The Correlation between Coach's Leadership, Coach-Athlete Interaction, and Mental Strength

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Abstract: The aim of this study was to find out the correlation between coach's leadership, coach-athlete interaction, and mental strength. This descriptive study was conducted using a quantitative approach. The samples were 40 teenage athletes at the Students' Sports Education and Training Center (PPLP) of Banten. The research instruments included a coach's leadership scale, a coach-athlete interaction scale, and a mental strength scale. The data were analyzed using a correlational test. It was revealed the value of r = 0.580 and sig. = 0.001 < 0.05. It means that there was a significant correlation between coach's leadership, coach-athlete interaction, and athletes' mental strengths. With the R square value of 0.336, it could be interpreted that coach's leadership and coach-athlete interaction contributed to the athletes' mental strength as much as 33.6%. The other 66.4% was influenced by other factors.

1 INTRODUCTION

As a central role in the development of mental strength, the coach shall give guidance, training and activities adjusted with the condition of the athletes (Weinberg et al., 2015). The success of a development program is also affected by the leadership factor of the coach (Slater et al., 2014). The coach is deemed to have an important effect in every aspects of the athletes' preparation to compete and in deciding the success and development of the athletes (Bodnár and Perényi, 2016). Sherwin et al (2016) stated that considering that the coaches learned through lots of different situations, everything has a role in the coach's development, the writer recommended that the coach education program must cover the combination of all seven learning situations. In this case, the coach must place himself correctly since it needs to be considered that just because a certain method works for a "successful" coach does not mean that it will transfer to every situation (Abraham and Collins, 2011). The relevance of the leadership theory and sports were clearer when "Sports are seen as a formal organization" (Chelladurai and Saleh, 1980). By analogize team sports as a formal organization, then the "coach position can be equated with the role of a manager or one that has a relation with the management" (Sage,

2016). Cox (2012) stated that "To achieve the ideal leadership behavior, the three said components must be congruent. The measurement of the coach's leadership behavior in this research used the Leadership Scale for Sport (LSS) by Chelladurai and Saleh (1980), LSS measured the construct of multidimensional leadership (Fletcher, 2006) explained that "Internal consistency for the four factors in LSS are adequate except for the low autocratic behavior dimension which is (<0,70)". In this case, a coach is a motivation provider for the athletes, the social support is important for an athlete's mental strength development. This shows that the majority of athletes perceive the coach as the positive effects provider in every aspects of the athletes' development (Jones et al., 2007). Other factors that can affect the mental strength development is the interaction between the athletes and the coach. The coach-athlete's interaction in the training process contributes positively toward the success of the athletes' potential development and vice versa. The effective coach-athlete interaction is holistic, emphasized in the positive growth and development ('to be the best that you can') as an athlete/coach and as an individual. The effective relationship of the basic materials such as empathy understanding, honesty, support, will, acceptance, responsiveness, hospitality, teamwork, concern, respect and positive things (Jowett and Cockerill,

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2003; Jowett and Meek, 2000). On the other hand, the effective relationship is ruined by the lack of will and emotion, isolation, even antagonism, fraud, exploitation, and physical or sexual harassment (Balague, 1999; Brackenridge, 2001; Jowett, 2003; Hampson and Jowett, 2012). In sports, there is a consciousness improvement on how important the psychological factor in the athletic work and it is now recognized that the physical talent is not the only component that leads to success (Gucciardi et al., 2008). In the science and sport community, mental strength is seen as one of the most important attributes that will cause a success athletic performance (Bull et al., 2005). On the highest level, mental play often separates the elite players from the ones with good performance (Gucciardi et al., 2009).

