sport psychology have called for culturally responsive approaches to research and consultation (Gill & Kamphoff, 2009). Cultural competency in the physical domain has been defined as the ability to understand and respect the values, attitudes, and beliefs that differ across cultures, and to consider and respond appropriately to these differences in the planning, implementing, and evaluating of research, interventions, and consultation (Gill & Kamphoff, 2009). In the field of psychology, increased awareness of the ways in which race, ethnicity, and culture shaped the perceptions of individuals spurred a movement to make research and practice more culturally responsive to cultural difference (Hall, 1997). As a result, governing psychological organizations such as the American Psychological Association (APA) and the Association for Applied Sport Psychology (AASP) adopted language in their ethical codes and provided guidelines for professionals to account for ways in which culture affects their work with the public. For instance, the APA's General Principal E: Respect for People's Rights and Dignity states the following:

Psychologists are aware of and respect cultural, individual and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language and socioeconomic status and consider these factors when working with members of such groups. Psychologists try to eliminate the effect on their work of biases based on those factors, and they do not knowingly participate in or condone

activities of others based upon such prejudices (APA Ethics Code, 2010; available at <http://www.apa.org/ethics/code/>)

Similarly, the Association for Applied Sport Psychology calls for cultural competency in its Code of Ethics Principle D: Respect for People's Rights and Dignity, stating the following:

AASP members are aware of cultural, individual, national origin, religion, sexual orientation, disability, language, and socioeconomic status. AASP members try to eliminate the effect on their work of biases based on those factors, and they do not knowingly participate in or condone unfair discriminatory practices (AASP Ethical Code, 2006; available at: <http://www.appliedsportpsych.org/about/ethics/ethics-code/>).

Although the APA and AASP's ethical standards are not a set of enforceable rules, they do set boundaries of professional conduct for the field. For example, AASP's Ethical Standard 3, Human Differences specifically states:

AASP members recognize that differences of age, gender, race, ethnicity, national origin, religion, sexual orientation, disability, language, or socioeconomic status can significantly affect their work. AASP members working with specific populations have the responsibility to develop the necessary skills to be competent with these populations, or they make appropriate referrals (AASP Ethical Code, 2006; available at: <http://www.appliedsportpsych.org/about/ethics/ethics-code/>).

Here, AASP calls on sport psychology practitioners to recognize the ways in which cultural differences affect their work, develop competency to address these differences, or make referrals. According to Schinke and Moore (2011), while other fields of professional psychology have fully integrated cultural competency into their standards of practice, the field of sport psychology has been slower to join the dialogue. Because cultural competency has not gained the same traction in sport psychology as in other domains of professional psychology, there is a significant gap in the literature concerning how culture affects sport psychology practices. For instance, Duda and Allison (1990)

found that between the years 1979 and 1987, only one theoretical research paper and no empirical research was published in the *Journal of Sport Psychology* (JSP), the premier empirical research journal in the field, established race/ethnicity as an independent variable within an explanatory framework to explain the experience of their research participants. Furthermore, 96.2% of the empirical research papers published did not report the racial or ethnic background of their study participants (Duda & Allison, 1990).

In 2004, Ram and colleagues (Ram, Starek, & Johnson, 2004) replicated Duda and Allison's study, examining manuscripts published in the *Journal of Sport and Exercise Science* (JSEP), *Journal of Applied Sport Psychology* (JASP), and *The Sport Psychologist* (TSP), between the years 1987 and 2000. Their findings indicated 18.91% of the empirical manuscripts from these three journals included references to race/ethnicity and only 1.22% included references to sexual orientation (Ram et al., 2004). Although there had been a rise in the reporting of race/ethnicity in sport psychology research, this trend did not reflect cross-cultural research. As Ram and colleagues (2004) point out, from 1987 to 2000, only 15 manuscripts published in the aforementioned journals explored race/ethnicity as a meaningful variable that influenced sport or exercise related behaviors. Mentions of sexual orientation were more limited with only 4 out of the 982 manuscripts published identifying sexual orientation as an important variable (Ram et al., 2004).

