

Original Article

Verbal aggression in basketball: perceived coach use and athlete intrinsic and extrinsic motivation

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Abstract:

The purpose of this study was to examine how coaches' verbal aggressiveness, as perceived by the athletes of basketball team sport, is related to athletes' intrinsic-extrinsic motivation. One hundred eighty basketball athletes completed two questionnaires, during their training sessions. Statistically significant differences were observed in coaches' verbal aggressiveness ($t_{1,178}=3.53$, $p<.05$), intrinsic motivation ($t_{1,177}=-6.31$, $p<.05$), identified regulation ($t_{1,178}=-8.80$, $p<.05$), external regulation ($t_{1,172}=8.56$, $p<.05$) and amotivation ($t_{1,173}=8.82$, $p<.05$), between the two genders of the athletes. Correlation analysis revealed that there was a negative significant relationship between coaches' verbal aggression with intrinsic motivation ($r=-.49$) and identified regulation ($r=-.44$), but there was a positive significant one with external regulation ($r=.46$) and amotivation ($r=.40$). The results of regression analysis revealed that perceived coaches' verbal aggressiveness could significantly predict the variables of athletes' intrinsic motivation and external regulation. Findings and implications for coaches' type of communication are discussed as well as future research suggestions.

Key words: basketball athletes, verbal aggressiveness, intrinsic motivation, extrinsic motivation.

Introduction

In a common sense, very often athletes report verbal aggressiveness by spectators, coaches or other athletes. By reviewing the related literature, it seems that most of verbal aggressiveness studies have examined this issue basically in university and school settings (Edwards, & Myers 2007; Myers, 2001; Rocca, 2004). Relatively few studies have provided information about coaches' verbal aggressiveness in sport settings generally (Bekiari, 2014; Bekiari, Digelidis & Sakellariou, 2006; Lemieux, McKelvie & Stout, 2002).

Verbal aggressiveness is perceived as a personality trait which urges a person to attack the self-concepts of interlocutor in order to cause a psychological pain (Infante & Wigley, 1986). This 'attack' could be expressed through various forms such as character attacks, competence attacks, physical appearance attacks, teasing, ridicule, threats, swearing, and profanity. The findings of a vast majority of studies revealed that verbal aggressiveness leads to negative outcomes regardless of the relational type (Bekiari, 2012; Edwards, & Myers 2007; Infante, Myers, & Buerkel, 1994; Infante & Rancer, 1996; Martin & Anderson, 1995). The continued verbal aggressiveness towards a person or a group of people is likely to be perceived as psychological abuse which in turn could be lead in learned helplessness (Infante, 1995; Infante & Rancer, 1996).

The overwhelming majority of studies examining the effect of trait verbal aggression consistently identify negative consequences associated with its use. A negative relationship was found between verbal aggression and social attraction and liking for the source of aggressiveness (Martin, Heizel, & Valencic, 1999). Several studies have found that verbal aggression can lead to physical aggression (Infante, Chandler, & Rudd, 1989; Infante, Sabourin, Rudd, & Shannon, 1990; Infante & Wigley, 1986; Sabourin, Infante, & Rudd, 1993).

Researchers have examined the term of 'verbal aggressiveness' in several domains and in educational as well. The findings of the studies conducted in this field revealed with consistency the negative outcomes of verbal aggression in teacher-student relationship. More specifically, teachers' use of slang and verbal aggression found to negatively related with their students' perception for them (Martin, Weber, & Burant, 1997). Similarly, teachers' verbal aggression is negatively related to students' perceptions of immediacy, homophile, and interpersonal attraction (Rocca & McCroskey, 1999) and student affect toward the teacher, the course content, and the recommended course behaviors (Bekiari, 2012; Myers & Knox, 1999). Finally, the demotivating force of verbal aggression toward students' participation in the class supports the findings of Gorham and Christophel (1992).

