

PARENT-INITIATED MOTIVATIONAL CLIMATE AND SELF-DETERMINED MOTIVATION IN YOUTH SPORT: HOW SHOULD PARENTS BEHAVE TO KEEP THEIR CHILD IN SPORT?

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Abstract:

There are many determinants of sports motivation such as athletes' personal characteristics, coaches, peers, parents and the other environmental factors. In this research, the aim was to analyse whether there was a relationship between the perceived parent-initiated motivational climate and self-determined motivation of karate athletes. Karate athletes (N=325) participated in the research and completed the adolescent version of the *Sport Motivation Scale* and *Parent-Initiated Motivational Climate Questionnaire*. Multiple regression analyses showed that the athletes' self-determined motivation significantly correlated with the learning and enjoyment climate, worry-conducive climate and success-without-effort climate perceived both in father and mother. Besides, regression analysis showed that the perceived family climate significantly contributed to self-determined motivation. Linear combination of father learning and enjoyment climate ($\beta=.21$), father success-without-effort climate ($\beta=-.17$), and mother success-without-effort climate ($\beta=-.14$) significantly contributed to self-determined motivation ($F(3,321)=18.88$, $R^2=.15$, $p<.001$). In conclusion, the results indicated that athletes' perception of the parent-initiated motivational climate was important for their self-determined motivation. The findings were evaluated and some implications for parents were proposed.

Key words: *autonomous motivation, worry-conducive climate, learning and enjoyment climate*

Introduction

The relationship between parent and child is an important factor in the child's development and his/her general well-being. Therefore, researchers have focused increased attention on how sports experiences, including the relationship between parents and children, may affect children's sports outcomes (O'Rourke, Smith, Smoll, & Cumming, 2013).

As a matter of fact, there is a lot of evidence which show that, besides the coach and peer groups, the mother and father also have a great role in motivation for sportive activities and in participation of a child in them (e.g., Allen & Hodge, 2006; Gurland & Grolnick, 2005; Keegan, Harwood, Spray, & Lavalley, 2009; Ullrich-French & Smith, 2006; White, 1996). Horn and Horn (2007) stated that belief and value systems of the mother and father (e.g., beliefs, attitudes and approaches, values) determined the way they treated their children. They also stated that these behaviors (modeling, providing opportunities, emotional support), afterward, also affected the belief and value systems of their children (Sánchez-Miguel, Leo, Sánchez-Oliva, Amado, & García-Calvo, 2013). Further, O'Rourke, Smith, Smoll, and Cumming (2014)

stated that parent-athlete relationships had traditionally received less empirical attention than those involving coaches. They further revealed that, compared to the coach-initiated motivational climate, the parent-initiated motivational climate was likely to be more influential for athletes' autonomous motivation for sports participation.

Motivation is an important factor in the participation of the child in sports and this issue is the key consideration for coaches, parents, teachers and researchers (Keegan, et al., 2009). As a matter of fact, if it is intended to make children have interest in sports in early age and in the following years, when they can realize their full potential, then providing a favorable environment is a must within the scope of the development period. Additionally, it is stated that mothers and fathers have an important role in affecting the participation of their children in sports during developmental years. Therefore, it is possible to say that motivation is a factor which contributes to the encouragement to engage in physical activities (Sánchez-Miguel, et al., 2013).

What motivates individuals toward certain behaviors has been one of the main research topics for scientists. Moreover, in sport contexts, determining motivational features of athletes is one

of the research areas in which there have been various studies (e.g. Amorose, Anderson-Butcher, Newman, Fraina, & Iachini 2016; Atkins, Johnson, Force & Petrie, 2015; Hein & Jöesaar, 2015; Stenling, Lindwall, & Hassmén, 2015). Studies on motivation employ different perspectives and theories one of which is the Self-Determination Theory (SDT). Deci and Ryan's (1985) SDT focuses on the factors which influence the development of motivation by both the intrinsic and extrinsic means. In line with the concepts of SDT, Stanley, Cumming, Standage, and Duda (2012) explain that governing behavior varies along a continuum of self-determination ranging from behaviors that are externally controlled to those which are fully self-determined in nature. Amotivation is placed on one end of the continuum, and it reflects a lack of intention to engage in the behavior. Intrinsic motivation is placed on the opposite edge of the continuum and is defined as the engagement in behavior for sheer pleasure, satisfaction, and enjoyment (Ryan & Deci, 2002). Extrinsic motivation is, with its sub-dimensions, placed between amotivation and intrinsic motivation on the continuum. Extrinsic motivation means that a person engages in the behavior to derive some rewards being external to the activity (Vallerand, 2004). Further, SDT explains also autonomous and controlling forms of motivation and focuses on the extent to which different types of the mentioned motivation types are autonomous or self-determined. Higher self-determined motivation means a stronger sense of volition or choice (Hein & Jöesaar, 2015). Researchers of SDT focus on social factors that foster or inhibit motivation (Ryan & Deci, 2002). In this context, mothers and fathers can be classified in these social factors that have a great role in children's sports participation (O'Rourke, et al., 2013).