Not having a scholarly base cross-cultural research in which sport psychology researchers and practitioners can pull from in their work with culturally diverse participants can create a situation where professionals project bias. For instance, Ram and colleagues (2004) contend that, "bias operates in research when it establishes the experiences of one common group as normative behavior and compares all other groups

to that standard” (p. 267). These scholars recognize that the theoretical constructs that underpin most sport psychology theories and strategies were most likely normed on populations that were not culturally diverse. Since sport psychology research has not historically accounted for cultural differences, especially in reference to Native Americans, the application of sport psychology theory/research may not seamlessly transfer across cultures. In view of this, researchers need to be cautious not to project their own cultural values or the cultural values embedded in academic theory onto their participants without exploring if these cultural values have cross-cultural validity first (Zetzer & Shockley, 2005).

Corey, Corey, & Callanan (2007) recommend that professionals first become aware of their own culturally learned assumptions, some of which may be culturally biased. Being self-reflective about one’s own cultural assumptions can allow cultural biases to surface and then be processed appropriately over the course of the research process. Parham further (2005) suggests that exploring the context and learning as much as possible about the research participant’s preferences is key when interfacing with individuals whose cultural background is different from their own. As was previously mentioned, it is also important to evaluate the cultural values embedded within theory, paying special attention to the cross-cultural relevancy and applicability of the theories guiding the research (Ram et al., 2004).

There are very important ethical reasons for including the Native American participants’ as partners in the research process. Traditionally, research concerning Indigenous populations, which includes Native Americans, has been conducted on them and not with them (Smith, 1999). As has been noted, western notions embedded in

scientific inquiry are not value free and as such, academia has historically projected Western European norms and values onto Native Americans in ways that are harmful (Lomawaima & McCarty, 2002; Smith, 1999). For these reasons, tribal governments and Native American organizations have begun to take control of research occurring within their jurisdiction through the development of their own institutional protocols and approval processes (Lomawaima & McCarty, 2002). For instance, the Center for Native Health Partnerships (CNHP) and National Congress of American Indians (NCAI) has published recommendations for developing research relationships with Native American communities (2012). Experts from the CNHP and NCAI (2012) publication highlight the need for collaborative research practices, stating:

Trust takes time. You need to prove-as a research or as an outsider-that you can actually function as a positive member of that community; and there's not a way to do that without becoming a part of that community. That takes time. You have to be able to humble yourself before another person, to understand that each person has something valuable to contribute. So you have to be able to quiet down your own agenda and your own thought processes and open your entire spirit (Walk Softly, Listen Carefully': Building Research Relationships with Tribal Communities, 2012, p. 3)

These comments reflect the critical need for research practices that honor the voices of the research participants and seek to enhance their engagement in establishing the research agenda. One well-established approach for doing research of this sort is found in action based research practices.

Action Research in Sport

Action research seeks to empower participants to develop practical solutions to problems that are significant to them (Herr & Anderson, 2005). Central to action research is the notion that the investigative process must be carried out by or with insiders of an organization and never to or on them (Herr & Anderson, 2005). The collaborative

orientation of action research makes it a well-suited approach for conducting research with Native American participants.

According to Gilbourne (1999), one of the key ways sport psychology researchers doing action research can collaborate with sport participants (e.g. coaches and athletes) is to support them in making strategic improvements to their practice. One example of this type of approach is found in Pain, Harwood, and Mullen's (2012) study with an elite soccer team, where the researchers worked with the coaching staff to improve the performance environment on their team. During the study, the researchers provided ongoing support to the coaches by administering a weekly survey to their athletes. The researchers then analyzed the athletes' responses and met with the coaches once a week to discuss the findings and to collectively develop strategies for improvement in targeted areas. The researchers noted that the survey helped stimulate reflection amongst the coaches and helped them identify areas the team needed to improve. Findings from this study indicated that the coaches and athletes reflection-on-practice increased over the course of the season and the coaches indicated that the data from the assessments improved the coaches' ability to manage the performance environment (Pain et al., 2012). This action research study presents one example of how sport psychology researchers can take a facilitative role in supporting coaches in the sport domain.