In sport, there is only a few science attentions that is focused on the mental strength and this is seen surprising considering this terms have been used widely for over the last 20 years (Gucciardi et al., 2009). Because the lack of research, mental strength is seen as one of the most used and least understood term in the sport psychology (Bull et al., 2005). Various researches about the athletes' mentality use the mental strength term to explain about excellent athlete's psychology attributes (Jones, 2002; Bull et al., 2005; Weinberg, 2015; Sullivan, Paquette, Holt, and Bloom, 2011). Gucciardi et al., (2009) stated that "When the physical, technic and tactical ability owned by the athletes are tend to be equal, the mental strength is the differentiator between the "good" and the "great" athletes. (Weinberg et al., 2015) stated that "The research on mental strength is new and developing". This can be seen from the variation of the results of the research published on football athletes with team characters (Clough and Earle, 2000; Middleton et al., 2004; Gucciardi et al, 2008; Sullivan et al., 2012). However, in the conducted research "Several same dimensions are gained, such as self-believe, work ethic, personal value, selfmotivated, tough attitude, concentration, resilience, pressure handling, emotional quotient, sport intelligence, and commitment" (Gucciardi et al., 2009). This research is centered toward the individual sport characters on teenagers.

Referring to the theories explained previously, the coach leadership behavior and coach-athlete's interaction allegedly have significant correlations in developing teen athletes' mental strength.

2 METHODS

This research used the descriptive method with quantitative approach. The samples of this research were 40 teenager athletes at the Students' Sports Education and Training Center (PPLP) of Banten consist of 30 male athletes and 10 female athletes who are still in High School residing in the athlete dorm of Banten. The respondent data retrieval was conducted in September. By filling in the scale questionnaire of mental strength for 40 questions, the coach-athlete's interaction scale of 20 questions. It was conducted at the PPLP Building in Banten after the athletes finished their training session.

3 RESULTS

After displaying descriptions of the result of research data, the researcher then conducted the first stage of statistics test in this research. The prerequisite test is the initial step in the statistics test. This test was conducted to find out the appropriate statistics type to test the research hypothesis. The statistics test used in this research was data normality test by using the Lilliefors test.

4 DISCUSSION

4.1 The Correlation between the Coach Leadership and Mental Strength

Table 1: Hypothesis Test Result 1 (Correlation Test).

R	Sig.	Remarks
0,539	0,000	Significant Correlation

Table 2: Hypothesis Test Result 1 (Regression Test).

R	R square
0,539	0,291

The r value = 0,539 and sig. = 0,000 < 0,05 then the correlation is significant, the value R square = 0,291 means that the correlation of the coach leadership and the athletes' mental strength is 29,1%while the rest 70,9% is affected by other factors.

4.2 The Correlation of the Coach-Athletes Interaction and Mental Strength

Table 3: Hypothesis Test Result 2 (Correlation test).

R	Sig.	Remarks
0,462	0,003	Significant Correlation

Table 4: Hypothesis Test Result 2 (Regression Test).

R	R square
0,462	0,213

The r value = 0,462 and sig. = 0,003 < 0,05 means that the correlation is significant, the value of R square = 0,213 which means that the correlation of coach-athletes interaction and the athletes' mental strength is 21,3% while the rest 78,7% is affected by other factors.

4.3 The Correlation of Coach Leadership and Coach-Athletes Mental Strength

Table 5: Hypothesis Test Result 3 (Correlation test).

R	Sig.	Remarks
0,580	0,001	Significant
		Correlation

Table 6. Hypothesis Test Result 3 (Regression Test).

R	R square
0,580	0,336

The r value = 0,580 and sig. = 0,001 < 0,05 means that the correlation of the coach leadership and the coach-athlete's interaction and mental strength is 33,6% while the rest 66,4% is affected by other factors.

4.4 Discussion

This research revealed the variable of coach leadership, the coach-athlete's interaction and teen athletes' mental strength. For the coach leadership variable, the researcher took several dimensions as the instruments such as training and instruction, democratic behavior, autocratic behavior, social support, and feedback. In other research, it was revealed by Chelladurai (in Tenembaum et al., 2012) explained that "Coach behavior consists of three components: (1) required behavior, the behavior affected by particular situation characteristics, (2)

