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Perception of Coaches' Value System, Motivational Climate and Self-Talk

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Abstract

This study examined how perception of values promoted by coaches related to athletes' perception of coach created motivational climate and their self-talk. In particular, the study aimed to explore the potential for perceived motivational climate to mediate the relationship between perceived value systems and self-talk. Participants were 284 football players (mean age 22.17 ± 3.37 years) from Ethiopian. They were members of 13 football clubs competing at the Ethiopian Premier League and National League. Regression analysis indicated that perceived values could predict 27.2%, ($F(8,275) = 12.814, p < .001$) of the variance in task climate and 20.9%, ($F(8, 275) = 9.069, p < .001$) of the variance in performance approach climate. In addition, motivational climate could predict 7.1% ($F(3,280) = 7.13, p < .001$) of the variance in negative self-talk, and 4.2% ($F(3,277) = 4.05, p < .01$) in positive self-talk with performance avoidance climate being the only significant predictor. Thus, the mediation model could not be tested, because, perceived coaches' values predicted perceived task and perceived performance approach climate, which did not predict self-talk. On the other hand, perceived values did not predict performance avoidance which predicted self-talk. In conclusion, even though most of the hypotheses proposed in this study were not confirmed, it can be taken as one pioneering contribution in exploring values and their effect in socio environmental and cognitive thoughts in sport setting.

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INTRODUCTION

Although appropriate attention has not been given for values in the field of sport psychology, the prominent figure of “Human values”, Schwartz, reflected that conceptualizing basic values has emerged since the 1950’s. Human values are regarded as one of the main influences in society, guiding people’s actions and governing their perceptions of reality (Schwartz, 2007). Schwartz (1992) proposed a theory of the content and structure of human values, which is widely used and universally validated theory of values (Cieciuch, & Schwartz, 2012). The Values Theory defines values as desirable, trans-situational goals, varying in importance that serves as guiding principles in people’s lives (Schwartz, 2007).

Values are important in understanding various social-psychological phenomena, and serve as standards of evaluation and predictors of attitudes, beliefs, and behavior (Bardi & Schwartz, 2003). As Schwartz suggested, when we think of our values, we think of what is important to us in our lives. People generally know what is important to them. Hence, when asked about their values, they can usually give reasonably accurate reports. People may act in accordance with their values even when they do not consciously think about them. Thus, values may operate outside of awareness but they are available for retrieval from memory (Amos, & Weathington, 2008).

In sport, both athletes and coaches should and do have their own value systems. And it is known that both athletes and coaches always try to understand important values of one another. As Peachey and Bruening (2012) suggested, individuals prefer an environment that possesses characteristics (e.g., values) that are similar to their own. So the similarity and differences of value priorities between

coaches and athletes will have significant effect on other related psychological factors such as athletes' perceptions of the sport environment and athletes' thoughts.

Values are relatively stable abstract motivational characteristics of persons that guide, justify, and explain attitude and actions, but it can be changed little from during adulthood (Davidov, 2008). Perceived motivational climate is one socio environmental issue which could be predicted from value perceptions. As Ames (1992) defined, motivational climate is a situation-induced environment directing the goals of an action in achievement situations. It can be either task- or ego involving depending on how people perceive the structure of the achievement environment; and most research focused on this dichotomous approach (task and ego climate). However, studies conducted by Elliot and colleagues (Elliot, & Harackiewicz, 1996; Elliot & Church, 1997), provided strong support for the hypothesized framework that achievement goal items yielded the three anticipated achievement goal factors: mastery, performance approach, and performance avoidance. This study also used the trichotomous approach as proposed by Elliot and his colleagues.

As it was indicated in Elliot and Church (1997), mastery goals were grounded in achievement motivation and high competence expectancies; performance avoidance goals is grounded in fear of failure and low competence expectancies and focus on avoiding negative evaluations from others. Performance approach goals grounded in achievement motivation, fear of failure and high competence expectancies, and seek positive evaluations of their competence from others.

Motivational climate in sport teams can be established as the result of many factors, among which parents, peers, and coaches (Weigand, et al., 2001; Duda & Balaguer, 2007). However, for this study motivational climate is the one from the coach as perceived by athletes. In particular, coaches are assumed to play an active

role in athletes' training and competitive as a major source of instruction and feedback for sport participants (Duda, and Balagour, 2007). Therefore, it is important to investigate the perceived social situation they create and how that psychological environment corresponds to the quality of athletes' thought in the sport setting. Hence, the climate environment is either task involving or ego involving, depending on athletes perception about which goals are emphasized by the coach.

The other outcome variable for this study was self-talk which is inherent thoughts and self-statements athletes address to themselves (Theodorakis, et al., 2000). It may occur with or without conscious awareness, inherently or deliberately. Self-talk refers to cognitive products that reflect what people say to themselves, expressing thoughts and beliefs about one-self, the world, and relationships with others (Calvete & Cardenoso, 2002). This definition of self-talk has been mostly used in field studies, descriptive or correlational, to describe the content of athletes' self-talk, and to explore self-talk antecedents (Theodorakis, Hatzigeorgiadis, & Zourbanos, 2012). So, this study tried to describe self-talk manifestations resulted from perception of coach's value system and motivational climate. Researches on self-talk more focused on its outcomes than its antecedents, moreover, research on antecedents of self-talk focus on limited areas. In addition, the effect of perceived coaches' value system has not been tested for its effect on self-talk. So it is worthy to focus on this new direction of socio environmental antecedent of self-talk.

The other area of research focus was perceived motivational climate, which is one of the social and environmental factor which might have impact on athletes self-talk. Past researches (e.g., Zourbanos, et al., 2011) suggested that the coach is an important factor in shaping athletes' self-talk, and encourages further investigation as

one socio-environmental factor. In this regard it is really important to see the effect of perceived motivational climate on self-talk.

Purpose of the study

This study was concerned with how the perceptions of value systems being promoted by the coach was going to be connected with athletes' perception of coach created motivational climate and their self-talk. So this study was intended to test the relationship among perception of coaches' values systems, perception of coach created motivational climate and self-talk among athletes. Additionally, the study assessed the potential for perceived motivational climate to mediate the relationship.

Hypotheses

Prioritizing function of values implies that they should not only prompt the adoption of appropriate attitudes, but also encourage the adoption of achievement orientations that are consistent with underlying values. Schwartz (2007) also said that social structure underlies at a large extent value priorities. So, as one social structure, motivational climate can also be the result of value priorities. Furthermore, because values are trans-situational principles that guide behavior and because motivational climate and achievement orientations address behavior only in the achievement domain, values can be considered as antecedents of motivational climate, and self-talk as consequences of both. Thus it was hypothesized in this study that motivational climate would mediate the relationship between perceptions of coaches' value and athletes' self-talk.

Values are stable constructs that do not change easily, even when investing considerable effort. On the other hand, as Bardi and Schwartz (2003) said values are

important in understanding various social-psychological phenomena, and in predictors of attitudes, beliefs, and behavior (Bardi & Schwartz, 2003). Even though demographic factors (e.g., age and gender) could be considered as antecedents, values mostly serve as predictors of most behavior and psychological variables (Krystallis, Vassallo, Chrysohoidis, 2012). Peachey & Bruening (2012) suggested that, individuals prefer an environment that possesses characteristics (e.g., values) that are similar to their own. From this statement it was hypothesized that athletes' perception of coaches' values would affect the motivational climate to be task involving, performance approach or performance avoidance.

Using the same analogy as the above hypothesis, values have effect on our thought processes (Bardi, & Schwartz, 2003). Therefore it was also hypothesized in this study that, significant proportion of athletes' self-talk differences would be attributed to differences in athletes' perception of coaches' value system.

It has been witnessed that how athletes define success affect their cognition and thoughts in many ways. One expected outcome for motivational climate is self-talk. In this study, it was also hypothesized that, significant difference in the content and type of self-talk would exist between athletes perceiving task climate, performance approach and performance avoidance climate. As Papaioannou, et al., (2008) suggested, perceived coach task-involving climate is linked to more adaptive cognitive, affective and behavioural responses than perceived ego-involving climate. So, more specifically, it was hypothesized in this study that, perceived task-involving and perceived performance approach climate positively related to positive self-talk and negatively related to negative self-talk. However, performance avoidance climate would be negatively related to positive self-talk and positively related to negative self-talk.

LITERATURE REVIEW

Conceptualization of values

The concept of values has a long history in psychology and other social sciences. They are considered as a motivational construct which plays an important role to explain opinions, attitudes and behavior. In his overview about values, Schwartz (2007) claimed after quoting words of psychologists in proclaiming the centrality of the concept of value that, value is able to unify the apparently diverse interests of all the sciences concerned with human behavior. When we think of our values, we think of what is important to us in our lives. Each of us holds numerous values with varying degrees of importance. A particular value may be very important to one person, but unimportant to another.

Although consensus regarding the most useful way to conceptualize basic values has emerged gradually since the 1950's, the very well known theory of human values was developed by Schwartz (1992) out of his social psychological studies of individual differences in value priorities and their effects on attitudes and behavior (Schwartz, 2007). Before defining the concept of value for his own theory, Schwartz summarized the main features of the conception of basic values implicit in the writings of many theorists and researchers as follows:

- Values are beliefs tied inextricably to emotion, not objective, cold ideas.
- Values are a motivational construct. They refer to the desirable goals people strive to attain.
- Values transcend specific actions and situations. They are abstract goals. The abstract nature of values distinguishes them from concepts like norms and attitudes, which usually refer to specific actions, objects, or situations.

