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Original

LA DESMOTIVACIÓN EN LAS DEPORTISTAS JÓVENES: EL PAPEL DE LOS CONFLICTOS CON EL/LA MEJOR AMIGO/A Y LOS SENTIMIENTOS DEPRESIVOS

UNDERSTANDING SPORT AMOTIVATION AMONG FEMALE YOUTH: THE ROLE OF BEST-FRIEND CONFLICTS AND DEPRESSIVE FEELINGS

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RESUMEN

Objetivos: El presente estudio investigó la relación entre los conflictos con el/la mejor amigo/a en un equipo deportivo y la desmotivación entre las deportistas jóvenes, prestando atención al posible papel de mediación de los sentimientos depresivos.

Material y métodos: Las participantes fueron 140 mujeres (13-17 años de edad) pertenecientes a algunas sociedades italianas de voleibol. Los conflictos con el/la mejor amigo/a, la desmotivación en el deporte y los sentimientos depresivos se evaluaron mediante cuestionarios autoadministrados a los atletas.

Resultados: Los resultados revelaron que los conflictos con el/la mejor amigo/a se asoció positivamente con la desmotivación en el deporte. Se concluyó que los sentimientos depresivos median en esta asociación.

Discusión y Conclusiones: Los resultados sugieren que los conflictos con el/la mejor amigo/a son características sobresalientes relacionados con la desmotivación en los deportes entre las jóvenes. Por otra parte, el efecto de la mediación indica que la desmotivación en el deporte podría estar vinculada a los sentimientos depresivos de las mujeres con experiencias de conflicto con el/la mejor amigo/a en el equipo. Los profesionales del deporte deben prestar especial atención al lado negativo de las amistades diádicas entre los atletas jóvenes. Este enfoque podría evitar el abandono de la práctica deportiva y promover una experiencia deportiva saludable entre los jóvenes.

Palabras clave: participación deportiva, factores sociales, factores personales; atletas

ABSTRACT

Objectives: This study examined the relationship between best-friend conflicts in a sports team and amotivation among female youth, investigating the possible mediation role of depressive feelings.

Material and Method: Participants were 140 girls (13-17 years of age) attending some Italian volleyball societies. Best-friend conflicts, amotivation in sports and depressive feelings were assessed by athletes' self-report questionnaires.

Results: Findings revealed that best-friend conflicts were positively associated with amotivation in sports. Depressive feelings were found to mediate this association.

Discussions and Conclusions: Findings suggest that best-friend conflicts are salient features related to amotivation in sports among female youths. Moreover, the mediation effect indicates that amotivation in sports might be linked to depressive feelings of females with experiences of best-friend conflicts in the sports team. Particular attention should be devoted by sport professionals to the negative side of dyadic friendships among youth athletes. Overtime, this focus could prevent sport dropouts and promote a healthy sport experience among youth.

Keywords: sport involvement; social factors; personal factors; athletes



INTRODUCTION

Dropouts represent a severe problem in the context of youth sports. This decline in sport involvement is particularly evident among girls that are less likely than boys to maintain participation in sport activity over time (National Institute of Statistics, 2012; Vescio, Wilde, & Crosswhite, 2005). Generally it is well established that, during adolescences sport experiences represent a general protective factor that provides health benefits and opportunities positive youth development (Janssen & LeBlanc, 2010). According to these positive sport correlates, it is necessary to constantly promote youth engagement in sport activities, thus reducing their early sport drop out.

According to the Self-Determination Theory (SDT, Ryan & Deci, 2000), individual behaviors can be categorized as intrinsically motivated (inner reasons), extrinsically motivated (external rewards) or amotivated: this distinction is based on the different reasons that give rise to daily action.

One of the main causes of adolescences dropping out of sports is the loss or the absence of motivation (both intrinsic than extrinsic). Amotivated athletes do not perceive reasons for sport involvement and therefore, they can easily leave the sport activity because they are not disposed to accept challenges and put forth effort (Pelletier et al., 1995; Vallerand, 2007). According to Ryan and Deci (2000) sport amotivation occurs when the motivation driving an individual to engage in a behavior is neither intrinsic nor extrinsic. Thus, amotivation is a specific dimension of the general construct of motivation that refers to experiencing feelings of incompetence or lack of control leading athletes to no longer identify any viable reason for practicing the activities (Vallerand, 2007). According to the self-determination theory (Ryan & Deci, 2000) social and psychological factors contribute to define the level of motivation of adolescent athletes. Prior works (Papaioannou, Theodoraki, Christodoulidis, & Kouli, 2006; Weiss & Stunz 2004; Zucchetti et al., 2013) have in fact focused on the social (e.g., reinforcement from coaches and parents) and psychological factors (e.g., perceived competence) that may enhance or undermine motivation, as it affects the degree to which someone persists in a given physical activity

(Weiss & Ferre-Caja, 2002). However, despite its importance for adolescent dropouts amotivation has been rarely examined. To our knowledge, only a few studies have tried to specifically investigate the relationship between social, psychological factors and sport amotivation among youth.