Action research studies like the one highlighted above are valuable in that they present a systematic way for integrating the theoretical orientation of sport psychology research with the local knowledge of the participant. It is important to recognize that while the sport psychology researcher may have pertinent academic knowledge that can be used to assist coaches and athletes, the coaches and athletes possess relevant knowledge that is as

important to consider. The sport psychology researcher will likely have developed their academic knowledge through a formal means, such as school, while coaches and athletes will most likely have honed their craft through practice and observing others as they practiced (Gilbourne & Richardson, 2005). Whereas the sport psychology researcher may have a better grasp of theory-based knowledge and strategies, sport participants, such as coaches, may have a better sense of what will work best on the ground. In view of this, it is reasonable to suggest that the most effective way of integrating motivational climate theory/research into natural sport settings will combine the academic knowledge of the sport psychology researcher with the local knowledge held by the participants. The previously employed methods for conducting motivational climate interventions have relied on a quantitative research method that has mainly silenced voices and experiences of the participating coaches, and in doing so have overlooked the important contribution they can offer to this line of research. It is important that action research projects with culturally diverse athletes and coaches prioritize their voice and increase their engagement in the overall research process. Conducting action research in a culturally competent manner will help ensure that the findings are accurate and beneficial for the participants that research intends to represent.

Conclusion

This literature review highlights the need for research employing collaborative designs to help coaches and athletes develop the optimal motivational climate within their sport programs. These collaborative research practices are particularly important when working with culturally diverse participants. Motivational climate research indicates that athletes thrive in a caring and task-involving climate; however more studies are needed that

attempt to bridge the divide between the directives of motivational climate theory and the realities of coaching practice and athletic participation.

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Table

Table 1

Mean (SD)	Caring Climate	Task-Involving Climate	Ego-Involving Climate
Time 1 (Spring)	4.02 (.43)	3.96 (.51)	3.42 (.50)
Time 2 (Preseason)	4.42 (.51)	4.21 (.34)	3.13 (.44)
Time 3 (Postseason)	4.32 (.70)	4.08 (.52)	2.98 (.36)

Appendix A

Interview Questions

1. What is important for me to know about your background to better understand you?
2. Why do you play volleyball?
3. How would you define success for yourself in volleyball?
4. How can someone like a coach best motivate you in volleyball?
5. What are your thoughts about how to best motivate your teammates?
6. How would you describe your relationship with your teammates?
7. How would you describe your relationship with your coach?
8. What are the strengths of your current volleyball team?
9. What is an area that you want your team to improve upon for the upcoming season?

Appendix B

Athlete Success Log

1) Describe a personal highlight from today's performance:

2) Describe a teammate's or team highlight from today's performance:

3) Rate your performance today in the following areas: (1= low & 10= highest possible):