Another theory, which reveals the influence of social environment on motivation, is the Achievement Goal Theory (AGT), a prevalent theory of motivation in sport context. The number of studies included in the recent meta-analyses shows the prevalence of AGT (Lochbaum, Kazak Çetinkalp, Graham, Wright, & Zazo, 2016; Lochbaum, et al., 2016). For example, the meta-analysis by Lochbaum, Kazak Çetinkalp et al., (2016) included 260 studies of AGT which were performed across 39 countries. Their research included only the studies on competitive sport and did not even review the studies performed on physical activity or in physical education contexts. The theory suggests that individuals have two kinds of dominant individualistic goal orientations. First of them, task orientation, focuses on individualistic achievement and progress due to effort, while ego orientation, which is the second goal orientation, means having a better performance and obtaining better results. Additionally, these two factors also reveal how an individual

defines achievement and sufficiency. Athletes, who simultaneously have higher task and ego tendencies, or athletes with high task tendency and low levels of ego tendency, show more adaptive motivational patterns than those with a low task orientation (Moreno, Cervelló, & Cutre, 2010). Also, the term "motivational climate" that emphasizes and fortifies task and ego orientations has also taken its place in the literature (Ames, 1992). According to AGT, there are two motivational climates which are task-involving and ego-involving. While task-involving motivational climate perceives entertainment, effort, self-reference and development as valuable tools of learning, ego-oriented climate underlines winning. Additionally, in an ego-involving climate, achievement is obtained through a positive social comparison with equal or lower levels of effort and superior performance, mistakes are evaluated as negative and punished. Ego-involving climate emphasizes normative standards (Ames, 1992; Roberts, 2012).

In a task-involving climate, the following is appreciated: improvement of performance, acknowledgment of mistakes, effort evaluated by the criteria of entertainment, effort invested and one's performance. In this context, task-involving climate is associated with more positive consequences (Ames, 1992; Harwood, Keegan, Smith, & Raine, 2015; Smith, Smoll, & Cumming, 2007). In the same way, SDT states that social environment is linked with motivation (Fenton, Duda, Quested, & Barrett, 2014; Hagger Sultan, Hardcastle, & Chatzisarantis, 2015; Jöesaar, Hein, & Hagger, 2012; O'Rourke et al., 2013, 2014). From this point, AGT and SDT indicate that environmental factors have influence on motivation. Studies procured on this topic researched the effects of coach, peers and family climates on athletes. For instance, task-involving motivational climate of coaches and peers are found to be in relation to entertainment experienced by athletes (Vazou, Ntoumanis & Duda, 2006). In the same way, Duda and Balaguer (2007) also reported that the motivational climate formed by the coach affected motivation of his/her sportspersons. There is also evidence in the literature that perceived parent motivational climate is linked with athletes' self-determined motivation (O'Rourke, et al., 2013, 2014). Other current research studies procured in this direction focused on coach's motivational climate (Ntoumanis, Taylor, & Thøgersen-Ntoumani, 2012; Olympiou, Jowett, & Duda, 2008; O'Rourke, et al., 2014), peers' motivational climate (Jöesaar, et al., 2012; Ntoumanis, et al., 2012), and parent-initiated motivational climate (Atkins, et al., 2015; Davies, Babkes Stellino, Nichols, & Coleman, 2016; O'Rourke, et al., 2013, 2014) and their effects on sportspersons.