Considering social factors, the recent study by Lopes, Gabbard, and Rodrigues (2013) has confirmed the influence of adolescent dyadic friendship in the sports context. Moreover, several studies have also shown the contribution of positive dyadic friendships (i.e., high level of intimacy, support) among team best friends on their level of sport motivation (Cox & Ullrich-French, 2010; Weiss & Smith, 2002). However, less is known about the contribution of the negative side of adolescent dyadic friendships. The best friend conflict represents the most studied negative dimension of the dyadic friendship since conflicts and disagreements are inevitable features of a close friendship in adolescence (Berndt, 2002; Noakes & Rinaldi, 2006). Research has, in fact, already highlighted some negative associations of best-friend conflicts (i.e., ADHD symptoms; depressive feelings, anxiety) (La Greca & Harrison, 2005; Zucchetti et al., 2014), also in the sports context (Holt, Knight, & Zukiwski, 2012; Ommundsen, Roberts, Lemyre, & Miller, 2005). Best friend conflicts are episodes of conflict and disagreements within close friendships, perceived by the child, which may complicate the regular course of the friendship. Although conflict is considered a negative feature of a close friendship it does not mean that children are unwilling to work things out with their peers; nonetheless, the role of best-friend conflicts among athletes is not completely clear, suggesting the need for further research. In fact, to our knowledge, no prior work has examined the impact of best-friend conflicts within the sport team on the level of amotivation. As conflicts with friends are inevitable and common, especially in adolescence, it is crucial to understand how these conflicts in the sports team may contribute to a lack of motivation. The study of the negative side of the friendship and of the amotivation could also effectively prevent negative outcomes, such as sport drop outs, identifying adolescents at risk of peer-impairments and amotivation.



Moreover, to our knowledge, research has rarely examined potential psychological mechanisms that may explain the association between best-friend conflicts and amotivation. For instance, McDonough and Crocker (2005) did not support the model of Weiss (2000) that suggests that adolescents' self-worth mediates the relationship between dyadic friendships and sport commitment. Specifically, their study showed that dyadic friendships do not play a role in predicting self-worth and that self-worth is a weak predictor of sport commitment. They underlined the need for future research that examines the processes that might link dyadic friendships and sport motivation.

In line with these suggestions, the present study examined other possible psychological mechanisms that may explain the effect of best-friend conflicts on sport amotivational outcomes. Among psychological factors, it has been shown that during adolescence, girls frequently report symptoms of depression due to biological, cognitive, emotional and social changes (Galambos, Leadbeater, & Barker, 2004). Empirical evidence show that youth who report more best-friend conflicts might experience poor psychological well-being such as high levels of loneliness and depressive feelings (LaGreca & Harrison, 2005). In addition, other studies indicate depressive feelings are potential predictors of physical activity decline and lack of motivational determinants, especially among female adolescents (Davison, Markey, & Birch, 2003; Haarasilta, Marttunen, Kapiro, & Aro, 2004). As a consequence, given these association between discomfort feelings, friendship and physical activity, we consider depressive feelings as a mediator between best-friend conflicts and amotivation in sport. Since girls who have a high level of best-friend conflicts are more likely to experience depressive feelings, they might also be more likely to report a high level of sport amotivation.

In summary, the identification of psychosocial characteristics linked to amotivation is particularly relevant to the design of interventions promoting sport involvement in the adolescent population thereby preventing the risk of dropout. These activities must address the psychosocial characteristics that are strictly connected to amotivation. Currently, interventions designed to

enhance sports motivation and participation of adolescents have obtained discouraging results. A review by Priest, Armstrong, Doyle and Waters (2008) reported an absence of high quality interventions planned and delivered by sporting organizations to increase participation and motivation in sports among adolescents. This lack of high quality interventions perhaps reflects a partial comprehension of the adolescent factors from which their amotivation and their lack of participation in sport activities depends. Amotivation represents a phenomenon that involves many individual aspects of the adolescent: for this reason we need to clearly verify the relationship between amotivation and other psychosocial factors in order to obtain more reliable and realistic findings about the individual aspects that undermine adolescent sport motivation.