Purposeful Effort

1 2 3 4 5 6 7 8 9 10

Supporting teammates

1 2 3 4 5 6 7 8 9 10

Supporting coaches

1 2 3 4 5 6 7 8 9 10

4) Based on my performance today, I would like to improve

5) One thing I can do that will lead to the desired improvement is

SIGNATURE: _____ DATE: _____

Appendix C

Perceived Motivational Climate in Sport Questionnaire (Seifriz et al., 1992)		Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Direction: As you read the following statements think about what it is like to play on your volleyball team this season. Please circle the number on the 5-point scale listed below that best describes how you truly feel. On my team...						
1.	players felt good when they did better than teammates.	1	2	3	4	5
2.	trying hard was rewarded.	1	2	3	4	5
3.	players were punished when they made mistakes.	1	2	3	4	5
4.	coaches focused on skill improvement.	1	2	3	4	5
5.	players were taken out of the game for mistakes.	1	2	3	4	5
6.	each player's improvement was important.	1	2	3	4	5
7.	playing better than teammates was important.	1	2	3	4	5
8.	players tried to learn new skills.	1	2	3	4	5
9.	the coach paid most attention to the "stars".	1	2	3	4	5
10.	players were encouraged to work on weaknesses.	1	2	3	4	5
11.	doing better than others was important.	1	2	3	4	5
12.	the coach wanted us to try new skills.	1	2	3	4	5
13.	the coach favored some athletes.	1	2	3	4	5
14.	players liked playing good teams.	1	2	3	4	5
15.	players were encouraged to out-play teammates.	1	2	3	4	5
16.	everyone wanted to be the best player/mvp.	1	2	3	4	5
17.	each player felt like they had an important role.	1	2	3	4	5
18.	only the best players got noticed.	1	2	3	4	5
19.	most players got to play in games.	1	2	3	4	5
20.	players were afraid to make mistakes.	1	2	3	4	5
21.	only a few players could be the "stars".	1	2	3	4	5

Appendix D

Caring Climate Scale (Newton et al., 2007)	Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
Directions: Read each statement and think about what it's like to play on your volleyball team this season. Choose the answer for each item that best describes what you think.					
On my team...					
1. The players are treated with respect.	1	2	3	4	5
2. The coaches respect the players.	1	2	3	4	5
3. The coaches are kind to the players.	1	2	3	4	5
4. The coaches care about the players.	1	2	3	4	5
5. The players feel that they are treated fairly.	1	2	3	4	5
6. The coaches try to help players.	1	2	3	4	5
7. The coaches get to know all the players.	1	2	3	4	5
8. The coaches listen to team members.	1	2	3	4	5
9. Players like one another for who they are.	1	2	3	4	5
10. The coaches accept players for who they are.	1	2	3	4	5
11. Players feel comfortable.	1	2	3	4	5
12. Players feel safe.	1	2	3	4	5
13. Players feel welcome every day.	1	2	3	4	5

Appendix E
Team Bingo

Find different people for each category and write their name in the box where it applies.
Feel free to talk to people about each topic and try to get BINGO!

B	I	N	G	O
Has a family member or close friend with a disability	Can cook a dish from a culture that is different than their own	Is artistic in some form	Is the first person in their family to attend college	A person who is left-handed
Has cared for a sick relative for an extended period of time	A single parent or product of a single parent home	Speaks two or more languages	Has three or more siblings	Loves country music
Can play a musical instrument	Grew up with horses	From the planet earth	Lettered in three different sports in high school	Has a close friend who is of another socio-economic status
Identifies as biracial or multiracial	Has a name with religious or cultural significance	Has played in a championship game	Has a close friend who is of another race	Has traveled to another country
Has a close friend who is of another sexual orientation	Is a vegetarian	Family has received welfare	Has attended a religious school	Is wearing the same color top as you today

Appendix F

Caring and Task-Involving Guided Imagery

Sit comfortably with your feet planted firmly on the ground, in a dignified position. Relax your shoulders downward and allow your tongue to release from the top of your mouth. Rest your arms wherever they feel comfortable and take a deep breath. Please close your eyes. Without trying, breathe naturally with ease. In your own time begin to take yourself towards practice where all of today's achievements will happen... imagine walking out of the locker-room and slapping the all in sign. As you approach the court see yourself letting go of everything, the worries, the past, and the future. You are completely free to be in this moment. See the confident look on your face and in your posture. You are powerful and ready to go onto the court. Your deepest desire is to deliver everything you have from the start to the end of practice. You approach today's practice with the understanding that the harder you work, the more you will improve as a player and the more we will improve as a team. Now place yourself in a practice drill... picture yourself accomplishing the drill with total effort, grace, and enthusiasm. See your precision as you place the ball exactly where you want it to go. From the bottom of your feet to the top of your head you are alive with energy. Your positive energy allows you to play confidently. Your energy is contagious as you celebrate your teammate's success and pick them up when they falter. See yourself easily letting go of mistakes, easily forgiving yourself, easily forgiving your teammates, and easily forgiving your coach. You feel a deep sense of trust in yourself, trust in your teammates, and trust in your coaches. Completely trusting the serve, the set, the pass, the spike, and most importantly your instincts. You are exactly where you are supposed to be at this moment in time, full of trust and your trust grows stronger and stronger and stronger and stronger. Feel the massive sense of accomplishment at the end of today's days practice; remembering you earned these feelings by giving everything that you had. See yourself walking off the court with your head held high. Take another deep breath and when you're ready open your eyes.