Relatively few studies have provided information about teachers' verbal aggression in physical education (PE) context. Additionally, Bekiari, and Sakellariou (2003) found that an increased level of verbal aggressiveness exists among teachers of PE and their students who perceive their instructors as verbally aggressive report greater learning loss in PE classes. According to Bekiari, Kokaridas, and Sakellariou (2005),

students who perceive their instructors as verbally aggressive reported greater learning loss in PE classes. Bekiari (2012) also reported teachers' perceived verbal aggressiveness negatively related with students' affect toward the course, course-related behaviour and the instructor, and students' satisfaction in PE lessons. In the same context, findings of another study (Hassandra, Bekiari, & Sakellariou, 2007), indicated that the antisocial fair play behaviors positively related with teachers' verbal aggression. On the contrary, pro-social fair play behaviors negatively related with teachers' verbal aggression (Hassandra, et al., 2007). Moreover, the motivation factors (enjoyment/interest, competence, and effort/importance), and the discipline ones (intrinsic and caring reasons) found to be negatively related with PE teachers' verbal aggression (Bekiari, Kokaridas, & Sakellariou, 2006).

Very little attention has been drowned by the researchers also about coaches' verbal aggressiveness in sport settings. Studies mainly examined the relationship between athletes' aggressiveness and type of sport (contact or non-contact) (Bredemeier, Weiss, & Shields, 1986; Huang & Cherek, 1999; Lemieux, et al., 2002). Huang and Cherek (1999) found that high contact sports athletes (e.g. rugby) more frequently emit aggressive behaviors than athletes of low contact ones (e.g. basketball). Bredemeier, Weiss and Shields (1986) revealed that boys' participation and interest in high contact sports, and girls' participation in medium contact sports, were positively correlated with less mature moral reasoning and greater tendencies to aggress. Bekiari, Digelidis and Sakellariou (2006) also found that athletes who participated in a non-contact sport perceived less verbal aggressiveness from their coaches when compared with athletes participating in a contact one. In addition, Bekiari (2014) found that verbal aggressiveness is negatively associated with enjoyment, ability, effort of the athletes and the democratic style of the coach. Another study indicated that male volleyball players reported higher somatic anxiety and were more affected by the verbal aggressiveness of their coaches than female volleyball ones (Bekiari, Patsiaouras, Kokaridas, & Sakellariou, 2006). Although, in most settings, the use of verbal aggression leads to negative results, it is frequently acceptable in sports (Kish & Woodard, 2005). Additionally, it was found that coaches' verbal aggression is likely to increase basketball players' extrinsic motivation (Reynolds & Allen, 2003).

In the modern educational process, so much in the school psychology (Gootfried, 1985) and school PE (Goudas, Biddle & Underwood, 1995), as well as in competitive sports (Duda & White, 1992), the concepts of motivation and verbal aggressiveness have been introduced and their important role is pointed out in the process of learning, participation and attitude of students-athletes. Weinberg (2003) defines motivation as the direction (approach, abandonment or eve) and the intensity (size) of an effort. Self-determination theory (Deci & Ryan, 2002), is a very interesting approach to motivation, applied successfully in sports (e.g. Frederick, & Ryan, 1995; Hager & Chatzisarantis, 2007; Vallerand, 2001) and PE settings (e.g. Ryan & Deci, 2009; Shen, McCaughtry, & Martin, 2007). According to this theory, people are motivated for different reasons. Self-determination theory (SDT) divides motivation into three major sections: external, intrinsic and amotivation (Deci & Ryan, 2000; Vallerand, 2004). According to Vallerand (2004), when extrinsically motivated individuals are engaged in an activity, they do it in purpose to derive some kind of external rewards (e.g. trophies), than the pleasure of the activity itself. In contrary, intrinsically motivated individuals participate without any kind of expectation for rewards but for the behavior itself and the satisfaction they receive from it (Deci & Ryan, 1991). Finally, the absence of motivation is called amotivation, referring to someone's intention for not acting (Ryan & Deci, 2000a). Amotivated individuals feel helpless to do an activity, with no expectations for the outcome of it and with a feeling of lack of personal control (Ryan & Deci, 2000b; Vallerand, 2004).