When research on motivational climate performed with the athletic population up to date are

taken into consideration, it is obvious that majority of them were performed in countries such as USA (O'Rourke, et al., 2013, 2014), UK (Hastie, Sinelnikov, Wallhead & Layne, 2014; Keegan, Harwood, Spray, & Lavalley, 2014; van de Pol, Kavussanu, & Ring, 2012), Finland (Jaakkola, Ntoumanis, & Liukkonen 2015), New Zealand (Hodge, Henry, & Smith, 2014), Norway (Ommundsen, Lemyre, Abrahamsen, & Roberts, 2013), Spain (Sánchez-Miguel, et al., 2013) and Croatia (Greblo, Barić, & Ceci Erpić, 2016). Moreover, a very recent meta-analysis of Harwood et al. (2015) reviewed AGT literature to identify the intra-individual correlates of motivational climate perceptions in sport and physical education contexts and showed that this topic had not been examined in Turkey. Motivation has a strong connection with the needs of individuals, and it should be analysed within the cultural scope of where it is evaluated because there are different motivational characteristics of individuals in different cultural environments (Ryska, 2001; Sari, Ilić & Ljubojević, 2013). When motivation is evaluated even regarding the most basic classification, it is revealed that there are differences between individualistic and collectivist cultures (Markus & Kitayama, 1991). In this context, the aim of this study was to analyse the effect of parent-initiated motivational climate on the young karate athletes' self-determined motivation with the sample group selected within the borders of Turkey. We hypothesized that while athletes' self-determined motivation would be positively linked to the perceived learning and enjoyment climate, it would be negatively linked to the perceived worry-conducive climate and success-without-effort climate.

Method

Participants

The sample consisted of 182 male and 143 female participants making a total of 325 karate athletes. Male athletes' mean age was 12.42 ± 2.72 years, and their sports experience was 3.40 ± 2.47 years. Female athletes' mean age was 12.73 ± 2.50 years, and their mean sports experience was 3.22 ± 2.10 years.

Data collection tools

Self-Determined Motivation: Adolescent version of the Sport Motivation Scale was used to measure athletes' self-determined motivation. The scale was initially developed by Pelletier et al. (1995). The scale was later revised and 12-item version was created. Language adaptation of this scale for the Turkish adolescent athletes was made by Kazak Çetinkalp, Aşçı, and Altıntaş (2012). Kazak Çetinkalp et al., (2012) conducted language adaptation research in children aged 13-17 years and reported that Sport Motivation Scale's adolescent

version had provided a reliable and valid measure of contextual motivation types for Turkish adolescent athletes. This scale has four sub-dimensions which are: intrinsic motivation, identified regulation, external regulation and amotivation. Index of self-determined motivation was calculated as explained in Ullrich-French and Smith (2006) using the sum of the averaged amotivation items weighted by -2, the averaged external regulation items weighted by -1, the averaged identified regulation items weighted by +1, and the averaged intrinsic motivation items weighted by +2. Higher scores on this index reflect a more self-determined motivational orientation of the participants. The items are answered on a 7-point Likert scale anchored by 1=does not correspond at all and 7=corresponds exactly.

Parent-Initiated Motivational Climate: Parent-initiated motivational climate was measured by Parent-Initiated Motivational Climate Questionnaire-2 (PIMCQ-2). This scale was developed by White and Duda (1993) on adolescent athletes. Language adaptation of this scale into Turkish was made by Altıntaş, Çağlar and Aşçı (2012) on adolescent sport and exercise participants (mean age= 15.19 ± 1.65 years). The scale consists of three subscales which are: learning and enjoyment climate (nine items), worry-conducive climate (five items), and success-without-effort climate (four items). Learning and enjoyment subscale reflects mastery climate, whereas worry-conducive and success-without-effort climate measure central aspects of ego climate (O'Rourke, et al., 2014). The participants were asked to complete the questionnaire for both their mother and father.

Data collection

Firstly, the karate coaches were contacted and the information regarding the purpose of the research was provided to them. After determining the clubs which will be a part of the research and obtaining necessary permissions, the karate athletes were met in face-to-face interactions. The purpose of the research was explained to them, and it was emphasized that the study was based on voluntary participation. The athletes were also told that there were no correct answers for the questionnaire and that they should answer as they felt.