- Values guide the selection or evaluation of actions, policies, people, and events. That is, values serve as standards or criteria.
- Values are ordered by importance relative to one another. People's values form an ordered system of value priorities that characterize them as individuals. This hierarchical feature of values also distinguishes them from norms and attitudes (Schwartz, 2007, p. 261).

Schwartz introduced his theory building on common elements in earlier approaches. The theory defines values as desirable, trans-situational goals, varying in importance that serves as guiding principles in people's lives (Schwartz, 2007). The five features above are common to all values. The crucial content aspect that distinguishes among values is the type of motivational goal they express. Because the same values have been identified in different societies, they are considered universal. Moreover, since values express preferences among alternatives, individuals and societies develop value systems which can be ranked in importance (Lee, et al. 2008).

Structure of values and inter- relationship

Schwartz derived the 10 motivationally distinct types of values from three universal requirements of the human condition: needs of individuals as biological organisms, requisites of coordinated social interaction, and survival and welfare needs of groups (Schwartz, 2007). The theory holds that groups and individuals represent these requirements cognitively, as specific values about which they communicate in order to coordinate with others in pursuing the goals that are important to them. The 10 values are the content aspect of the theory. Perhaps each value is independent; the

structural aspect of the theory specifies relations of similarity and dissimilarity among these values (Schwartz, 2007; Lee, et al, 2008).

Schwartz mapped the motivational content of value domains in spatial relations to other value types. He described a two-dimensional psychological space bisected by two orthogonal bipolar axes. The first describes the tendency to place the interests of others (self-transcendence) above the interests of self (self-enhancement) or vice versa. The second describes the need for change (openness to change) as opposed to the need for stability (conservation). These axes provide a framework for 10 groups of similar values (domains) that are more or less compatible or conflicting according to their relative location in the model. Adjacent domains are compatible and opposing domains are conflicting.

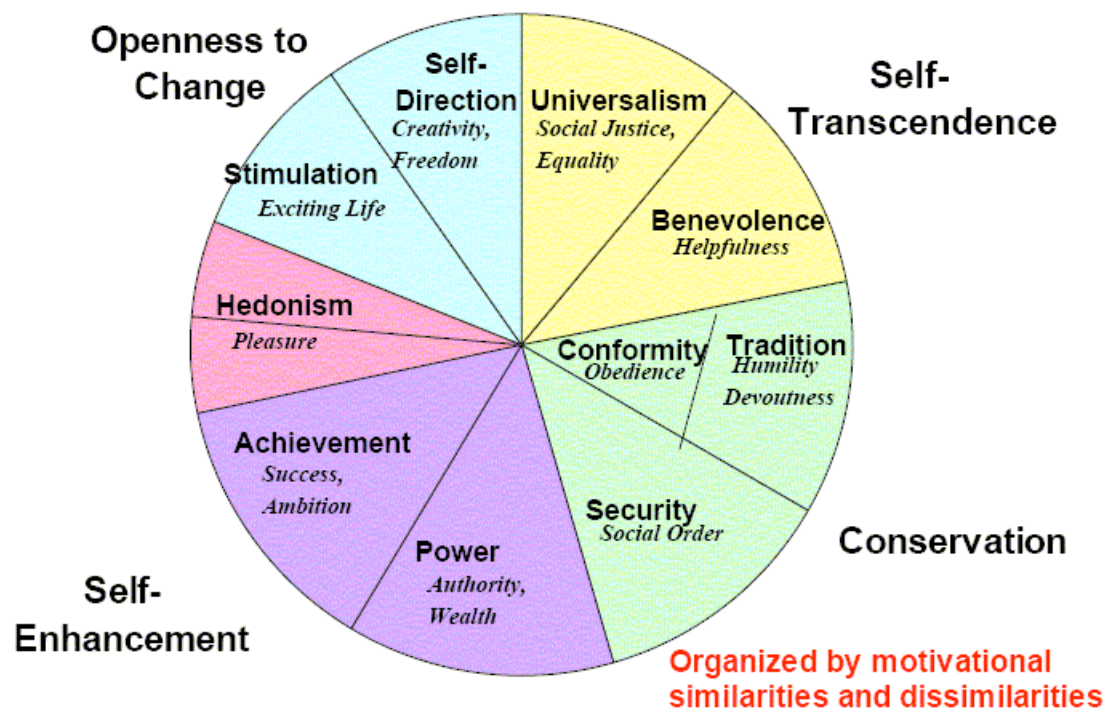
Table 1. Definitions of the motivational types of values in terms of their core goal.

| Value type | Core goal |
|-------------------|---|
| 1. Power | Social status and prestige, control or dominance over people and resources |
| 2. Achievement | Personal success through demonstrating competence according to social standards |
| 3. Hedonism | Pleasure and sensuous gratification for oneself |
| 4. Stimulation | Excitement, novelty, and challenge in life |
| 5. Self-direction | Independent thought and action – choosing, creating, exploring |
| 6. Universalism | Understanding, appreciation, tolerance and protection for the welfare of all people and for nature |
| 7. Benevolence | Preservation and enhancement of the welfare of people with whom one is in frequent personal contact |
| 8. Tradition | Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self |
| 9. Conformity | Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms |
| 10. Security | Safety, harmony and stability of society, of relationships and of self |

Adopted from, Schwartz, 2007

As described in Table 1, the ten values are: hedonism, stimulation, self-direction, security, universalism, benevolence, conformity, tradition, power and achievement. For example, the motivational goal of power is social status and prestige, with control or dominance over people and resources. The motivational goal of hedonism is pleasure and sensuous gratification for oneself (Schwartz, 2003, in press).

Figure 1. Theoretical model of relations among ten motivational types of values



Adopted from, Schwartz, 2007

As indicated by Schwartz and Boehnke (2004), the circular structure in Figure 1 above portrays the total pattern of relations among values postulated by the theory. Some values may be closely related to each other but others may oppose each other.

In other words, actions to realize one value may be congruent or opposed to actions to realize other values. As noted earlier, two values are congruent if the actions typically taken to express each of them are compatible with attaining the other value. For example, universalism and benevolence values are congruent because actions that express both values promote the welfare of others. Hence, behaviors that express benevolence and universalism values are congruent and may be positively interrelated. In contrast, values conflict if the actions that express one value hinder attainment of the other value. For example, tradition and hedonism values are incongruent because behavior that expresses commitment to tradition usually requires self-constraint that clashes with the hedonistic pursuit of sensual pleasure. Thus, behaviors that express tradition and hedonism values are incongruent and may be negatively interrelated.

Measurement of values

Although social psychologists have consistently treated values as conscious, explicitly reportable constructs, it may be useful to add implicit measures to the battery of methods for assessing them (Maio,2010).

The correspondence between the hypothesized and actual content and structure of values can be assessed Smallest Space Analysis (SSA) (Schwartz, & Bardi, 2001). SSA is a multidimensional scaling model (MDS) used to map the relations among all value items simultaneously in a two-dimensional space based on the Pearson correlations among the importance scores of each pair of values. As Schwartz (2007) suggested, the more positive the correlation, the closer the values on the map. He further claimed that, if the theoretical structure is correct, then the predicted circular structure should emerge on the map.

The instrument used to measure values, for Schwartz's model of human values, is based on the ten value domains (Schwartz, 2007). The survey asks participants to rate different words or phrases for the ten domains of values on a 9-point scale with labels at -1 (opposed to my values), 0 (not at all important), 3 (important), 6 (very important), and 7 (extremely important). This approach is further supported by evidence that differentiation in ratings helps to improve their prediction and that rankings can force illegitimate distinctions.

Implicit measures can isolate automatic evaluations of values. At first glance, automatic evaluations of values may seem unimportant because long-standing perspectives have explicitly treated values as conscious judgments of desirable trans-situational goals. Nonetheless, implicit measures are compatible with the traditional view of values if we keep in mind that, in general, both conscious and unconscious judgments and behaviors may be shaped partly by automatic associations and that, consistent with the strong role of affect in values, some of the automatic associations with them may be unconscious or difficult to articulate (Amos, & Weathington, 2008). Implicit measures are particularly useful when automatic associations have these properties.

Antecedents of values

It has been indicated in Schwartz (2007), that socio-demographic characteristics contribute to explaining individual differences in value priorities because they represent different sets of life experiences. Mean level of values and their effects may vary across different cultural groups, countries or even time points; this reflects the contribution of societal differences and changes for value priorities (Davidov, 2010).

As Schwartz (2007) supported life circumstances and background variables influence value priorities. Typically, people adapt their values to their life circumstances. People's age, education, gender, and other characteristics largely determine the life circumstances to which they are exposed. These include their socialization and learning experiences, the social roles they play, the expectations and sanctions they encounter, and the abilities they develop. Thus, differences in background characteristics represent differences in the life circumstances that affect value priorities. For example, age is one of the strongest variables which can result in value differences between coaches and athletes. According to Schwartz (2007), age is positively correlated with security, tradition, and conformity values. He also found that stimulation, hedonism, and achievement values correlate most negatively with age, and that power values correlate negatively too.

