



The relationship between early maladaptive schemas and mental skills with goal orientation of footballers

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ABSTRACT

This study aims to investigate the relationship between early maladaptive schemas and mental skills by interpreting the footballer's competitive anxiety and goal orientation. The research methodology is descriptive using correlational models. According to the predictor variables of early maladaptive schemas and mental skills, goal orientation and competitive anxiety are predicted in a sample of footballers in the Premier League and Azadegan League. The research population consisted of all footballers in the Premier League and Azadegan League. Considering the formula, the sample size was chosen 200 using convenience sampling method from Premier and Azadegan Leagues' football teams. The measurement tools include Young Schema Questionnaire-Short Form (YSQ-SF; Young, 1998), The Ottawa Mental Skills Assessment Tool 3 (OMSAT-3), Task and Ego Orientation in Sport Questionnaire (TEOSQ) and Competitive State Anxiety Inventory-2 (CSAI-2). In the statistical analysis of the data, descriptive and inferential indicators and methods were used. The research hypotheses were tested by standardized multiple regression analysis and finally, the conclusion based on the hypotheses was that there was a relationship between some components of early maladaptive schemas and mental skills with goal orientation of footballers.

Keywords: early maladaptive schemas, mental skills, goal orientation, footballers

Introduction

One of the interesting and debatable topics in sports is sport psychology. Perhaps because sport psychology is a subject easily discussed by coaches, athletes and fans. Sometimes the spectators do not want or cannot interpret the playing style of a professional athlete, they often want to explain it in terms of psychology (Sardari Poor, 2013). Sport psychology includes the right selection and motivation of athletes so that each athlete can compete at the highest level of their ability. Athletes in this regard should employ strategies to despair competitors, cope with high level of stress or reduce it, do not abuse drugs, use successful team strategy and teach and learn skills. Studying psychology and its use at sports enables individuals to: 1) describe a behavior; 2) explain a behavior; and 3) predict a behavior (Anshel, 2009). In this study, we investigate the relationship between early maladaptive schemas and mental skills by interpreting the footballer's competitive anxiety and goal orientation and initially will provide theoretical foundations for the study:

Early maladaptive schemas

The term "early maladaptive schemas" was first used by Bartlett (1932, quoted by the Ziegler-

Hill, Green, Arnau, Sisemore and Myers, 2011) means understanding and perception of ego and the world. Piaget (1952, quoted by the Ziegler-Hill et al., 2011) said the term schema to define the child's understanding at different stages of cognitive development. Clark, Beck and Alford (1999) have defined schema as increasing systematic bias in information processing. Schema is formed based on personal life experiences consciously or unconsciously in early childhood (James, Southam and Blackburn, 2004). So schemas created to deal with life events in childhood will be maladaptive in later life. Many studies have claimed that there is a relationship between schema and psychological disorders in later life. According to Beck (1991), dysfunctional schemas are considered as predisposing factors of psychological trauma when a person encounters with the experiences related to the scheme in their lives, it would be a predisposing factor for anxiety and depression. In addition, Clark and colleagues (1999) stated that although negative perception of ego and the world (cognitive schema) is not a major predisposing factor for depression, but includes depression's characteristics. While schema and the relationship between schema and psychological disorders have been defined in cognitive theory, Yang (1999) has defined schema from another perspective with the concept of early maladaptive schemas in order to define thoughts, beliefs and rules arising from

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childhood. According to the definition and Yang et al. (2003), schema is an abstract term affecting the evaluation of information obtained from the outside world and how to deal with problems.

Evolutional roots of early maladaptive schemas

Early maladaptive schemas are created because of unfulfilled basic emotional needs arisen from the interaction between early environment and nature of the child (Thimm, 2010). There are five basic emotional need for human. These needs are universal and all people have these needs. The severity of the needs are different in different people. The person with mental health can satisfy the basic emotional needs in adapted way (Young et al., 2003). These needs include:

1. Safe attachment to others (including the need for security, stability, love and acceptance)
2. Autonomy, efficiency and identity
3. Freedom in expressing needs and healthy emotions
4. Spontaneity and recreation
5. Realistic limitations and self-control

Evolutional roots of early maladaptive schemas lie in adverse childhood experiences. Schema that arise early and are usually most powerful originate from their family. The child's mental world dynamics accurately reflect the dynamics of family. At the same time with the child development, other influential factors, such as school peers, community and culture become increasingly important to find and play a role in the formation of schema. However, schemas that are formed later during the evolution are not very deep and strong (Gaffey, 2009).