Data analyses

Data was analysed by SPSS 17. Skewness and kurtosis values were calculated to check normal distribution. Skewness and kurtosis values should be between -1 and 1 for normal distribution (Huck, 2012). It was found that skewness and kurtosis values were between -1 and 1, indicating that the data was normally distributed. Thus, parametric analyses were used for further analysis. Descriptive statistics were used to determine general demographic characteristics and other variables. Pear-

son's correlation analysis was performed to inspect the relationship between the variables. Stepwise multiple regression analysis was run to reveal the contribution of parent-initiated motivational climate to self-determined motivation.

Results

Minimum and maximum scores, means and standard deviations of all variables can be seen in Table 1. Mean scores for the types of perceived motivational climate initiated by the mother indicated the highest score for learning and enjoyment

climate with success-without-effort climate having the minimum score. Mean scores for the perceived motivational climate initiated by the father showed that perceived learning and enjoyment climate had the highest score and worry-conducive climate had the minimum score.

As found in Table 2, while the athletes' self-determined motivation significantly correlated with learning and enjoyment climate ($r=.293, p<.05$), worry-conducive climate ($r=-.239, p<.05$) and success-without-effort climate ($r=-.293, p<.05$) perceived in the father, it also correlated with

Table 1. Descriptive statistics for sport motivation and family motivational climate

	N	Min.	Max.	M	SD	
Self-determined motivation	325	-10.50	15.50	5.50	4.15	
Mother	Learning and enjoyment climate	325	2,11	5	4.25	0.62
	Worry-conducive climate	325	1	5	2.42	0.98
	Success-without-effort climate	325	1	5	2.39	1.07
	Learning and enjoyment climate	325	2.22	5	4.28	0.63
Father	Worry-conducive climate	325	1	5	2.39	1.09
	Success-without-effort climate	325	1	5	2.43	1.14

Table 2. Results of correlation analysis among age, sports experience, self-determined motivation and family motivational climate

	1	2	3	4	5	6	7	8
1. Age								
2. SE	.456**							
3. SDM	-.033	.018						
4. FLEC	-.220**	-.116*	.293**					
5. FWCC	.008	-.108	-.239**	-.230**				
6. FSWEC	-0.029	-.171**	-.293**	-.260**	.462**			
7. MLEC	-.222**	-.074	.292**	.645**	-.160**	-.241**		
8. MWCC	.090	-.103	-.281**	-.302**	.731**	.476**	-.301**	
9. MSWEC	.026	-.130*	-.287**	-.286**	.449**	.755**	-.238**	.548**

Note.*= $p<.05$; ** = $p<.01$

SE=sport experience; SDM=self-determined motivation; FLEC=father learning and enjoyment climate; FWCC=father worry-conducive climate; FSWEC=father success-without-effort climate; MLEC=mother learning and enjoyment climate; MWCC=mother worry-conducive climate; MSWEC=mother success-without-effort climate.

Table 3. Regression table regarding contribution of parent-initiated motivational climate to self-determined motivation

	Step 1			Step 2			Step 3		
	B	SE	β	B	SE	β	B	SE	β
FLEC	1.96	0.36	0.29	1.56	0.36	0.23	1.39	0.37	0.21
FSWEC				-0.90	0.21	-0.23	-0.68	0.23	-0.17
MWCC							-0.51	0.23	-0.14
R ²		.09			.14			.15	
R ² Change		.09			.05			.01	
F		30.40			25.44			18.88	

Note. Dependent variable=self-determined motivation.

FLEC=father learning and enjoyment climate; FSWEC=father success-without-effort climate; MSWEC=mother success-without-effort climate.

learning and enjoyment climate ($r=.292$, $p<.05$), worry-conducive climate ($r=-.281$, $p<.05$) and success-without-effort climate ($r=-.287$, $p<.05$) perceived in the mother.

The result of the stepwise multiple regression analysis (Table 3) was used to assess the ability of the perceived parent-initiated motivational climate to predict adolescent athletes' self-determined motivation. Total variance explained by the model as a whole was 15%, $F(3,321)=18.88$, $p<.001$. Athletes' perception of the father's learning and enjoyment climate ($\beta=.21$) and father's success-without-effort climate ($\beta=-.17$) as well as the mother's success-without-effort climate ($\beta=-.14$) were the significant predictors of self-determined motivation.