Thus, in light of the previous literature limitations, the present study aimed to first examine, the relationship between best-friend conflicts and sport amotivation among a wide population of adolescent female athletes. We expected best-friend conflicts to be positively related to sport amotivation in girls. Additionally, we tested whether the association between best-friend conflicts and sport amotivation was mediated by psychological factors, specifically depressive feelings. We expected that high levels of depressive feelings might partially explain the relationship between best-friend conflicts and sport amotivation.

METHODS

Procedure and Participants

Participants were 140 young female athletes attending eight Volleyball Sport Society teams in the northwest of Italy. We invited 200 girls from twenty volleyball teams to participate. The parents of 140 players gave the informed consent for their child's participation (70% participant rate). The study was entirely submitted and evaluated by the Ethics Committee at the University of (name blinded for review), the members of the committee approved the methodology and research protocol.

The participants ranged in age from 13 to 17 years ($M_{age} = 15.08$; $SD = .97$) (see Table 1 for the main participants information). The group of participants is representative of the population of early female



adolescents from the northwest of Italy; 98% of all early adolescents attended a public primary school. In addition, regarding relevant structural indicators, such as the proportion of family divorces and the level of education of the parents, our participants appeared relatively comparable to the general Italian population (National Institute of Statistics, 2012). Regarding family structure, 93% of the parents were married and living together, 7% were separated or divorced. Most parents (64% of the mothers, 72% of the fathers) had a high school diploma (see Table 1).

TABLE 1. Characteristics of Participants

Variable	Category	N	%
Place of birth	Northern Italy	120	85%
	Other Italian Regions	20	15%
	No answer	0	/
Family condition	Married	131	93%
	Separated or Divorced	9	7%
	No answer	0	/
Level of mothers education	Primary school	31	20%
	High School	90	64%
	University	19	16%
	No answer		/
Level of fathers	Primary school	35	25%
	High School	95	67%
	University	10	8%
	No answer	0	/
Age participants	Range: 13–17	Mean: 15.08	SD .97

Participant recruitment occurred through initial contact with coaches, sport leaders, and parents through a formal informational letter. The purpose and the study procedures were explained during a face-to-face meeting. In accordance with Italian law and the ethical code of the Professional Psychologists Association in Italy, parents provided written consent for the athletes to participate. The target youth group also agreed to participate. Athletes completed questionnaires, which were distributed (during volleyball training sessions) by trained research staff composed by two PhD in Developmental Psychology with experience in the administration of the questionnaire to youth. The questionnaires took approximately one-hour to complete and no one did quite for that reasons. Participants were assured of confidentiality and anonymity. Coaches were not

present during the questionnaire administration in order to ensure privacy to the youth in answering to the questions. No incentives were offered for participation.

Measures

Sport Amotivation. Amotivation was assessed using the subscale of the Sport Motivation Scale (SMS) developed by Pelletier et al., (1995). The choice of this scale was justified by the fact that it is the scale more used in the sport science literature and because it is a scale validated in Italian language (Candela et al., 2014). In this subscale, composed by 4 items, athletes were asked the following question: “Why do you practice your sport?”. Each item represents a perceived reason for not engaging in the activity. Items are assessed using a 7-point Likert-type scale with response choices ranging from “Does not correspond at all” to “Corresponding exactly.” We summarized the item responses and used the total as the total score of amotivation. The Cronbach alpha of the scale was .86. A previous study (Pelletier, Vallerand, & Sarrazin, 2007) confirmed the factor structure of the scale and revealed a satisfactory level of internal consistency as well as adequate test-retest reliability, also in Italian language (Candela et al., 2014).

Best-Friend Conflicts. To measure the best-friend conflicts we used the Italian version of the Conflict scale (Lecce, Primi, Pagnin, & Menzione, 2006), which is a subscale of the Friendship Quality Scale (Bukowski, Hoza, & Boivin, 1994). The scale is one of the best measure scale used to the literature to analyze the negative side of the friendship quality. It is composed of 4 items (e.g., *How often are you and your best-friend in disagreement?*) with responses on a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*very much*) (Cronbach’s Alpha=.76) reflecting feelings about frequent fighting, being angry even after the fight is over, disagreeing about many things, and reciprocal teasing referring to the best friend on the sports team. Youths were instructed to complete the scale in relation to their best friend on the sports team.

Depressive Feelings. To measure depressive feelings, we used the Short Mood Feelings Questionnaire (SMFQ, Angold, Costello, & Messer, 1995), a rapid and effective scale composed of 13



items with responses on a 3-point Likert scale ranging from 0 (*never*) to 2 (*often*) reflecting feelings about depression and loneliness (e.g., *How often do you feel sad?*). The SMFQ is a unifactorial scale; high scores reflect high severity of depressive symptoms. The Cronbach's α of the scale was .90.