Appendix G

Coach Self-Reflection Form

Directions: Take a moment to consider your performance as a coach today. Once you have had time to reflect, considered each statement, indicating whether you never, rarely, sometimes, often, or always respond in that way by checking appropriate spaces.						
As I reflect back on today, I...		Never	Rarely	Sometimes	Often	Always
1.	Positively reinforced athletes when they performed well.	1	2	3	4	5
2.	Positively reinforced each athlete when they displayed great effort, regardless of the outcome.	1	2	3	4	5
3.	Positively reinforced athletes when they displayed support and encouragement for each other.	1	2	3	4	5
4.	Provided encouragement or positive technical instruction to athletes after they made a mistake.	1	2	3	4	5
5.	Responded with negative technical instruction or punitively when an athlete made a mistake.	1	2	3	4	5
6.	Made each athlete feel like they played an important role on the team.	1	2	3	4	5
7.	Emphasized rivalry and social comparisons amongst team members.	1	2	3	4	5
8.	Provided each athlete with instruction and drills that allowed them improve upon skills for their position.	1	2	3	4	5
9.	Acknowledged athletes and made them feel welcomed and accepted at practice.	1	2	3	4	5
10.	Provided opportunities for athletes to talk with me and I actively listened to what they had to say.	1	2	3	4	5
11.	Expressed appreciation for each athlete for who they were as a person.	1	2	3	4	5
12.	Had a practice that started and ended on time, was organized, and ran smoothly.	1	2	3	4	5

Describe an interaction with an athlete that went really well today. (Highlight)

Describe an interaction with an athlete that could have gone better. (Improvement)

What is one thing you can do to help ensure that things go better next time? (Goal)

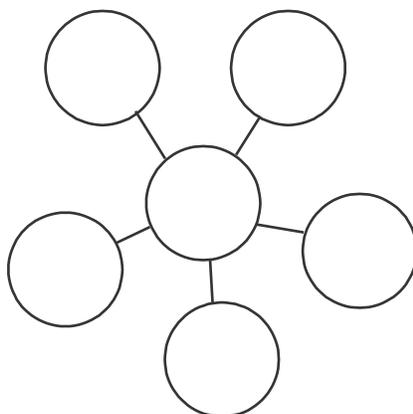
Appendix H

Paseo Activity

Purpose

When a group would like to examine issues of identity, diversity, beliefs and values, and would like to begin making connections between who we are and how that shapes decisions and behaviors, the Paseo can be a tool for initiating the dialogue. It is essentially a two-step process, which begins with individual reflection and then moves into personal storytelling. This is a flexible process, in that the theme of the questions and prompts can be tailored to meet the objectives of the group.