Mental skills:

Mental skills are learned or inherent characteristics of the athlete that make his successful performance possible or probable (Cox, 2002). Psychological-Mental readiness like physical fitness has factors characterized by "mental or psychological skills" (Sanaati Monfared, 2010).

Goal setting

Many researchers believe in goal setting as an important factor in improving performance (Burton, 1993; Curtis, 1987; Harris and Harris, 1986; Lock and Lathman, 1990; Orlic, 1986 and 1990; Porter and Foster, 1986; Sirm and Colony, 1989; Harwood, 2005; Weinberg, 2004; Gould, 2001). This skill helps athlete concentrating the attention, keep trying and resistance, increase confidence and deal with anxiety (Burton, 1993). Burton and Gould (1993) argue that athletes

should set specific, measurable, achievable and at the same time realistic and difficult to increase the impact of goal setting. Researchers have found that if the goals are both short-term and long-term, it will help more growth of athletes (Bell, 1983; Harris and Harris, 1984). As well, they prioritize setting performance goals, such as increasing the number of accurate services in volleyball than setting achievement goals such as defeating an opponent (Burton, 1989; Weinberg, 2004).

Goal orientation and progress motivation

The current approach to motivation is a social-cognitive approach from the attitude of Nichols (1989) toward the purpose of progress. Nichols focused on the goal-directed nature of the behavior related to the progress and argued that perception of ability is the distinguishing feature of progress motivation (Roberts, Aspyng and Pmbtrn, 1388). Two major goal orientations proposed by Nichols (1989) include task-orientation and ego-orientation. These two orientations are considered as are goal orientations because the progress goal of people is different. The purpose of task orientation, is mastery of a particular skill. The ability to understand task orientation gives an important function of a point of time in the future to the individual. Task orientation enables the athlete to understand that even if he gets one more ball than last week, his ability has been increased. The orientation is continued in the individual to master the skill working on it and enjoys the feelings of self-efficacy and confidence. Ego-orientation has been defined as perceived ability for leaving others behind. When ego-orientation depends on the perceived ability of individuals and self-confidence about how he compares the others, it conflicts with the objective improvement of skills (Zardari Poor, 2013).

The interesting question is how an individual becomes task- or ego-involved. In general, two theories are considered in this field. According to the first theory, people are prone to be task- or ego-involved. According to the second theory, the conditions cause the individuals to be task- or ego-involved. The assumption is that people are prone to orientation towards task or ego (Nichols, 1989). Individual differences in orientation toward task or ego may be the result of socialization under task- or ego-involved conditions (whether at home, class or in the previous experience of physical activity). Individuals demonstrate the behavior related to



each progress goal. It should be noted that goal orientation shouldn't be considered as feature or characteristic, but also is a cognitive schema subjected to change when the individual processes the information related to performing the task. But these orientations also have no stability and change over time. One of the assumptions of the progress goal theory is that these two goal orientations are vertical; so one can simultaneously move in one direction or in both. Now, there is a lot of empirical evidence in support of this claim (Roberts, Sping and Pamberten, 2009). Given the importance of this topic, we consider the following assumptions:

The research hypotheses are as follows:

1. The early maladaptive schemas and their dimensions are the predictors of goal orientation (task-directed).
2. The early maladaptive schemas and their dimensions are the predictors of goal orientation (ego-directed).
3. Mental skills and their dimensions are the predictors of goal orientation (task-directed).
4. Mental skills and their dimensions are the predictors of goal orientation (ego-directed).

Materials and methods

The research methodology is descriptive using correlational models. According to the predictor variables of early maladaptive schemas and mental skills, goal orientation and competitive anxiety are predicted in a sample of footballers in the Premier League and Azadegan League. The research population consisted of all footballers in the Premier League and Azadegan League. Considering the formula, the sample size was chosen 200 using convenience sampling method from Premier and Azadegan Leagues' football teams. Finally, 206 valid questionnaires were collected among which 96 subjects related to 5 teams in the top half of the Premier League until 7th week of season2015-2016, 56 subjects related to 3 teams in the bottom half of the Premier League until 7th week of season2015-2016, 36