Deci and Ryan (1985, 2000), as well as Ryan and Connell (1989), proposed that external motivation appears with the following four different forms: external, introjected, identified, and integrated regulation. External regulation is a kind of behavior that is directed toward external factors such as material rewards or coercions from other persons (Vallerand, 2004). An athlete, for example, participates for the coach's reward, or in order to avoid the negative criticism (e.g. of his/her parents). A slightly shift for external to internal motivation describes the identified regulation, where actions are performed in avoidance of feeling of guilty and shame (e.g. an athlete decides the practice participation for not feeling guilty if doesn't to it). Identified is more self-determined in nature than the two previous ones. Identified individuals' participation doesn't necessarily mean enjoyment for the activity, but only a recognition for its profit. Finally, integrated regulation is related with a specific behavior that has been incorporated harmoniously in the individual.

Studies have shown that internal motivation is connected with a series of positive behaviours, such as effort, pleasure, insistence in the activity and creativity (Ryan & Deci, 2000; Vallerand, 1997; 2004). On the contrary, external motivation is connected with negative behaviors and emotions. According to Ryan and Deci (2000), intrinsic motivation is a desirable type of motivation, but as the individual is grows-up, his freedom to select the activities is reduced due to various social requirements and roles. Consequently, the individual is called to execute activities that are obligatory and less interesting, so that his autonomy and internal motivation are decreased. Thus, the causes that lead the individual to continue the implementation of such activities are external. Such field can be the athletic field where the athletes continue their training for exterior causes such as reward or social distinction (Ryan & Deci, 2009; Vallerand, 2004).

The overwhelming majority of studies examining the effect of verbal aggression consistently identify negative consequences associated with its use (Infante, Myers, & Buerkel, 1994; Infante & Rancer, 1996; Martin &

Anderson, 1995; Edwards, & Myers 2007; Rocca, 2004; Bekiari, 2014). Nevertheless, the perceived coaches' verbal aggressiveness has not been related to athletes' intrinsic-extrinsic motivation in basketball team sport. This study examined the relationship between coaches' verbal aggressiveness as perceived by the basketball athletes and athletes' intrinsic-extrinsic motivation. In particular, this study intends to answer the following research questions:

Is there a relationship between verbal aggressiveness of coaches as perceived by athletes with athletes' self-reports of intrinsic-extrinsic motivation in basketball team sport? If such a relationship exists, is it positive or negative? Are there any differences noted between the two sexes regarding verbal aggressiveness, intrinsic and extrinsic motivation?

Perceived coaches' verbal aggressiveness could significantly predict the variables of athletes' intrinsic and extrinsic motivation? In the light of the findings, useful conclusions is expected to be drawn regarding the relation of coaches' verbal aggressiveness as perceived by athletes with athletes' intrinsic and extrinsic motivation in basketball sport.

Method

Participants

The sample for the study consisted of 180 Greek teen basketball athletes (144 boys and 36 girls), 15-19 of age ($M=15.74$, $SD=1.22$). The sample was randomly selected from Athens, Thessaloniki and Trikala region. All participants were volunteers and they filled in a consent form. Specific instructions were provided to athletes before they filled in the questionnaires. Researchers were available to provide explanation throughout the data collection process. They were asked to retrieve from their memory their experiences from a specific training session that they took part previously in order to fill in the questionnaire.

Instruments

Verbal Aggressiveness Scale. The Verbal Aggressiveness Questionnaire (Bekiari, Digelidis, Hatzigeorgiadis, & Sakellariou, 2005) was used to assess-athletes' perceptions regarding coaches' verbal aggressiveness. The questionnaire comprises 8 items (e.g. insults athletes, makes negative judgments on athletes' ability). The development of the instrument was based on the Verbal Aggressiveness Scale (Infante & Wigley, 1986). Preliminary examination (Bekiari et al, 2005) has provided support for the psychometric properties of the instrument. In particular, confirmatory factor analysis has revealed satisfactory fit indices (CFA: .97, SRMR: .02), and the internal consistency of the scale has been supported (Cronbach's alpha: .97). Participants were asked to respond on a 5-point Likert scale ranged from 1 to 5 (1 = *strongly disagree*, 5 = *strongly agree*).