1. Each participant makes/draws a web of circles, roughly resembling the diagram of a molecule. (The facilitator may chart one as a model, with each participant creating his own on a journal page or note pad.) The basic design looks something like this:



2. Within this diagram, each group member should write his or her name in the center circle. Each additional circle should contain a word or phrase that captures some element of his or her identity. This means those terms or descriptors that have most helped shape who the person is and how s/he interacts in the world. (Some groups will move right into this; others will prefer to have the facilitator model what is intended. For example, one circle might contain the word “woman”, another the word “black”, another the phrase “grew up in Deep South”, and so on.) As an additional step, participants may be asked to include words or phrases that other people use to identify them. (This may be done in a different color, or in pencil rather than in ink.)
3. The entire group now moves to stand in a large open area, forming two concentric circles, in preparation for the dialogue portion of this process. Some group members will prefer to take their notepads with them. (An even number of people is necessary, since the dialogue takes place in pairs.) The outer circle faces

inward while the inner circle faces outward. The circles should look something like this:

The facilitator will now begin to ask the group to think about and respond to a series of questions. Important instructions to provide before the questioning starts are:

Once the question has been stated, everyone will be allowed one minute to think about his or her own response to the question. This is intended to ensure that each person is fully listening to his or her partner during the dialogue process, without being distracted by a desire to plan a response when his or her turn to speak begins.

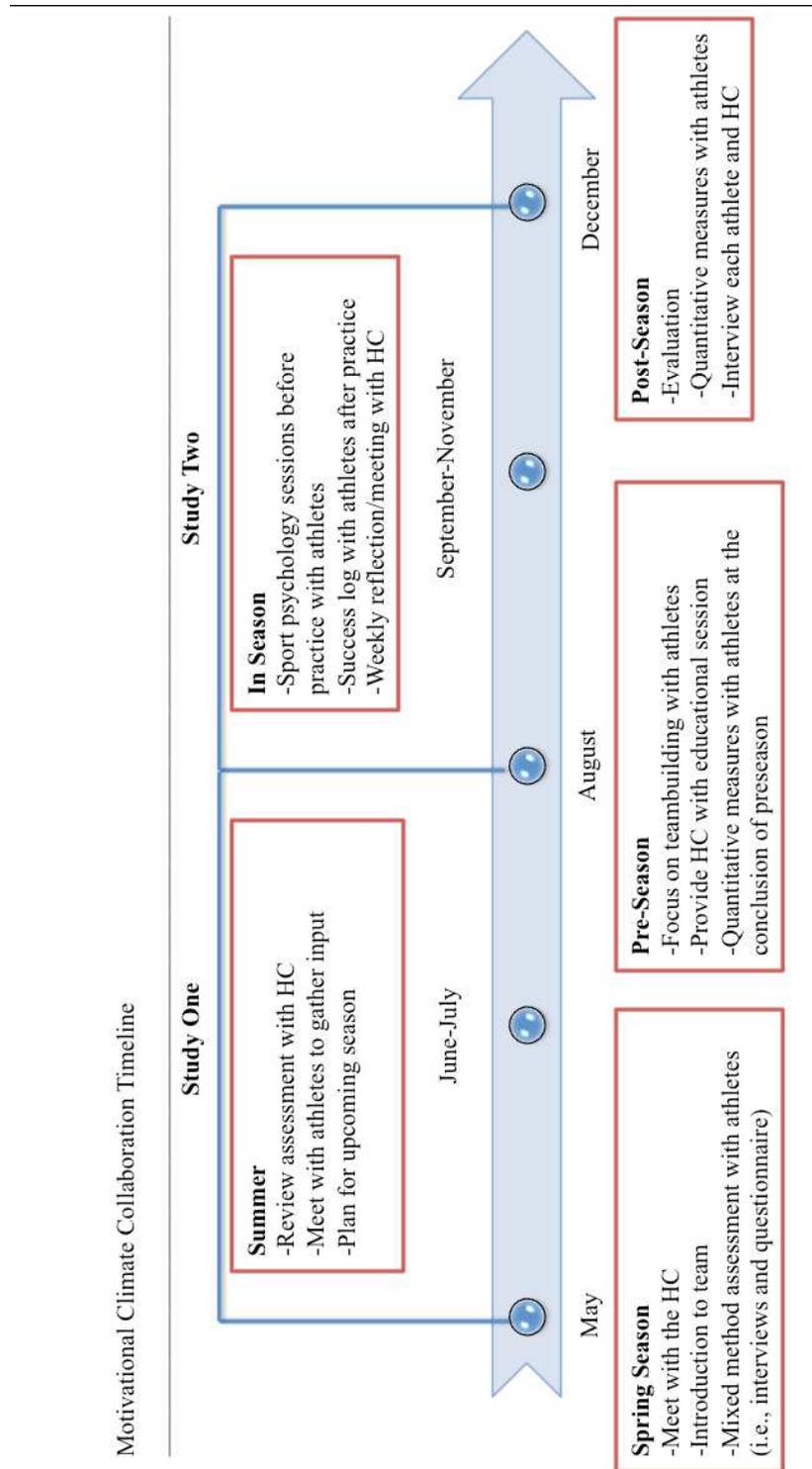
- At the end of the one-minute thinking time, the facilitator will announce the beginning of the round of dialogue. Each person will take turns responding, without interruption, to the question or prompt, with two minutes allotted for each. If the speaker does not take two minutes, the full time should be allowed, being comfortable with the silence. The facilitator will call time at the two-minute point, when the pairs should make sure the second partner gets a chance to speak for a full two minutes, without interruption.
- At the end of the second partner's time, the facilitator will ask the group members to thank their current partner, and say goodbye. Either the inner or the outer circle will be asked to shift to the left or right. (Groups may want to shift one, two, or three persons to the right or left, to mix the partners more quickly). Participants should take a moment to greet their new partners.
- The next round of dialogue will begin, with a new question, and with the one minute thinking time. The process continues through each round of questions or prompts.