preferred behavior, coach behavior expected by the athletes as a result of the athletes' individual characteristics, (3) actual behavior, coach behavior that presents because of the coach's characteristics." According to Chelladurai, "The conformity of these three behaviors will affect the satisfactory level of the athletes and team performance. A coach can also adapt transformational leadership form as an effort to replace the situational characteristics that push the team in doing their activities, and change the athlete's characteristics to self-esteemed and aspiring athletes". Based on the result of the correlation (r) value, the dimension with the highest value was the feedback dimension, followed by the social support, training and instruction, democratic behavior dimension, and lastly the autocratic behavior. Chelladurai and Carron (in Fletcher, 2006) explained that "The coach's raining and instruction would be less effective in shaping the athletes' mental strength in the case where the athlete is experienced. On the other hand, if the athletes have less competing experiences, the instruction and training would give a significant effect." This was supported by the research conducted by Crust and Azadi (2008) who found that "coach's instruction and training effects have significant impacts in developing the athletes' mental strength." This reflects that the instruction and training is closely related to the athletes' performance improvement. In the research conducted by Salminen and Liukkonen (in Fletcher, 2006) found out that the democratic behavior also plays and affects significantly for the athletes' mental strength." However, the result was rebutted and inversely proportional with the research conducted by Crust and Azadi (2008) who found out that "Democratic behavior does not affect the athletes' mental strength significantly." Furthermore, Crust and Azadi (2008) also explained that "Social support, positive feedback and autocratic did not affect the athletes' mental strength significantly." Besides, "The needs of coach's social support increased due to the increasing competition that the athletes' participate in" (Chelladurai and Carron in Fletcher, 2006).

For the coach-athlete's interaction variable, the researcher revealed the emotional closeness, commitment and complementary behavior dimensions. Jowet (2009) explained that "There after dimensions about the coach-athlete's three interaction, namely: (1) emotional closeness, focused on the compatibility of the coach and athlete's emotional relationship, (2) commitment, this dimension described the cognitive bond and longterm oriented, (3) complementary behavior, this dimension described the behavior transaction

between the coach and the athletes in teamwork concept". Based on the result of correlation (r) value, the dimension with the highest value is the emotional closeness dimension, followed by the commitment dimension and the last one is the complementary behavior. Sir Alex Ferguson (in Jowet and Carter, 2006) stated that "Commitment is one of the success key elements of coaching." Adie and Jowwet (2010) explained that "Coach-athlete relationship affects the athletes' performance and motivation." Although there are not plenty of previous researches, however with the idea of coach having an "intense and personal relationship that has common goals" (Jowwet and Carter, 2006), therefore the researcher assumed that the coach-athlete's interaction has a significant correlation toward the athletes' mental strength.

The mental strength variable of this research covers the individual and team sports characteristics. consists of four dimensions, namely: challenge facing behavior, performance relevant behavior and values, pressure facing behavior, success aiming behavior. Gucciardi et al. (2008) conducted the research on mental strength in the context of team sport, football (Gucciardi used the Australian-rules football). In his research, Gucciardi et al. (2008) interviews eleven experienced coaches on elite levels. The verbatim data gained was further analyzed and resulted in three main categories in understanding the mental strength. The first category is the characteristics, this category consists of eleven characters that are deemed as the mental strength keys (self-believe, work ethic, personal value, self-motivated, tough attitude, concentration, resilience, handling pressure, emotional quotient, sport intelligence, and physical fitness). Two other categories are the situation and behavior. The three categories gave understanding on the correlation of the main characteristics and the process (situation and behavior). In the conducted researches "Several same dimensions were gained, such as self-believe, work ethic, personal value, selfmotivated, tough attitude, concentration, resilience, handling pressure, emotional quotient, sport intelligence, and commitment" (Gucciardi et al., 2008).

4.5 Limitation

The main limitation of this research included the size of small samples and the respondents used were teenagers.

5 CONCLUSSIONS

Based on the hypothesis test, there are significant and positive correlation of the coach leadership and the coach-athlete's interaction and mental strength. By considering the variance proportion for the coach leadership variable, there are five dimension to the sequence of autocratic behavior, democratic behavior, training and instruction, social support, and feedback. Whereas for the coach-athlete's interaction variable, there are three dimensions to the sequence of complementary behavior, commitment and emotional closeness.

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