Analytic Plan

The proposed mediating role of depressive feelings on the association between best-friend conflicts and sport amotivation was tested using the criteria described by Baron and Kenny (1986) and Holmbeck (1997). In order to demonstrate mediation, the following conditions should be met: (a) the predictor variable has an effect on the mediator, (b) the mediator variables have an effect on the outcome variables when controlling for predictor variables, and (c) the effect of the predictor variable on the outcome is significantly less when the mediator is included in the model than when it is not in the model. Linear regression analysis was used to assess mediation.

Mediation analysis was conducted as follows: the direct effect (best-friend conflicts \rightarrow sport amotivation) was evaluated to verify the influence of the predictor on the outcome variable. If the direct effect was significant, the mediator was included in the analyses.

Theoretically, if the mediation does exist, the coefficients of the direct path (best-friend conflicts \rightarrow sport amotivation), the paths from the predictor variable to the mediator (best-friend conflicts \rightarrow depressive feelings), and from the mediator to the outcome variables (depressive feelings \rightarrow sport amotivation) should all be significant and in the directions predicted. A mediation effect is present if, when the mediating paths are included, the overall fit of the model improves and the coefficient from predictor to outcome is lowered. If the direct effects between the predictor and the outcome are no longer statistically significant, the mediation is said to be *full*. If the significance of the direct paths is lowered but still significant, the mediation effect is said to be *partial*.

With regard to model indices of fit, Sobel tests were calculated to determine the statistical significance of mediation effects.

RESULTS

Descriptive Analyses

Table 2 presents descriptive information and correlations among the study variables. We computed correlation coefficients to assess the hypothesized relationships between the study variables: best-friend conflicts, depressive feelings and sport amotivation. Best-friend conflicts were positively correlated with depressive feelings and sport amotivation. Depressive feelings showed positive correlations with sport amotivation.

TABLE 2. Intercorrelations and Descriptive Informations about Best- Friend Conflicts, Depressive Feelings and Sport Amotivation.

	M	SD	1	2	3
Best Friend Conflicts	6:13	2:17		.37**	.19*
Depressive feelings	18:35	4:46	.37**		.31**
Sport amotivation	7:05	3:07	.19*	.31**	

Note: $N=140$

* $<.05$. ** $<.01$.

Best-Friends Conflicts, Depressive Feelings, and Sport Amotivation: Mediation Analyses

Results indicated that best friend conflict scores were significantly associated with sport amotivation ($\beta = .19$; $p < .03$) (Table 3). As an essential condition for mediation to occur, we found best friend conflicts scores to be significantly associated with our mediating factor, depressive feelings ($\beta = .74$, $p < .01$). In the mediation model, when the depressive feelings variable was added into the analyses, best friend conflict scores were no longer associated with sport amotivation ($\beta = .08$, $p = \text{n.s.}$) (Table 3). According to our hypothesis, these results indicate the presence of a full mediational effect of the depressive feelings on the sport amotivation (Sobel test for indirect effect=4.127, $p < .05$). The effect that best-friend conflicts exerted on sport amotivation was not direct, but rather, was fully mediated by depressive feelings.



TABLE 3. Unstandardized and Standardized Coefficients Between Best-Friends Conflicts (Independent Variable), Depressive Feelings (Mediator), and Sport Amotivation (Outcome).

Variable	B	Se β	β
Step 1			
Best friend conflicts	.27	.125	.191*
F	4.543*	**	***
Step 2			
Best friend conflicts	.12	.133	.089
Depressive feelings	.17	.065	.243**
F	5.353**		
ΔF	.810		

Note: $N=140$

* $<.05$. ** $<.01$.

DISCUSSION

The purpose of this study was to examine the association between best-friend conflicts and sport amotivation among female youth athletes, accounting for salient psychological related mechanisms. Considering Italian female athletes the studies of Zucchetti and colleagues (2013) have deepened the role of sport motivation provided further insights into unknown associations among psychological, socio-relational factors and intrinsic motivation, highlighting the innovative role of sport enjoyment and coaches leadership style as a key factors for sustaining intrinsic motivation. However the consideration of the role of friendship quality is, to our knowledge, unique. A first innovative feature was the study of a negative aspect of dyadic friendships, that is the best-friend conflict, in relation to amotivation in sports. To our knowledge, prior studies have deepened the role of positive dyadic friendships (i.e., high level of intimacy; support) leaving out the role of the best-friend conflicts in relation to sports motivation in general. For instance, Smith and colleagues (2006) recognized best-friend conflicts as an independent aspect of the dyadic friendship experience, however, they have not shown its effect on sport motivation among adolescents. In other studies, Ulrich-French and Smith (2006; Ulrich-French & Smith, 2009) have deepened the exclusively positive features of dyadic friendship, ignoring the possible role of conflict on motivational outcomes. Recently, a study by Holt, Knight, and Zukiwski (2012) made a valuable contribution to the