Individual value priorities can be resulted from adaptation to life experiences. Adaptation may take the form of upgrading attainable values and downgrading thwarted values (Maios, 2010). But the reverse occurs with values that concern material well-being and security. In keeping with the structure of values identified by the theory, antecedents affect priorities in a systematic manner. They tend to enhance the importance of values that are adjacent in the value circle (e.g., conformity and security) but to undermine the importance of the competing values (e.g., self-direction and stimulation). As stated by Schwartz (2007), people's life circumstances also provide opportunities to pursue or express some values more easily than others: For example, wealthy persons can pursue power values more easily, and people who work in the free professions can express self-direction values more easily.

Thus, though little explored, values may be considered mediators of the effect of variables like age, gender, education or economic and professional status on attitudes, opinions and behavior (Schwartz, 2007). However, as it is relatively stable personality (Krystallis, Vassallo, Chrysohoidis, 2012), values should be considered as antecedents for most related psychological variables. In the current study, values were considered as an independent variable for both motivational climate and self-talk. Specifically this study tried to assess, athletes perception of values promoted by the coach and its effect on their perception of coach created motivational climate and self-talk.

Outcomes of Values

Values represent the most abstract cognitions and serve as standards or models for evaluating attitudes, beliefs, and behavior. Values are stable constructs that do not change easily, even when investing considerable effort. As a result, values can serve as predictors of behavior over extended periods of time (Krystallis, et al., 2012).

Values influence most if not all motivated behavior (Schwartz, 2007). Value serve the interests of individuals or groups, motivate action by giving it direction and intensity, provide standards by which behavior is evaluated, and are learned by individuals from the dominant values of their social groups and through their own experiences (Lee, and colleagues, 2008). As stated in Schwatz (2007), although most studies were correlational, value serve as a source of motivation, influence on attention, perception, and interpretation in situations; and also influence in thoroughly planning actions are to mention but a few.

Lack of research on sport setting

As described above values have been the subject of considerable research in mainstream psychology since 1950s but have received limited attention in sport psychology until recently (Lee, Whitehead, & Balchin, 2000). As Peachey and Bruening (2012) suggested, factors in individual differences has started studying in recent years. One factor of individual difference, neglected by previous research, is value in general and its congruence, or the similarity of values between the individual, the coach and other officials in the team. Athletes have their own values priorities; the compatibility of their value with their perception about coaches' value system might greatly affect both individual and group success. Theorists have viewed values as the criteria people use to select actions and evaluate events (Schwartz, 1992). So understanding values systems in a team is worthy area of study for a sport psychology. The concept of values can be, so, considered an independent variable affecting behavior.

Because values are considered universal in the sense that they are principles that govern all aspects of our lives, they should also have its own effect on sport setting (Lee, et al., 2000). Each athlete can have his/her own values as an individual athlete. In addition to athletes' values of their own, their perception of coaches' values has not received appropriate attention in the sport psychology literature. Values should underpin decision making in sport, and significantly affect athletes' behavior including their goal orientation, motivation, morality and their feelings.

Motivational climate

One motivational framework well suited to study the potential implications of social situational factors is achievement goal theory, which is the root of the concept of motivational climate. As Nicholls, (1989) suggested, it is a social-cognitive framework developed to facilitate the understanding of how success is perceived and competence evaluated (Liukkonen, et al., 2010). Achievement goal theory assumes that the individual is an intentional, goal-directed organism who operates in a rational manner (Roberts, Treasure, and Conroy, 2007). Individuals give meaning to their achievement behavior through the goals they adopt.

Nicholls (1989) identifies achievement behavior utilizing task involvement and ego involvement (Roberts, Treasure, & Conroy, 2007). When the individual is task involved, the goal of action is to develop mastery, improvement, or learning, and the demonstration of ability is self-referenced. Success is realized when mastery or improvement has been attained. The goal of action for an ego-involved individual, on the other hand, is to demonstrate ability relative to others, making ability other-referenced. Success is realized when the performance of others is exceeded, especially when expending less effort than others. Biddle, and his colleagues (2003), have also found that, ego-oriented person participated in sport in order to demonstrate normative competence and receive recognition for this. Ego orientation, therefore, is likely to be coupled with more extrinsic motives for participation. In contrast, the task-oriented person, who is primarily concerned with skill mastery and learning, would be expected to participate in sport for skill development, enjoyment, and other intrinsic facets of the experience. Task orientation, therefore, should be related to

more intrinsic motives for involvement, such as developing skills and being part of the team.

There is widespread acceptance of the fact that motivational goal orientations and motivational climate are likely to interact (Papaioannou, Marsh, and Theodorakis, 2004; Boyce, Gano-Overway, & Campbell, 2009).

Using the key elements of the achievement goal theory, Ames (1992) defined the concept of motivational climate as a situation-induced environment directing the goals of an action in achievement situations. A motivational climate can be either task- or ego involving depending on how people perceive the structure of the achievement environment. Motivational climate is considered to affect a person's interpretation of the criteria of success and failure in achievement environments. Ego-involving climate stresses performance outcomes and social comparison among athletes (Papaioannou, et al., 2007). This leads to increased external motivation and anxiety as well as decreased interest and enjoyment. In a task-involving climate, athletes relate their performances to their personal development, they are rewarded from involvement and effort, and they set their personal goals themselves (Papaioannou, et al., 2007).

In their article, Elliot and Harackiewicz (1996) propose that the conventional achievement goal dichotomy be expanded to incorporate independent approach and avoidance components within the performance goal orientation. Specifically, they call for a reconsideration of the trichotomous variant of achievement goal framework, composed of a mastery goal and two performance goals, one directed toward the demonstration of competence and the other aimed at avoiding the demonstration of incompetence.

So, the three goal types are referred to as mastery, performance approach and performance avoidance. Mastery goal refers to a personal focus on the development of competence and task mastery. And Papaioannou and colleagues (2012) suggested that, mastery approach goals are the most preferable goals. Performance-approach goal reflects involvement in an activity in order to demonstrate superiority over others, whereas a performance avoidance goal reflects a focus on avoiding the demonstration of incompetence relative to others. Mastery and performance-approach goals construe an approach orientation while performance-avoidance goals an avoidance orientation (Elliot, and Harackiewicz, 1996; Elliot & Church, 1997). In support of Elliot's suggestion, Papaioannou and colleagues (2012) found that performance avoidance goals have negative implications for people's motivations. Performance approach goals were related to several adaptive outcomes but also some maladaptive outcomes, so its findings remain controversial.

Achievement motivation orients individuals toward the possibility of success, and, consequently, it is likely that this motive will prompt the adoption of self-regulatory forms focused on the attainment of positive outcomes: mastery and performance-approach goals. In reciprocal fashion, fear of failure orients individuals toward the possibility of failure and therefore is likely to evoke performance-avoidance goals that focus on the avoidance of negative outcomes (Elliot & Church, 1997).

The social situation created by significant others varies in terms of the achievement goal emphasized (Duda, & Balaguer, 2007). The behaviors coaches engage in help athletes to create a motivational climate. Ames (1992) introduced the term motivational climate as an overriding aspect of the social psychological

environment, such as a sport team. The importance of the coach, as one authority figures, is apparent because he or she is able to influence athletes in their rewards, feedback, imposed deadlines, competition, surveillance, and the interpersonal styles and so on (Kipp & Amorose, 2008).

In the sport psychology literature there is a considerable number of studies examining the antecedents and effect of motivational climate. Motivational climate could result from demographic factors (like age, gender and educational level) and it can also be created by significant others (like peers, parents, teachers and coaches) (Duda & Balaguer, 2007). For example a study by Papaioannou and colleagues (2008) found that, perceptions of performance approach goals endorsed by significant others had low negative relationship with academic performance and they were unrelated to sport satisfaction. The motivational climate that coaches establish is through their communication of goal priorities (e.g., skill development, having fun, winning) and the pattern of rewards and punishments for specific athlete behaviors, such as successful or unsuccessful effort and performance (Appleton, Hall, and Hill, 2011).

Coaches play a central role in sport setting, both as instructors of sports skills and as adult role models. Studies have tried to examine the link between the motivational climate emphasized by coaches and athletes' achievement motivation and in general they revealed that a perceived mastery oriented climate is related to task orientation and intrinsic motivation such as effort, enjoyment, and satisfaction (Weigand, et al., 2001). Moreover, studies has found that a perceived coach task-involving climate is linked to more adaptive behavioral responses than perceived ego-involving climate (Papaioannou, 2006)

A performance oriented climate has been related to ego orientation and feelings of pressure and tension in sport (Weigand, et al., 2001). In their conclusion, Weigand, et al., (2001) also summarized the findings that task oriented goals have been shown to be related to adaptive aspects of motivation in sport and physical education; ego oriented goals have been shown to be related to maladaptive aspects of motivation, unless ability is perceived to be high.

In another study, Reinboth, and Duda (2004), reported that self-esteem was the lowest among athletes participating in an environment that was perceived to be high in its ego-involving features, but high among athletes perceiving a highly task-involving environment regardless of their perceptions of competence. They also found that, contingent self-esteem, physical exhaustion, and reported physical symptoms were positively predicted by perceptions of an ego-involving climate. The results suggest that an examination of variations in the perceived motivational climate may provide further insight into whether sport participation can be health promotive or potentially damaging to athletes' welfare.