subjects related to 1 team in the top half of Azadegan League until 9th week of season2015-2016 and 18 subjects related to 1 team in the bottom half of Azadegan League until 9th week of season2015-2016 were willing to participate. The measurement tool is Young Schema Questionnaire-Short Form (YSQ-SF; Young, 1998), which is a 75-question questionnaire measuring fifteen early maladaptive schemas. Also in this study, the mental skills of players were evaluated using Ottawa Mental Skills Assessment Tool 3 (OMSAT-3). This questionnaire developed by Draper, Salemla and Durand-Bush (1995) measures 12 mental skills in three groups, it has 48 questions that each four questions measures a mental skill. Two other questionnaires are Task and Ego Orientation in Sport Questionnaire (TEOSQ) (the questionnaire prepared by Duda and Nicholls in 1992 has 13 questions, which are in two aspects of task- and ego-orientation) and Competitive State Anxiety Inventory-2 (CSAI-2) (the questionnaire made in 1996 by Jones and Swain has 27 questions measuring three subscales of cognitive anxiety, somatic anxiety and self-esteem with Likert scale (1: not at all up to 4: high)). In the statistical analysis of the data, indicators and methods of descriptive and inferential analyses were used as follows:

- Descriptive analysis of demographic data and subjects' scores in the questionnaire including the minimum score, the maximum score, percentage, density, frequency, mean and standard deviation
- Kolmogorov-Smirnov test of normal distribution of scores
- Logarithmic correction of the data with non-normal distribution
- Research hypotheses test by standardized multiple regression test

Findings

Descriptive Statistics

This section describes the data based on the demographic characteristics of the sample.

Age	Frequency	Percentage	Density
Less than 20	15	7.3	7.3
20-25	76	36.9	44.2
25-30	62	30.1	74.3
More than 30	53	25.7	100
Total	206	100	

Education	Frequency	Percentage	Density
High school diploma	31	15	15



Diploma and graduate student	88	42.7	57.8
BS	68	33	90.8
Graduate	19	9.2	100
Total	206	100	

marital status	Frequency	Percentage	Density
Married	114	55.3	55.3
Single	92	44.7	100
Total	206	100	

3.2. Normality of the data:

Smirnov test results of normal distribution of scores have been provided.

Variable	Z	Sig
Goal setting	1.35	0.051
Self-confidence	1.47	0.026
Commitment	1.77	0.004
Reaction to stress	1.14	0.145
Control fear	1.01	0.258
Refreshment	1.35	0.052
Relaxation	1.23	0.095
Visualization	1.26	0.082
Mental workout	1.38	0.052

Results of the table shows that only the distribution of self-esteem, commitment, competition plan, mental anxiety and somatic anxiety of the participants was not normal and logarithmic correction was applied on these variables.

Inferential statistics

In this section, multivariate regression analysis has been used to test the hypotheses and answer the questions.

First hypothesis: The early maladaptive schemas and their dimensions are the predictors of goal orientation (task-directed).

Summary table of regression model, variance analysis and regression statistical characteristics of the schemes and goal orientation (task-directed)

R	R Squared	F	Significance level	Durbin-Watson
0.626	0.392	32.40	0.001	1.705

Standard coefficients related to the effects of schemes and their dimensions on goal orientation (task-oriented) are presented in the table below.

Table of Standard coefficients related to the effects of schemes and their dimensions on goal orientation (task-oriented)

Variable	Beta	T	Significance level
Distrust	-0.027	-0.496	0.621
Strict criteria	0.291	4.112	0.001
Entitlement and grandiosity	0.095	1.35	0.176
Lack of self-discipline	-0.436	-7.68	0.001

Second hypothesis: The early maladaptive of goal orientation (ego-directed). schemas and their dimensions are the predictors

The relationship between early maladaptive

R	R Squared	F	Significance level	Durbin-Watson
0.789	0.638	88.40	0.001	1.96

Summary table of regression model, variance analysis and regression statistical characteristics of the schemes and goal orientation (ego-directed)

Standard coefficients related to the effects of (ego-oriented) are presented in the table below. schemes and their dimensions on goal orientation

Table of Standard coefficients related to the effects of schemes and their dimensions on goal orientation (ego-oriented)

Variable	Beta	T	Significance level
Distrust	-0.019	0.447	0.656
Strict criteria	0.520	9.51	0.001
Entitlement and grandiosity	0.329	6.11	0.001
Lack of self-discipline	-0.110	-2.51	0.013

Third hypothesis: Mental skills and their dimensions are the predictors of goal orientation (task-directed).