literature on conflict in sports. Although they have shown that conflict among team friends was a prevalent feature, its role in relationship to motivational outcomes remains unclear.

Our results indicate that female youth, with a high level of best-friend conflicts on a sports team, reported a high level of amotivation in sports. That is, athlete's perceptions of conflict with the best-friend within the sport team is associated with a lack of intent to engage in sport practice. According to our findings, the significant contribution of the best-friend conflicts, against the level of amotivation in sports, was highlighted. Thus, as previously demonstrated, dyadic friendships are motivationally salient in the youth sport context (Smith et al., 2006; Ulrich-French & Smith, 2009); the same holds true with regard to their negative side. Although it has been underlined that best-friend conflicts have beneficial aspects towards the psycho-social adjustment of adolescents (LaGreca & Harrison, 2005; Adams & Laursen, 2007), our research provides evidence about their maladaptive role against some aspects of girls development, also in the sport context. Thus, sports professionals cannot ignore that episodes of conflicts among team best friends can contribute significantly to the loss of youth sport motivation.

Moreover, our findings highlighted the mediation role of girls psychological discomfort with the association between best-friend conflicts and amotivation. Specifically, we found that depressive feelings completely mediated the relation between best-friend conflicts and sport amotivation. In other words, female athletes with frequent best friend conflicts show high amotivation because they experience frequent depressive feelings. These depressive feelings may result from conflicts and can increase the level of amotivation for the sports experience.

Thus, the association between best-friend conflicts and sport amotivation simply becomes apparent in how youths with high best friend conflicts levels perceive their psychological difficulties. Based on this finding, depressive feelings are important key-factors for understanding the relationship between negative dyadic friendships and female adolescent sport motivation. The amotivation of adolescent athletes seems to be a matter of psychological health.



Several limitations and strengths need to be underlined. The main limitation of this study concerns the cross sectional design. Future research should investigate this relationship, adopting a longitudinal approach. One point of strength of the study was the deepening of the negative aspect of dyadic friendships towards the level of sport amotivation among youths, a type of motivation less explored by the previous research. Overall, our result, using Self-Determination Theory as a framework (Ryan & Deci, 2000), confirms that dyadic friendships are motivationally salient in sports. A positive dyadic friendship among team friends leads to a high level of sports motivation as well as episodes of conflict and an unsatisfactory close friendship leads to high level of amotivation in adolescent females. This result is not in line with a previous study that stated that friendship conflict in itself might not be especially problematic for youth sport participants (Smith et al., 2006). Thus, it is clear from these findings that it is necessary to further deepen the role of negative aspects of dyadic friendships on youth sport motivation.

Moreover, this study provides an innovative model in which dyadic negative friendships and depressive feelings together contribute to sports amotivation. To our knowledge, no studies have considered these aspects in a unique model.

CONCLUSIONS

In sum, this study explicated an important process underlying the relationship between dyadic friendships and youth sport motivation, suggesting that the relationship between high best-friend conflicts within the sport team and sport amotivation have to be interpreted in light of specific intrapersonal factors. This revealed mediator mechanisms on the relationship between best-friend conflicts and sport amotivation provides further evidence that the problem might be related to psychological difficulties of adolescents with best friend conflicts. Findings from this study may have relevant implications for the prevention of sport dropouts among female youth. It can be useful, for instance, that coaches also teach some strategies for the management and resolution of conflicts among athletes, limiting the depressive feelings. Thus, it is necessary that coaches adopt not only team-oriented strategies, but also that they take into account the

social dyadic dynamics among their athletes. An intervention that is aimed at improving these social abilities might also enhance youth skills and support adaptive and positive peer relationships within the teams, thus, helping female athletes to cope with psychological distress and the preservation of sport motivation. In order to contrast adolescent amotivation, sports professionals and coaches should pay attention to best friend conflicts and to related depressive feelings among their athletes. This attention to the dyadic friendships and depressive feelings could be undoubtedly favorable, not only to sustain youth sport involvement but also for general well-being and positive psychological development.

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