Research in motivation has focused on motivational attributes of sport environment. Since values are considered as principles that govern all aspects of our lives, they should have motivational underpinnings. Although Elliot proposed that achievement goals emerged from unconscious needs, as Papaioannou and colleagues (2012) reviewed that several authors have suggested achievement goals might reflect values. Peachey and Bruening (2012) also suggested that, individuals prefer an environment that possesses characteristics (e.g., values) that are similar to their own. Papaioannou and Karakanta (2010) investigated the association of achievement goals with sets of Schwartz's universal values. They found that priority given to values

corresponded to priority given to different achievement goals. Moreover, Lee and colleagues (2008) tried to assess the relationship between values and goal orientation, and they found that values strongly predicted task and ego orientation respectively. Lee and colleagues suggested that values underpin achievement orientation. They also suggested that the role of value systems lies in underpinning achievement orientation and that an institutional value system may function to promote a dominant motivational climate. It is clear from the few past pioneering studies (e. g., Papaioannou and Karakanta, 2010; Lee et al., 2008) that there is strong link between values and goal orientation. As mentioned above motivational climate was originated from achievement goal theory. According to the principle of compatibility, Papaioannou, et al., (2007) suggested that climate perceptions and achievement goals should be compatible between each other in terms of target, action domain, life context, and time. From their finding we can also suggest the link between the perceived values and motivational climate, and predict motivational climate from values, which was the intention of the current study.

Self-talk definitions and conceptualization

One of the basic aspects in the study of social sciences concepts is the way in which concepts are being defined. In the field of sport psychology, many different definitions with different emphasis have been given for self-talk in the literature. Self-talk can be simply defined as “what people say to themselves either out loud or as a small voice inside their head” (Theodorakis, et al., 2000). However, as Hardy (2006) suggested, it is probably a little simplistic to define self-talk as “statement addressed to self”; it lacks many aspects. Thus Hardy (2006, p.84) describe self-talk based on different researchers suggestion along the following guidelines. Self-talk should be

defined as: “(a) verbalizations or statements addressed to the self; (b) multidimensional in nature; (c) having interpretive elements association with the content of statements employed; (d) is somewhat dynamic; and (e) serving at least two functions; instructional and motivational, for the athlete”.

Several attempts have been made in clearly defining the concept of self-talk and underlining its dimensions. For example, Theodorakis, et al., (2012), elaborated two dimensions which are basic in understanding the concept of self-talk: Positive-negative and Motivation-instruction self-talk. The first conceptual distinction is between negative and positive self-talk. Originally it has been said that, positive ST helps athletes to stay focused, not to stick on past mistakes, or project far in the future. In contrast, negative self-talk is that which is inappropriate, anxiety producing and counterproductive. However, Theodorakis and colleagues (2012) suggested that the distinction should only be based on the content of the statement. They tried to explain their assertion in that defining self-talk using both its content and impact can result in misleading its conception. Because, based on individual and situational characteristics, it is possible that positive statements can have negative effects and negative statements can have positive effects. As Theodorakis and colleagues (2012) suggested, self-talk has its impact on performance as facilitative effects and debilitating effects.

Another conceptual distinction of self-talk based on the content and function of self-talk is that between motivational or instructional self-talk. As stated in Theodorakis and colleagues (2012), motivational self-talk refer to psyching-up and confidence building cues, whereas instructional self-talk refers to focusing or directing attention cues, and cue providing instructions with regard to technique,

strategy, or kinesthetic attributes of a skill. Zinsser, Bunker, and Williams (2001) identified that ST can be characterized as instructional or motivational. Instructional ST refers to statements related to focus of attention, technical information and tactical choices, whereas motivational ST refers to statements related to confidence building, effort input and positive moods.

Research approaches to the study of self-talk

The interest of sport psychologists in researching ST is growing in recent years. There are two main research paradigms that researchers are used in the study of self-talk. Hatzigeorgiadis and Biddle (2008) discussed the two approaches and their distinction: self-talk as spontaneous thoughts individuals experience and self-talk as a mental strategy with the use of specific cues. It was also described in Theodorakis and colleagues (2012), that the first refers to self-talk as inherent thoughts and self-statements athletes address to themselves, mostly during sport performance. This paradigm mainly focuses on the occurrence and the frequency of such statements or automatic thoughts, which may occur with or without conscious awareness, inherently or deliberately. This paradigm has been mostly used in field studies, descriptive or correlational, to describe the content of athletes' self-talk, to explore self-talk antecedents, and to examine the relationship between self-talk and performance.

The second paradigm refers to the use of self-talk as a mental strategy, where self-talk cues or self-talk plans are used aiming to enhance performance, or achieve other related outcomes. The second paradigm has been used for both the descriptive study of self-talk, with regard to the use of self-talk as a strategy, and mostly for the study of the impact of self-talk strategies on performance through experimental research.

Although the study of self-talk was started recently, studies are gradually increasing in quantity and diversity. One of the basic aspects of studying self-talk is its importance in terms performance outcomes. Studies (e.g., Latinjak, Torregrosa, & Renom, 2010; Cutton, & Landin, 2007; Landin & Hebert, 1999) using various research designs and tasks have thoroughly supported that self-talk can be an effective cognitive strategy for skill acquisition and performance enhancement. However, as Hardy, Hall, & Hardy, (2005) suggested, relatively little is known about the nature of self-talk, so this study examined self-talk as thought content.

Self-talk as thought content

Although the promotion of appropriate self-talk is a commonly employed cognitive intervention in applied sport psychology that is frequently included in mental skills intervention packages, relatively little is known about the nature of self-talk (Hardy, et al., 2005). In his review Hardy (2006), forwarded six aspects to the nature of self-talk in order to offer clarity about what exactly the nature of self-talk is.

The first aspect of self-talk is its valence, which is concerned with the content of self-talk and is anchored with the bi-polar descriptors of positive and negative self-talk. This dimension is the most important dimension of self-talk has received much more research emphasis than any other aspect of self-talk (Hardy, 2006). Positive self-talk is a form of praise, and helps keep athletes' focus of attention in the present, not on past errors or the distant future is commonly termed positive self-talk (Weinberg, 1988). On the other hand, self-talk that is said as a form of criticism, and "...that gets in the way because it is inappropriate, irrational, counterproductive, or anxiety-producing is called negative self-talk" (Theodorakis et al., 2000). Although studies

reported that negative self-talk negatively influence performance, Tod, Hardy, and Oliver, (2011) reported, is does not impede performance.

As Burton, D., Gillham, A., & Glenn, S. (2011) suggested, most existing research has focused on the nature of self-talk and its consequences rather than its antecedents. The study of antecedents of ST was underserved, though, Theodorakis, et al., (2012) suggested that it is an important research direction which enables us to understand the factors that shape or influence self-talk. Hardy, et al., (2009) presented a conceptual model suggesting two broad dimensions of ST antecedents: personal and situational. Personal antecedents consists of factors such as individual's cognitive processing preferences, individual's belief in ST and individual's personality, anxiety, and achievement goal orientations. Most studies on personal antecedents focus on achievement goals (Theodorakis, et al., 2012). The overall results of different studies seem to suggest that task orientation shows more 'adaptive', at least in terms of content, relationships with thought patterns. Situational antecedent consists of factors such as task difficulty, match circumstances, coaching behavior and competitive setting. It was highly suggested that what is going on during competition to a large degree determines athletes' self-talk. However, Theodorakis, et al., (2012), refined this model by taking out coaching behavior and significant others related factors to constitute another antecedent called socio-environmental antecedent.

Environmental and social factor affecting self-talk was first initiated by Zourbanos (2008). Zourbanos and colleague at different point in time (2006; 2007; 2010; 2011) conducted different studies to assess the impact of social environment and significant others on self-talk, which led them to suggest that the influence of the

coach and broader social and environmental factors should be considered as a separate class of self-talk antecedents (Theodorakis, et al., 2012).

The role of the team environment in influencing self-talk

As a social animal, we humans have a sense of belonging to develop supportive relationships which appear to have a significant effect on our behavior in general. It is amenable that the impact of the social environment in general, and significant others in particular, has great impact on individuals' cognitions (Zourbanos et al., 2011). The relationship between the social environment and individuals' cognitive concepts has been supported by many researchers in different areas of psychological research (Wyer, and Srull, 1986). The influence of the environment in the process of thinking is now an area of great interest in sport.

Coaching behavior

Interest regarding self-talk antecedents has been exhibited focused on the relationship between significant others' influencing self-talk. Social-cognitive theorists (e.g., Wyer, and Srull, 1986) propose those individuals' interactions with the social environment, and in particular significant others' behavior directed at them, influence the way individuals view themselves and respond to stimuli through internalization processes (Zourbanos, et al., 2011).

Zourbanos considered the role of significant others in shaping athletes' self-talk, and in particular, the role of "the most" crucial significant other for athletes, the coach. Different research that have been carried out suggest that the coach is an important factor in shaping athletes' cognition and self-talk (Carvello, et al., 2007;

Zourbanos, et al., 2011; Haznadar, 2012), and encourages the investigation of further social – environmental parameters.