Discussion and conclusion

When the motivational climate research in sport is investigated, motivational climate appears to have an influence on intrinsic motivation, extrinsic motivation and amotivation (Kavussanu & Roberts, 1996; Lavigne, et al., 2009; O'Rourke, et al., 2013; Younes, Ciccomascolo, & Shim, 2013).

The results of the current research showed that athletes' self-determined motivation significantly correlated with athletes' perception of learning and enjoyment climate, worry-conducive climate and success-without-effort climate perceived both in the father and mother. Regarding the contribution of athletes' perception of parent-initiated motivational climate to athletes' self-determined motivation, it was seen that athletes' perception of the father's learning and enjoyment climate, father's success-without-effort climate and mother's success-without-effort climate significantly contributed to self-determined motivation. This finding supported the study by Lavoie and Stellino (2008) who found that the mother and father's learning and enjoyment climate contributes significantly to intrinsic motivation (Lavoie & Stellino, 2008). Moreover, the systematic review performed by Harwood et al. (2015) showed that perceptions of task (or mastery) climate were consistently associated with a range of adaptive motivational outcomes including intrinsic forms of motivational regulation and experience of flow, whereas perceptions of ego (or performance) climate were positively associated with extrinsic regulation and amotivation.

In this context, Amorose and Anderson-Butcher (2007) stated that engaging mainly for the learning/enjoyment inherent in the task implied intrinsic motivation and it reflected the possession of a more self-determined motivational orientation. Amorose et al. (2016) revealed that perceptions of autonomy support from coaches, fathers and mothers each were related to athletes' self-determined motivation. This finding reveals that the more athletes perceive autonomy, the more they show self-determined motivation. Within the

framework of SDT, motivation literature provides a clear evidence about the link between autonomy support and athlete's motivation for participating in sport (Amorose & Anderson-Butcher, 2007; Gagné, Ryan, & Bargmann, 2003; Pelletier, et al., 1995; Pelletier, Fortier, Vallerand, & Briere, 2001). As stated in SDT, strength of intrinsic and extrinsic motivation determines an individual's sense of autonomy, the extent to which behavior is viewed as self-governed (O'Rourke, et al., 2013). Therefore, it is important for athletes to feel autonomy support from their parents or significant others to develop self-determined motivation. Findings of the present study are important for revealing that the athletes' self-determined motivation was significantly correlated with learning and enjoyment climate.

Findings of this study take support from AGT in addition to SDT. In this study, athletes' perceptions of fathers' learning and enjoyment climate contributed to their self-determined motivation. Since mastery climate is known to be closely related to enhanced enjoyment and performance, decreased performance anxiety and provides higher levels of self-esteem (O'Rourke, et al., 2013), it is important that young athletes in this study experienced mastery climate initiated by their parents. It was also revealed that parental reinforcement of desired behaviors was related to the development of intrinsic motivation in children (Weigand, 2000).

It can be concluded that athletes' perception of the motivational climate created by parents was important for young athletes' self-determined motivation. These findings are consistent with previous research conducted with different samples from different contexts (e.g., Gurland & Grolnick, 2005; Kavussanu & Roberts, 1996; Keegan, et al., 2009; Lavigne, et al., 2009; O'Rourke, et al., 2013; Ullrich-French & Smith, 2006; White, 1996). In line with the current results, it could be suggested to parents that learning and enjoyment climate should be fostered, whereas behaviors which create worry-conducive and success-without-effort climates may be avoided to enhance children's self-determined motivation. Children could be encouraged to learn new skills, have fun while learning new techniques, and their effort to learn and develop themselves should be rewarded. Also, giving the impression to children that success could be obtained with minimum effort and that exerting high effort is not necessary for being successful might negatively affect children's self-determined motivation.

On the other hand, some behaviors of parents such as not trusting children's abilities, comparing them with the other children instead of evaluating whether their children have improved their performances, and raising them in a way in which children get afraid of making mistakes, could be detrimental for self-determined motivation. Therefore, such behaviors should be avoided if children are to

keep participating in sport, have fun and not drop out of participation. Further studies could investigate whether athletes' self-determined motivation is related to parent-, coach- and peer-initiated moti-

vational climate. Also, these investigations could be made across different age categories, sport experience levels, sports branches and cultural backgrounds.

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