4. Debrief the process. It is important not to shortchange this step. One way to begin the debrief is to ask the group to take a few minutes to do a quick-write on what they saw, heard and felt during this process. After the quick-write, do a round robin sharing (30 seconds or less) of what each participant observed. Ask participants to think of this as the "literal description" round of an Atlas protocol. They should provide "just the facts" without inference, interpretation or judgment. Proceed from there to a more open debrief discussion.

This activity was adapted from work by: Debbi Laidley of the UCLA School Management Program, with Debbie Bambino, Debbie McIntyre, Stevi Quate and Juli Quinn. Created at the NSRF Winter Meeting, December 2001, Houston, TX.

Appendix I

Motivational Climate Collaboration Timeline



Appendix J

Self-Reflection

It is important for the readers of this research to understand that I have a vested interest in empowering Native American athletes and coaches. In 2012, I was living my dream as teacher and coach on a Native American reservation. Although the student-athletes under my charge were enjoying a measure of success in the classroom and on the playing field, I recognized that there were times that they did not appear to believe in themselves. I reached out to Dr. Fry and expressed interest in learning more about how to support Native American students using the principles found in sport psychology.

Upon arriving to KU in the summer of 2012, I began designing a research project that comprised collaborating with a local Native American college football coaching staff and providing them with education on how to integrate motivational research into their coaching practice. Overall, the collaborative project was a success, as multiple coaches saw benefits in many areas of their coaching practice as a direct result of learning and experimenting with the evidenced-based motivational approaches. My goal for the dissertation project was to build upon the work I did with the football program, but add the principles of action research to strengthen my efforts to make the research more collaborative in orientation.

As a Native American researcher conducting research with Native American participants, I entered research with a high level of cautiousness. I am very familiar with the long history of research practices that have misrepresented, exploited, and damaged the reputations of Native American communities. For instance, it was important to me that I not add my name to a legacy of colonial scholarship that unconsciously projected

theory onto communities of color. To the contrary, as an American Indian Studies major I was trained to be conscious and critical of these types of ethnocentric research practices. I was also interested in employing research methods that could more accurately reflect the participants' experiences and understandings. I recognized the power that I had to write about my participants in a way that was not reciprocal. I understood that there was not a process or established channels for Native American research participants to produce knowledge in the same way that I could. For these reasons, I was attracted to qualitative methods from an action-based perspective because it permitted me to treat the participants as local experts in our interactions, to include our interviews. Additionally, qualitative methods provided a means for accessing the participants' first-hand experiences in a way that was not possible with quantitative methods. It was my overarching goal that these qualitative methods would help ensure that the research participants' voices rang through the findings of the study.