It has been reported in studies, that, coaching behavior, support, and statements by coaches addressed to athletes are related to athletes' positive and negative self-talk (Zourbanos, et al., 2006; Zourbanos, et al., 2007). More specifically, Zourbanos, et al., (2006) investigated how athletes' social environment can influence cognitive processes, such as self-talk. Their results showed that social support provided by coaches, in the form of esteem support, mediated the relationship between coaches' supportive behavior and athletes' positive self-talk. Moreover, it was found that coaches' negative activation predicted directly athletes' negative self-talk. Zourbanos et al., (2007) reported that positive and negative statements by the coach were related to athletes' positive and negative self-talk respectively. Finally, Zourbanos, et al., (2010) in a multi-method examination of the relationship between coaching behavior and athletes' self-talk supported through experimental evidence that the coach may have an impact on athletes' self-talk. They found that supportive coaching behavior can reduce negative self-talk and negative coaching behavior can reduce athletes' positive self-talk.

In another study examining the influence of coaches on athletes' self-talk, Zourbanos, et al., (2011) found that, perceptions of support received from the coach were positively related with athletes' positive self-talk and negatively related with athletes' negative self-talk. The magnitude of the relationships between social support and negative self-talk was somewhat larger than that between social support and positive self-talk. As Zourbanos and colleague, (2011) suggested, their results were in line with other previous findings regarding social support in the broader sport

psychology literature in that a positive relationship was found between perceptions of received support provided by the coach and athletes' positive self-talk. Respectively, a negative relationship was found between perceptions of received support provided by the coach and athletes' negative self-talk (Zourbanos, et al., 2011).

Previous studies have tried to link between motivational climate as one team environmental factor which may have an influence on self-talk. There are some studies which serve as the basis for the investigation of the link between motivational climate and self-talk in this study. For example, Zourbanos et al (2007) found that supportive coaching behavior was positively related to positive self-talk and negative coaching behavior was positively related to negative self-talk. In addition, Zourbanos, and colleagues (2006) also reported that social environment influences cognitive processes like self-talk. Their results showed that social support provided by coaches mediated the relationship between coaches' supportive behavior and positive self-talk. In a study to see the mediational role self-talk in the relationship between motivational climate and self-efficacy, Haznadar (2012), found that motivational climate created by coach could have an important impact on athletes self-talk.

In general, the results of different studies provided substantial indications that coaches have an influence on athletes' cognition and thought. So, motivational climate created by coaches might have relationship with athletes self-talk.

Overall, as mentioned above, values are stable psychological construct and govern all aspects of human behavior. It is an independent variable in this study and it was expected to affect motivational climate and self-talk. The structure and contents of the ten value domains are distinct and their effect was expected to be different to create the social environment and to affect thought processes like self-talk.

The motivational climate created by significant others are responsible for the formation of athletes' achievement goals, emotions, and behaviors (Papaioannou, et al., 2008). Papaioannou, and colleagues (2007), described that perception of ego-involving climate is emphasized, athletes perceive their coach to normatively define success; that is, they perceive ability and task difficulty are judged in relation to the ability and performance of others, and they perceive coaches focus on overcoming others to prove that they are more competent than most of their teammates. Hence, the climate environment is either task involving or ego involving, depending on athletes perception about which goals are emphasized by the coach. As it has been mentioned above, studies have indicated that a perceived coach task-involving climate is linked to more adaptive cognitive behavior than perceived ego-involving climate. As thought content, motivational climate may have relationship with athletes self-talk.

METHOD

Participants

Participants were 284 male football players (Mean 22.17 ± 3.37) from Ethiopia. They were members of 13 football clubs competing at the Ethiopian premier league or national league. Participants had training for at least 5 times per week.

Measures

Perception of coaches' values measure: Schwartz (1992) proposed that ten basic value domains can describe an individuals' value which can be characterized by describing their central motivational goal. Taking this proposition in to account, 60 specific motivational words or phrases, which were assumed to tap the ten value domains were administered. The questionnaire started with the statement: ***“How important your coach considers the following words/expressions that describe values that the coach wants to promote in your team?”*** And then followed by 60 phrases presented in a Likert scale form ranging from 7(***of supreme importance***) to 0 (***not important at all***) and -1 (***opposed to his/ her principles***). The domains were Achievement (e. g., Successful), Benevolence (e. g., Responsible), Conformity (e. g., Obedient), Hedonism (e. g., Pleasure), Power (e. g., Authority), Security (e. g., Family security), Self-Direction (e.g., Independent), Stimulation (e. g., Daring), Tradition (e. g., Humble), and Universalism (e. g., Wisdom).

Motivational Climate: This study was based on the trichotomous model of achievement goals (Elliot & Church, 1997): ***task/mastery, performance approach and performance avoidance***. To measure athletes' perception of motivational climate created by the coach, Measuring Perceived Motivational Climate in Physical Education (Papaioannou, et al., 2007) was adapted for coaching context. The scale

consists of 18 items, 6 for each climate subscale. The questionnaire started with a clause *“In this football team.....”*. And then statements which are assumed to tab each climate were presented which started with *“My coach...”* Example items are: *‘My coach often makes me worried if they say that I’m not capable in football’* (performance avoidance); *‘My coach is very happy when I learn new skills and tactics’* (task) and *‘My coach encourages athletes to play better than the others’* (performance-approach). The responses were given on a 5-point scale (1 = strongly disagree; 5 = strongly agree).

Self-talk: The Automatic Self-Talk Questionnaire for Sport (ASTQS) was used to assess athletes’ self-talks. ASTQS is a comprehensive instrument which was developed by Zourbanos, and colleagues (2009) to assess the content and structure of athletes’ self-talk. The instrument comprises eight distinct self-talk dimensions, four of which are labeled as positive and four as positive. The positive self-talk dimensions are Psych up (e.g., Give 100%), Confidence (e.g., I feel strong), Anxiety control (e.g., Calm down), and Instruction (e.g., Focus on your technique), and The negative self-talk dimensions are Worry (e.g., I am going to lose), Disengagement (e.g., I want to stop), Somatic fatigue (e.g., My body doesn’t help me today), and Irrelevant thoughts (e.g., I am thirsty). The questions were arranged in rating scale from 0 (never) to 4 (very often) to indicate their thoughts experiences based on their latest competition.

Procedure

The study was approved by the Bioethics Committee of the institution. After translated to the local language (Amharic), the questionnaire was back translated to English by another expert who has proficient language skill of both English and Amharic (local language). This back and forth translation of the instrument helped to

insure the equivalency of the two versions. The data was collected on mid of January to mid of February, 2013. During data collection, the researcher was there all the time of data collection.

In order to follow the procedure and to make the data collection ethically clear, a reference letter was first obtained from concerned bodies of the University of Thessaly to be presented to officials in the data collection site. Then the researcher informed the purpose of the study to Ethiopian football federation in order to get accreditation so as each club officials would not be uncomfortable. And then a letter was sent to each coach explaining the purpose and procedure of the research and requesting permission to include his/her team and players in the study. A consent form was prepared to be signed by each player. During data collection, participants were explained about the general over view of instruments to be used; and they were informed that their response is anonymous, kept confidential and to be used for research purpose only; they were also told that they were at any time well come to ask questions during data collection.

Data Analysis

In order to show the general picture of the data, descriptive values as the mean and standard deviation were determined for all study variables. In addition, Cronbach's alpha was calculated to test internal consistency reliability. Bivariate correlations were examined to test the relationships among all variables. Finally, regression analyses were calculated to (a) test the degree to which perceived values could predict perceptions of motivational climate, (b) the degree to which motivational climate could predict self-talk, and (c) the degree to which motivational climate would mediate the relationship between values and self-talk.

RESULTS

Reliabilities and Descriptive Statistics

Reliabilities and descriptive statistics (Mean and Standard deviation) of all variables are presented in Table 2. Most of the value scales had good coefficient of reliability using Cronbach's alpha. Seven out of the ten value subscales had reliability coefficient greater than .70 with a maximum coefficient from Universalism ($\alpha = .89$). Power value ($\alpha = .67$), Hedonism value ($\alpha = .43$), and Stimulation value ($\alpha = .52$) were the three value subscales with reliability coefficient of less than .70. Although Power value subscale was marginally accepted, Hedonism and Stimulation were excluded from further analysis.

From motivational climate, only mastery climate was found to show reliability coefficient of more than .70. The reliability coefficient of performance approach and performance avoidance climate subscales were found to be .41 and .61 respectively. The reliability of performance approach climate subscale was too small to be accepted. So, two items (Item no 5 and 12 from Appendix 1) were excluded and a marginally acceptable alpha coefficient ($\alpha = .63$) was obtained. So, all motivational climate subscales were retained for further analysis.

Except Irrelevant thought, all positive and negative self-talk subscales were highly reliable with coefficient alpha values ranging from .73 (disengagement thought) to .93 (Instructional positive self-talk). Cronbach's alpha value of Irrelevant though subscale was extremely low ($\alpha = .29$). So it was excluded from further analysis.