Summary of regression model, variance analysis and regression statistical characteristics of mental skills and goal orientation (task-directed)

R	R Squared	F	Significance level	Durbin-Watson
0.306	0.094	1.66	0.077	2.03

Standard coefficients related to the effects of orientation (task-oriented) are presented in the mental skills and their dimensions on goal table below. dimensions on goal orientation (task-oriented)

Table of Standard coefficients related to the effects of mental skills and their

Variable	Beta	T	Significance level
Goal setting	0.023	0.255	0.799
Self-confidence	0.001	-0.009	0.993
Commitment	-0.011	0.139	0.890
Reaction to stress	0.007	0.081	0.936
Control fear	0.036	0.408	0.683
Refreshment	0.141	-1.63	0.104
Relaxation	0.231	2.50	0.013
Illustration	0.045	-0.493	0.623
Mental workout	-0.155	-1.86	0.064
Centralization	0.059	0.676	0.500
Recycle of focus	0.128	1.54	0.125
Competition plan	0.052	0.730	0.463

Fourth hypothesis: Mental skills and their (ego-directed). dimensions are the predictors of goal orientation

Summary table of regression model, variance analysis and regression statistical characteristics of the mental skills and goal orientation (ego-directed)

R	R Squared	F	Significance level	Durbin-Watson
0.533	0.286	6.38	0.001	2.11



Standard coefficients related to the effects of orientation (ego-oriented) are presented in the mental skills and their dimensions on goal table below.

Table of Standard coefficients related to the effects of mental skills and their dimensions on goal orientation (ego-oriented)

Variable	Beta	T	Significance level
Goal setting	-0.111	-1.36	0.175
Self-confidence	-0.067	-0.886	0.377
Commitment	-0.071	-0.986	0.324
Reaction to stress	-0.046	-0.683	0.547
Control fear	0.180	2.306	0.022
Refreshment	-0.121	-1.57	0.116
Relaxation	0.199	2.42	0.016
Illustration	-0.125	-1.54	0.124
Mental workout	0.103	1.4	0.163
Centralization	0.158	2.02	0.044
Recycle of focus	0.156	2.11	0.036
Competition plan	0.112	1.76	0.079
Variable	-0.111	-1.36	0.175
Distrust	-0.067	-0.886	0.377
Strict criteria	-0.071	-0.986	0.324
Entitlement and grandiosity	-0.046	-0.603	0.547
Lack of self-discipline	0.180	2.306	0.022

Conclusion

This study aims to determine the relationship between early maladaptive schemas and goal orientation of football players. In relation to the first hypothesis, results showed that early maladaptive schemas and their dimensions are the predictor of goal orientation (task-directed). Also according to the indices, only the components of strict criteria and lack of self-discipline of early maladaptive schemas are the predictors of goal orientation (task-based), and other variables are not the predictors of criterion variable. In relation to the second hypothesis, results showed that early maladaptive schemas and their dimensions are the predictor of goal orientation (ego-directed). Also according to the indices, the components of strict criteria, entitlement and grandiosity, and lack of self-discipline are the predictors of goal orientation (ego-based), and distrust is not the predictor of criterion variable. There was no research studying this issue for the fourth to tenth hypotheses. In relation to the third hypothesis, results showed that mental skills and their dimensions are not the predictor of goal orientation (task-directed). Also according to the

indices, only the component of relaxation is the predictor of goal orientation (task-based) and other components are not the predictor of criterion variable. In relation to the fourth hypothesis of the study, results showed that mental skills and their dimensions are the predictors of goal orientation (ego-directed). Also according to the indices, only the components of the fear control, relaxation, concentration and recycle of concentration are the predictors of goal orientation (ego-directed), and other variables are not the predictor of criterion variable. Finally, the general conclusion based on the hypotheses is that there was a relationship between some components of early maladaptive schemas and mental skills with goal orientation of footballers.

Suggestions are discussed for future researches:

1. Since the evaluation requires the use of various tools and methods such as interview, using related questionnaires and observation in natural situations together with the use of others' information, it is suggested to perform qualitative researches in teams by sports psychologist.
2. Given that the present study selects and evaluates the questions related to four schemas, it



is suggested to evaluate the relationship between other schemas and the interpretation of competitive anxiety and goal orientation for future researches.

3. Given that the sample is selected only among male soccer players, it is recommended for future researches to use a sample of both sexes.

4. To overcome the constraints mentioned above, it is suggested to cooperate with the Ministry of Youth and Sports, Football Association and the League organization in this area.

Practical suggestions:

1. Football Association is recommended to consider the influence of mental skills in training courses for base coaches to increase the quality of football players' skills from childhood and observe the progress of football in the coming years.

2. Coaches of sports teams are recommended to use sport psychologist's for measuring and increasing mental skills of the players.

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