In many ways my status as a Native American gave me an insider status with the participants. I did not take our shared heritage granted and I was just as conscious about our differences as I was about our similarities. However, gaining entry to site and building rapport with the participants happened more quickly and seamlessly than would have been the case if I were a non-Native American.

Early in my relationship with the athletes, I recognized how many of the family level challenges they faced paralleled the obstacles that I have struggled with in my own life. By building relationships with the athletes on this team, I learned to value my unique background, recognizing how it helped provide a basis for relating to them in a more authentic way. For example, after learning that many of us shared common hardships, I

was able to disclose pieces of my personal history with them in a way that increased our trust. I always thanked athletes for their willingness to share with me and that gratitude was reciprocated when I shared with them. For example, multiple athletes personally thanked me for sharing aspects of my background with the team. The coach was especially thankful.

Overall, engaging in this research project was a highly rewarding experience for me. Learning more about the multitude of factors that affected these athletes motivation and the broader motivational climate expanded my understanding of how dynamic the motivational process is. I was able to practice applying theory-based strategies and observe the results in real time. Having flexibility to be a participant in the setting and also the primary research instrument gave me increased access to what was happening on the ground. For example, I felt like having the dual role of researcher and practitioner provided me a privileged vantage point in observing what motivational approaches were effective and ineffective over the course of the season. Typically, from my observations, effective motivational practices were consistent with the guiding theories.

My future plans are to provide educational services to the athletes and coaches in Native American communities. Although I had prior experience coaching and teaching within a Native American context, the added insight I gained as a researcher and sport psychology practitioner has helped me develop a set of skills that will make me a more responsive practitioner. For instance, this research process has helped me in a number of areas such as my ability to carefully listen and observe, connect theory to practice, and recognizes the limitations of theory-based approaches. It is my hope that every academic could have as rich and fulfilling of a research experience as I did.

Appendix K



APPROVAL OF PROTOCOL

May 12, 2015

Joseph Claunch
j662c534@ku.edu

Dear Joseph Claunch:

On 5/12/2015, the IRB reviewed the following submission:

Type of Review:	Initial Study
Title of Study:	Motivational Climate Collaboration between a Native American Collegiate Volleyball Program and a Sport Psychology Professional
Investigator:	Joseph Claunch
IRB ID:	STUDY00002584
Funding:	None
Grant ID:	None
Documents Reviewed:	• UpdatedVolleyballConsentForm.docx, • NEWUDHSCL_New_Submission_Form_V2_Haskell_Volleyball (2).pdf, • Survey, • Interview Protocol Volleyball.docx,

The IRB approved the submission from 5/12/2015 to 5/11/2016.

1. Before 5/11/2016 submit a Continuing Review request and required attachments to request continuing approval or closure.
2. Any significant change to the protocol requires a modification approval prior to altering the project.
3. Notify HSCL about any new investigators not named in original application. Note that new investigators must take the online tutorial at https://rgs.drupal.ku.edu/human_subjects_compliance_training.
4. Any injury to a subject because of the research procedure must be reported immediately.
5. When signed consent documents are required, the primary investigator must retain the signed consent documents for at least three years past completion of the research activity.

If continuing review approval is not granted before the expiration date of 5/11/2016 approval of this protocol expires on that date.

Please note university data security and handling requirements for your project:

<https://documents.ku.edu/policies/IT/DataClassificationandHandlingProceduresGuide.htm>

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

Sincerely,

Stephanie Dyson Elms, MPA
IRB Administrator, KU Lawrence Campus