Table 2: Descriptive statistics and Cronbach's alpha coefficients for all scales.

| Variable | Mean | SD | Cronbach's Alpha |
|---------------------------------------|-------------|-----------|-------------------------|
| Perceived Values | | | |
| Achievement | 5.84 | 0.94 | .82 |
| Conformity | 5.80 | 1.05 | .73 |
| Power | 5.07 | 1.24 | .67 |
| Security | 5.24 | 1.19 | .75 |
| Self-direction | 5.63 | 1.16 | .82 |
| Tradition | 5.43 | 1.25 | .78 |
| Universalism | 5.34 | 1.34 | .89 |
| Benevolence | 5.70 | 1.21 | .88 |
| Perceived Motivational climate | | | |
| Task | 4.13 | 0.74 | .76 |
| Performance avoidance | 2.92 | 0.73 | .61 |
| Performance approach | 4.43 | 0.60 | .63 |
| Negative self-talk | | | |
| Worry | 0.89 | 0.67 | .75 |
| Disengagement | 0.62 | 0.67 | .73 |
| Somatic fatigue | 1.07 | 0.69 | .76 |
| Positive self-talk | | | |
| Psych up | 2.67 | 1.16 | .88 |
| Anxiety control | 2.43 | 1.03 | .77 |
| Confidence | 2.82 | 1.21 | .91 |
| Instruction | 2.86 | 1.20 | .93 |

As indicated in Table 2, mean scores for all value subscales were moderate to high (above 5 on a 7-point scale). From the motivational climate, high scores were

revealed for the task and performance approach subscales, whereas a moderate mean was revealed for performance avoidance. Mean scores for positive self-talk were moderate and for negative self-talk were low. Instructional self-talk had the highest mean score value and disengagement thought had the least mean score of all the self-talk subscales.

Correlations

Table 3 below presents the correlations of all variables included in the study. In general, there was significant positive relationship between all value subscales. It was also found that all the three subscales of motivational climate (task, performance approach and performance avoidance) were found to be positively correlated to one another. Regarding self-talk, the results from correlation matrix revealed that positive self-talk dimensions were positively correlated with each other, and negative self-talk dimensions were also positively correlated with each other. Between them, positive and negative self-talk were mostly unrelated.

The result also indicated that, athletes' perception of task climate and performance approach climate were significantly positively correlated with all value domains. However, perception of performance avoidance climate was found to be positively correlated only with Power and Tradition. Yet, the bivariate correlation revealed that perception of coaches' value system domains did not significantly correlate with any dimension of positive and negative self-talk; there was only one significant low negative relationship between somatic fatigue and self-direction. Moreover, performance avoidance was positively correlated with all the three dimensions of negative self-talk and negatively correlated with all the four dimensions of positive self-talk. However, the correlations of task and performance approach climate with positive and negative self-talk were low and non-significant.

Table 3. Pearson correlation coefficient for all variables

| | Correlations | | | | | | | | | | | | | | | | | |
|---------------------------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|-------|-------|------|-------|-------|-------|-----|
| | 01. | 02. | 03. | 04. | 05. | 06. | 07. | 08. | 09. | 10. | 11. | 12. | 13. | 14. | 15. | 16. | 17. | 18. |
| 01. Achievement | - | | | | | | | | | | | | | | | | | |
| 02. Conformity | .73** | - | | | | | | | | | | | | | | | | |
| 03. Power | .60** | .54** | - | | | | | | | | | | | | | | | |
| 04. Security | .74** | .64** | .76** | - | | | | | | | | | | | | | | |
| 05. Self-direction | .77** | .68** | .69** | .78** | - | | | | | | | | | | | | | |
| 06. Tradition | .79** | .75** | .67** | .80** | .83** | - | | | | | | | | | | | | |
| 07. universalism | .75** | .69** | .73** | .83** | .83** | .86** | - | | | | | | | | | | | |
| 08. Benevolence | .82** | .78** | .65** | .81** | .82** | .86** | .87** | - | | | | | | | | | | |
| 09. Task involving | .48** | .41** | .35** | .36** | .43** | .46** | .43** | .48** | - | | | | | | | | | |
| 10. Performance avoidance | .07 | .05 | .18** | .11 | .09 | .12* | .12 | .09 | .25** | - | | | | | | | | |
| 11. Performance approach | .42** | .41** | .27** | .34** | .36** | .41** | .37** | .41** | .63** | .21** | - | | | | | | | |
| 12. Worry | -.05 | -.03 | -.05 | -.07 | -.09 | -.03 | -.07 | -.07 | .03 | .23** | -.01 | - | | | | | | |
| 13. Disengagement | -.06 | -.04 | .05 | -.01 | -.05 | -.02 | -.01 | -.08 | -.07 | .22** | -.05 | .61** | - | | | | | |
| 14. Somatic fatigue | -.03 | -.07 | -.10 | -.07 | -.14* | -.06 | -.09 | -.08 | -.03 | .18** | .00 | .69** | .48** | - | | | | |
| 15. Psych up | -.04 | -.01 | -.03 | -.04 | -.02 | -.01 | -.04 | -.04 | -.03 | -.18** | -.03 | -.06 | -.07 | -.06 | - | | | |
| 16. Anxiety control | .01 | .03 | -.02 | -.01 | .04 | .05 | -.01 | -.01 | -.03 | -.12* | -.00 | -.02 | -.01 | -.01 | .82** | - | | |
| 17. Confidence | -.01 | .01 | -.04 | -.02 | -.01 | .00 | -.03 | -.00 | -.02 | -.24** | -.08 | -.11 | -.10 | -.09 | .90** | .81** | - | |
| 18. Instructional | -.03 | .02 | -.06 | -.06 | -.02 | -.03 | -.05 | -.02 | -.05 | -.22** | -.09 | -.08 | -.14* | -.06 | .91** | .81** | .93** | - |

Note: **p<0,01; *p<0.05.

Regressions

In order to see the contribution of athletes' perception of coaches' value system (achievement, benevolence, universalism, tradition, security, self-direction, conformity, and power) in predicting variance in perceived motivational climate (mastery, performance approach and performance avoidance), three distinct standard enter method regression analyses were conducted. The first regression analysis revealed that the variance of task climate explained by the model as a whole was 27.2%, $F(8,275) = 12.814$, $p < .001$. The final model of the analysis indicated that, Achievement (beta= .28), Power (beta= -.27), and Benevolence (beta= .24) values were found to be significant predictors of Perceived task climate.

Table 4: Standardized beta values after three regression analyses

| | Task | | Performance approach | | Performance avoidance | |
|----------------|-------------|----------------|----------------------|----------|-----------------------|----------|
| | <i>Beta</i> | <i>t</i> | <i>Beta</i> | <i>t</i> | <i>Beta</i> | <i>t</i> |
| Achievement | .243 | 2.49* | .188 | 1.846 | -.036 | -.325 |
| Conformity | -.015 | -.168 | .159 | 1.741 | -.094 | -.94 |
| Power | .097 | 1.16 | -.039 | -.451 | .239 | 2.487 |
| Security | -.272 | -2.479* | -.032 | -.278 | -.072 | -.57 |
| Self direction | .043 | .404 | -.031 | -.279 | -.068 | -.55 |
| Tradition | .169 | 1.377 | .167 | 1.307 | .165 | 1.174 |
| Universalism | -.016 | -.125 | -.021 | -.151 | -.008 | -.052 |
| Benevolence | .284 | 2.07* | .087 | .612 | .017 | .105 |

*Note: In each regression analysis perceptions of value were independent variables and perceived motivational climate were dependent variable. ** $p < .01$, * $p < .05$.*

The second regression analysis indicated that variance of performance approach climate explained by value domains as a whole was 20.9%, $F(8, 275) = 9.069$, $p < .001$. The final model of the analysis indicated that no one value factor was found to be significant predictor of performance approach climate, however, Achievement ($\beta = .19$, $p = .06$) and Conformity ($\beta = .16$, $p = .08$) approached significance.

Finally, the third regression analysis revealed that, the variance of performance avoidance explained by the model as a whole was low 4.2%, and non-significant, $F(8, 275) = 1.516$, $p = .151$. The coefficients for all variables are displayed in Table 4.

Two regression analyses were also conducted to examine the variance of negative and positive self-talk predicted by perceived motivational climate. All the three independent factors (task, performance approach and performance avoidance) entered in to the model simultaneously. For negative self-talk, the result showed that motivational climate could predict 7.1% of the total variance, $F(3, 280) = 7.13$, $p < .001$. The final model of the analysis revealed that only performance avoidance climate was found to be significant predictor of negative self-talk ($\beta = .27$).

For positive self-talk, the result showed that motivational climate could predict 4.2% of the total variance, $F(3, 277) = 4.05$, $p < .01$. The final model of the analysis revealed that only performance avoidance climate was found to be significant predictor of positive self-talk ($\beta = -.20$). The coefficients for all variables are displayed in Table 5.

Table 5: Standardized beta values after two regression analyses

| | Negative ST | | Positive ST | |
|-----------------------|-------------|----------------|-------------|--------------|
| | <i>Beta</i> | <i>t</i> | <i>Beta</i> | <i>t</i> |
| Task climate | -.078 | -1.035 | .38 | .495 |
| Performance avoidance | .274 | 4.597** | -.204 | -3.35 |
| Performance approach | -.03 | -.401 | .35 | -.474 |

*Note: In each regression analyses perceived motivational climate were independent variables and self-talk were dependent variable. ** $p < .01$, * $p < .05$.*

Generally based on the results found, perceived coaches' values predicted perceive task and perceived performance approach climate, which did not predict self-talk. On the other hand, perceived values did not predict performance avoidance which predicted self-talk. So, the meditation model could not be tested.

DISCUSSION

The objective of this study was to examine the relationship among Perceived values, motivational climate and athletes' self-talk. In particular, the study was intended to examine whether athletes' perception of values promoted by the coaches were related with athletes' perceptions regarding the motivational climate established by the coach as mastery, performance approach and performance avoidance; further to test the relationship of perceived values and motivational climate with athletes' positive and negative self-talk in sport as outcome variables. Coaches are role models who are assumed to greatly influencing athletes' thought and actions, so it is important to investigate how they are perceived by their athletes' for the value they promote in the club and the motivational environment they create. This study was important as it has been hypothesized that, different perceptions of value priorities might be one factor for different perception of motivational climate, which might resulted in different thought processes like self-talk. This was assumed to help researchers to device instructions for coaches so as to enable to clearly communicate values with their athletes and to create appropriate climate for athletes' cognitive processes and success in their profession.

The result of this study revealed significant positive correlation between perceived motivational climate (Task and performance approach) with all perceived value domains. However, there was no relationship between performance avoidance and perceived values. Furthermore, it was found that values could predict 27.2% and 20.9 % of variance in task and performance approach respectively. Benevolence, Power, and Achievement were value domains found to be significant predictors of task climate in their respective order of predictive power. However, among the eight value domains, no

one single factor structure was found to be significant predictor of performance approach. In addition, it was found that performance avoidance was the only perceived motivational climate variable which was found to be significantly correlated with both negative and positive self-talk in opposite directions. Moreover, the three motivational climate factors could predicted 4.2% and 7.1% of the variance of positive and negative self-talk respectively. However, only performance avoidance was found to be significant predictor for both negative and positive self-talk. So, even though the primary intention of this study was to test for meditation hypothesis, it was not possible to test the meditational role of motivational climate in the relationship between perception of values and athletes' self-talk because there was no relationship between perceived values and self-talk.

Based on the conceptualization of value theory proposed by Schwartz, it was understood that values are stable constructs and they are treated in most studies as predisposed variable like personality traits (Schwartz, 2003). Moreover, values are considered as an important determinant factor for most, if not all, psychological variables (Krystallis, et al., 2012). Based on this conceptualization of value, it was hypothesized in this study that different perceptions of coaches' value system would have relationship with athletes' perception of their motivational climate. In support of the hypothesis, it was found that value had strong relationship with task climate and performance approach. The result was consistent with the implication of previous researches (e.g., Bardi, & Schwartz, 2003; Schwartz, 2007) that each value is meaningfully related to all behaviors.

As Schwartz (2003) proposed, structures of values are arranged in circular fashion based on their relationships. So, positive relationship of all value domains between each other was not expected. Even though it was not expected, the bivariate analysis indicated

that, all the eight value variables were significantly related positively with both mastery and performance approach climate. This could be explained by the positive correlation coefficient obtained from value domains between each other, which were in contrast with what the theory suggests, as the theory of human value claims, adjacent values should be related positively, while opposite values in the structure should be related negatively (Schwartz, 2003).

Schwartz define each of the values in terms of the broad goal it expresses, and he defined “achievement value” as personal success through demonstrating competence according to social standards; he also defined “security value” as safety, harmony, and stability of society derived from basic individual and group requirements (Schwartz, 2003). So, these two values are positively related to each other and they were expected to have the same effect for mastery climate. On the other hand, “benevolence values” derive from the basic requirement of smooth group functioning which is opposite to personal achievement. In this research, however, it was found that they have significant positive relationship.

Even though the regression analysis indicated that values could not predict variance in athletes’ perception of ego protecting climate, the bivariate correlational analysis revealed that significant relationship obtained for power and tradition value domains. Power and tradition are around the same position in the circular structure of values; this indicated that they themselves are strongly related. As Schwartz (2003) argues, value analysts have mentioned power values as preserving public image, and social recognition, which are in line with performance avoidance climate within which athletes focus on avoiding the criticism of others (Elliot and Church, 1997).

As mentioned above, values are assumed to have an effect on all variables like our thought processes (Bardi & Schwartz, 2003). Using this assertion of Schwartz theory of human values, it was hypothesized that, athletes' self-talk differences could be attributed to differences in athletes' perception of coaches' value system. However, from the analysis it was found that there was no relationship between value domains and both negative and positive self-talk. As Davidov (2010) suggested, values are an important component of culture, so one possible explanation might be the cultural differences. It can also be explained by responses trustworthiness obtained from participant athletes. As we can see from the descriptive data, all value domains have mean value of greater than 5 from a range of 7. This indicates that athletes perceived their coach above average on all the value subscales. In addition, it can also be speculated that, athletes may have refrained from expressing their feelings about their coach freely. Instead of rating what they feel, they may have considered the data as an instrument to "evaluate" coaches and give responses on the basis of "not spoiling the relationship" they have with the coach.

In understanding antecedents of self-talk not many studies have been conducted. It is known that there are some research studies examining the relationship between motivational climate and athletes self-talk. Based on findings on the influence of coaches on athletes' cognitive processes (e.g., Zourbanos et al., 2010; Zourbanos, et al., 2011), it was suggested that perceived task-involving and perceived performance approach climate positively related to positive self-talk and negatively related to negative self-talk. It was found in this study that, performance avoidance had significant negative relationship with positive self-talk and positive relationship with negative self-talk. However, the study did not confirm the hypothesized relationship that performance approach and task climate

have with both negative and positive self-talk. Moreover, this finding was not consistent with previous research findings, as in general the literature support positive effect of mastery climate on self-talk. As stated in Papaioannou, et al., (2007), for example, the effect of a mastery climate on positive motivational outcomes is large and positive, whereas the effect of performance climate on positive outcomes is small and negative. By contrast, the impact of mastery climate on negative motivational outcomes is small and negative, whereas the impact of performance climate on negative outcomes is moderate and positive.

Direction for further research

The present study has potential implications for further research related to the variables under investigation. First value should be studied about its manifestations and differences based on different demographic variables like gender, age, and level of participation, in as many cultures as possible. This will enable us to understand whether the content and structure of values goes in accordance with the proposed theory. In addition it will help us test the integrity of the instrument used and the responses obtained.

Research in different places and for different cultural context should also be conducted to second and ensure “universality” of values over different diversified cultural groups. Most of researches were done in American and European context. So, further research is required in different cultural groups around the world to test for the universality of values domains. Schwartz and Bardi (2001) also said that the African

culture diverge from the pan-cultural order. It was good indication that value priorities found in this study was different from what was expected.

The comparative effect of socioeconomic and demographic variables on values has been explored by Schwartz (2007). These comparative studies raise methodological challenges regarding the validity and comparability of values studied in different contexts such as nations, cultures or time. People might perceive and understand value questions differently, although the same questions are used in the different contexts, because answers for value questions might be dependent on the temporal or cultural context, conducting research on diversified cultural group is required.

As it has been understood from values theory, it underlies most psychological variables. So, studying athletes' and coaches' values system from their own perspectives and its effect on athletes' cognition and thought processes will also be good direction of research.

There are research findings supporting the relationship between achievement goal and values. However, motivational climate and value relations could not be confirmed in this study. So, replication and related research should be conducted to see if the model supports the relationship between perceived values and self-talk

This study was a cross-sectional and we cannot establish causality. So, longitudinal and experimental studies should be conducted to explore the causal effect of significant others like coaches, on athletes cognition and other related outcomes. Finally, considering the limitations of this study in to account, it is important to replicate and expand the present investigation.

Limitations

There are a number of limitations associated with the current study that should be recognized. The first limitation is the absence of a pilot study to guide the study design and instruments. Although conducting a pilot study does not guarantee success, it might give advance warning about where the main research objectives may not be met. All the instruments of this study were developed in other countries and they have not been tested in the population and culture of the present study. Having said this, the current study was a preliminary investigation into the value system and related outcomes for the population of Ethiopia.

The second limitation concerns the time of data collection. Data about self-talk and other cognitive data in sport should be collected right after competition, or the next training session after the match. This can help athletes to remember what exactly they were feeling and what they were saying to themselves. But for this study, because of the “African Cup of Nations”, all premier league and national league competition under Ethiopian football federation were not hosted. As the data collection took place one month after the latest match of participants, it may have been too difficult for athletes to remember what they were feeling and what they were saying to themselves during their latest matches.

Conclusion

Regardless of the limitations mentioned above, the present study could be taken as one pioneering work for efforts in the future to explore values and perception of values in sport settings; their influence on coaching behavior, and their effect on athletes’ self-talk. The result of this study suggested that perceptions of values endorsed by the coach

can influence perceived motivational climate. In this study values were found to relate to performance approach and mastery climate. So, in order to make the climate environment appropriate for their professional performance and success, it is recommended in this study that coaches should have clear value for their team, and for their athletes.

Moreover, they should clearly communicate the values with their athletes.

The result of this study also enabled us understand coach's behavior and motivational climate as an antecedent factor for self-talk. Although it was hypothesized that all climate dimensions would relate to athletes' positive and negative self-talk, only performance avoidance was found to be related to positive and negative self-talk. Performance avoidance was negatively related to positive self-talk and positively related to negative self-talk. Although not consistent, there is finding supporting the negative effect of negative self-talk on performance, in addition, studies found that performance avoidance climate is maladaptive (Papaioannou, 2006; Elliot & Church, 1997). So, as a significant person in shaping athletes self-talk, it is important to inspect whether coaches emphasize performance avoidance goals. If so, it will be great intervention area for psychologists try to change such coaching behavior.

Overall, although there were some findings in support of the hypotheses, most of the results of this study did not confirm what has been expected. Therefore research should be conducted to see cultural variability and conceptual distinctions regarding the variables of the study.

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Appendix 1: Questionnaire

General Instruction: This is a study involving **football teams**. With this questionnaire we want to investigate how athletes perceive their coaches and how these perceptions are connected with perceived motivational climate and self-talk. The questionnaire is anonymous and there are no correct or wrong answers. Correct answer is what you really think. Please circle each of the following statements. Please give only one answer for each statement (for example, circle either A for “Agree” or D for “Disagree”).

Motivational climate

| In this football team... | Strongly agree | agree | neutral | disagree | Strongly disagree |
|--|----------------|-------|---------|----------|-------------------|
| My coach often makes me worried if they say that I'm not capable in football | SA | A | - | D | SD |
| My coach pays particular attention to whether my football skills are improving | SA | A | - | D | SD |
| My coach encourages athletes to play better than the others | SA | A | - | D | SD |
| My coach makes me afraid of the evaluation in football and protect myself from it. | SA | A | - | D | SD |
| My coach is absolutely satisfied only with players that everyone recognizes as more capable in football | SA | A | - | D | SD |
| My coach often makes me worry about how others watch my abilities in football | SA | A | - | D | SD |
| My coach insists that errors in skills and games help me to find my weaknesses and improve my football abilities. | SA | A | - | D | SD |
| My coach insists that we must fight to prove that we are more capable in skills and games than others | SA | A | - | D | SD |
| My coach makes me avoid actions which could possibly be the reason to be laughed at by other people | SA | A | - | D | SD |
| My coach is very happy when I learn new skills and tactics | SA | A | - | D | SD |
| My coach often makes me worry if they call me incapable in drills or games | SA | A | - | D | SD |
| My coach only praises players that look like more capable than others in football | SA | A | - | D | SD |
| My coach is absolutely satisfied when he sees that I improve all my football abilities | SA | A | - | D | SD |
| My coach's principle is that players should prove that they are more capable than others in all skills and games | SA | A | - | D | SD |
| My coach helps me in learning how to improve my abilities in games and exercises | SA | A | - | D | SD |
| My coach wants us to appear more capable than others in all football skills and tactics | SA | A | - | D | SD |
| My coach makes me to avoid exercises or games in which my abilities could be negatively commented | SA | A | - | D | SD |
| My coach makes sure that I understand how to perform a new skill before the team moves on to learning other skills | SA | A | - | D | SD |

Perceived value systems

| Your coach's values: How important your coach considers the following words/expressions that describe values that the coach wants to promote in your team? | Of supreme importance NCE | Very much important | Very important | Rather important | Rather little importance | Of little importance | Of very little importance | Not important at all | Opposite to his/her principle |
|---|--------------------------------------|--------------------------------|-----------------------|-------------------------|-------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--|
| 0. high effort | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 1. Successful | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 2. Helpful | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 3. Politeness | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 4. Pleasure | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 5. Social power | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 6. Clean | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 7. Creativity | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 8. Daring | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 9. Devout | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 10. Protecting the environment | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 11. capable | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 12. honest | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 13. honoring parents and elders | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 14. enjoying life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 15. authority | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 16. national security | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 17. curious | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 18. a varied life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 19. accepting portion in life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 20. a world of beauty | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 21. ambitious | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 22. forgiving | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 23. obedient | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 24. self-indulgent | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 25. wealth | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 26. social order | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 27. freedom | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 28. an exciting life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 29. humble | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 30. unity with nature | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 31. influential | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 32. loyal | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 33. self-discipline | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 34. preserving one's public image | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 35. family security | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 36. choosing own goals | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 37. moderate | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |

| Your coach's values: How important <u>your coach</u> considers the following words/expressions that describe values that the coach wants to promote in your team? | Of supreme importance NCE | Very much important | Very important | Rather important | Rather little importance | Of little importance | Of very little importance | Not important at all | Opposite to his/her principle |
|--|--------------------------------------|--------------------------------|-----------------------|-------------------------|-------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--|
| 38. broad-minded | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 39. intelligent | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 40. responsible | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 41. social recognition | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 42. reciprocation of favors | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 43. independent | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 44. respect for tradition | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 45. self-respect | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 46. true friendship | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 47. healthy | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 48. private life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 49. spiritual life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 50. sense of belonging | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 51. social justice | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 52. mature love | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 53. wisdom | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 54. meaning in life | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 55. equality | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 56. a world at peace | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 57. inner harmony | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 58. Having fun | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 | -1 |
| 59. Happiness | | | | | | | | | |

Self-talk questionnaire – ASTQS

On the following questionnaire, there are phrases describing athletes' thoughts. Please use the rating scale below to indicate, based on your latest competitions, thoughts you usually experience or intentionally use while performing. Your responses will be kept in **absolute confidence**. In other words, your individual answers will not be shown to anyone. Please read each statement carefully, and then choose the correct response for you by circling the appropriate number.

0 =never, 1 = rarely, 2 = sometimes, 3 = often, 4 = very often

| | | | | | | |
|-----|---|---|---|---|---|---|
| 1. | I am going to lose | 0 | 1 | 2 | 3 | 4 |
| 2. | I want to stop | 0 | 1 | 2 | 3 | 4 |
| 3. | I am thirsty | 0 | 1 | 2 | 3 | 4 |
| 4. | My body is not in a good condition | 0 | 1 | 2 | 3 | 4 |
| 5. | I'm wrong again | 0 | 1 | 2 | 3 | 4 |
| 6. | I want to get out of here | 0 | 1 | 2 | 3 | 4 |
| 7. | What will I do later tonight | 0 | 1 | 2 | 3 | 4 |
| 8. | I am tired | 0 | 1 | 2 | 3 | 4 |
| 9. | I am not as good as the others | 0 | 1 | 2 | 3 | 4 |
| 10. | I can't keep going | 0 | 1 | 2 | 3 | 4 |
| 11. | I am hungry | 0 | 1 | 2 | 3 | 4 |
| 12. | Today I 'suck' | 0 | 1 | 2 | 3 | 4 |
| 13. | I am not going to reach my goal | 0 | 1 | 2 | 3 | 4 |
| 14. | I am fed-up | 0 | 1 | 2 | 3 | 4 |
| 15. | I want to take a shower | 0 | 1 | 2 | 3 | 4 |
| 16. | My body doesn't help me today | 0 | 1 | 2 | 3 | 4 |
| 17. | I cannot concentrate | 0 | 1 | 2 | 3 | 4 |
| 18. | I think I'll stop trying | 0 | 1 | 2 | 3 | 4 |
| 19. | My legs/arms are shaking from tiredness | 0 | 1 | 2 | 3 | 4 |
| 20. | I am not going to make it | 0 | 1 | 2 | 3 | 4 |
| 21. | What will others think of my poor performance | 0 | 1 | 2 | 3 | 4 |

On the following questionnaire, there are phrases describing athletes' thoughts. Please use the rating scale below to indicate, based on your latest competitions, thoughts you usually experience or intentionally use while performing. Your responses will be kept in **absolute confidence**. In other words, your individual answers will not be shown to anyone. Please read each statement carefully, and then choose the correct response for you by circling the appropriate number.

0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = very often

| | | | | | | |
|-----|----------------------------------|---|---|---|---|---|
| 1. | Let's go | 0 | 1 | 2 | 3 | 4 |
| 2. | Relax | 0 | 1 | 2 | 3 | 4 |
| 3. | I believe in me | 0 | 1 | 2 | 3 | 4 |
| 4. | Concentrate on your goal | 0 | 1 | 2 | 3 | 4 |
| 5. | Power | 0 | 1 | 2 | 3 | 4 |
| 6. | Don't get upset | 0 | 1 | 2 | 3 | 4 |
| 7. | I am very well prepared | 0 | 1 | 2 | 3 | 4 |
| 8. | Focus on what you need to do now | 0 | 1 | 2 | 3 | 4 |
| 9. | Give 100% | 0 | 1 | 2 | 3 | 4 |
| 10. | Calm down | 0 | 1 | 2 | 3 | 4 |
| 11. | I feel strong | 0 | 1 | 2 | 3 | 4 |
| 12. | Concentrate on your game | 0 | 1 | 2 | 3 | 4 |
| 13. | Do your best | 0 | 1 | 2 | 3 | 4 |
| 14. | No stress | 0 | 1 | 2 | 3 | 4 |
| 15. | I can make it | 0 | 1 | 2 | 3 | 4 |
| 16. | Focus on your technique | 0 | 1 | 2 | 3 | 4 |
| 17. | Strong | 0 | 1 | 2 | 3 | 4 |
| 18. | I believe in my abilities | 0 | 1 | 2 | 3 | 4 |
| 19. | Concentrate | 0 | 1 | 2 | 3 | 4 |

Gender: You are Male Female

Your **Age:** ____

How would you describe your **Religion?**

1. Orthodox Christian 2. Catholic Christian 3. Protestant Christian 4. Other Christian (please define) _____

5. Islam 6. Buddhism 7. Chinese traditional Religion 8. Nonreligious/atheism 9. Other religion (please define) _____

Usually, how many training sessions does your team have per week? ____

Do you usually participate in a contest every week with this team? YES NO

How would you describe this team: Professional Semi-Professional Amateur Beginners

Please describe the level of competition that you participate with this team (e.g. local or regional or national level,

.....

Thank you very much for your cooperation!!