Intrinsic and Extrinsic Motivation Scale. This 16-item Contextual Motivation Scale developed initially by Papaioannou, Milosis, Kosmidou, and Tsigilis (2002), according to Vallerand's hierarchical model of motivation (Vallerand, 1997). The scale is composed of four internally consistent factors: intrinsic motivation, identified regulation, external regulation and amotivation. Following the stem "Why are you engaged in basketball team sport?", responses to the items were indicated on a 5-point Likert-type scale (1 = *strongly disagree*, 5 = *strongly agree*).

Data Collection and Analysis

Data analysis included the use of the Statistical Package for Social Sciences (SPSS 21.0). Cronbach α reliability analysis was used to examine the internal consistency of the factors of each questionnaire. The T-test for independent samples was used in order to reveal statistical significant differences between the two genders of the athletes. Pearson correlation coefficient (r) was employed to measure the correlation between the subscales of the questionnaires. Moreover, regression analysis was computed to explore the extent to which the factor of perceived coaches' verbal aggressiveness could be predicted from the variables of athletes' intrinsic and extrinsic motivation. The level of statistical significance was set at .05.

Results

Cronbach's α reliability analysis for the 8-items verbal aggressiveness scale (Bekiari, et al, 2005) was .96. The factors of intrinsic motivation ($\alpha = .91$), identified regulation ($\alpha = .89$), external regulation ($\alpha = .90$) and amotivation ($\alpha = .81$) showed a high degree of reliability (Table 1).

Table 1. Descriptive statistics and Cronbach's alpha

	<i>M (SD)</i>	Cronbach's α
Verbal aggressiveness	2.26 (1.14)	.96
Intrinsic motivation	2.88 (1.35)	.91
Identified regulation	2.96 (1.43)	.89
External regulation	2.72 (1.16)	.90
Amotivation	2.93 (1.24)	.81

Statistically significant differences were observed in coaches' verbal aggressiveness ($t_{1,178}=3.53$, $p<.05$), intrinsic motivation ($t_{1,177}=-6.31$, $p<.05$), identified regulation ($t_{1,178}=-8.80$, $p<.05$), external regulation ($t_{1,172}=8.56$, $p<.05$) and amotivation ($t_{1,173}=8.82$, $p<.05$) between the two genders of the athletes (Table 2).

Table 2. Athletes' gender comparison

Variables	Gender	N	Mean	SD	t	df	p
Verbal aggressiveness	males	144	2.41	1.23	3.53	178	.001
	females	36	1.68	.27			
Intrinsic motivation	males	143	2.59	1.34	-6.31	177	.000
	females	36	4.04	.65			
Identified regulation	males	144	2.57	1.32	-8.80	178	.000
	females	36	4.55	.49			
External regulation	males	138	3.05	1.07	8.56	172	.000
	females	36	1.49	.49			
Amotivation	males	139	3.29	1.14	8.82	173	.000
	females	36	1.58	.48			

A correlation analysis was conducted, the results of which are presented in Table 3. As it can be seen, there was a negative significant relationship between coaches' verbal aggression with intrinsic motivation ($r=-.49$) and identified regulation ($r=-.44$), but there was a positive significant relationship with external regulation ($r=.46$) and amotivation ($r=.40$).

Table 3. Correlation Analysis Results

	1	2	3	4	5
1. Verbal aggressiveness	1.00				
2. Intrinsic motivation	-.49**	1.00			
3. Identified regulation	-.44**	.88**	1.00		
4. External regulation	.46**	-.71**	-.77**	1.00	
5. Amotivation	.40**	-.77**	-.83**	.84**	1.00

** $p < .001$

To examine the extent to which athletes' intrinsic and extrinsic motivation could be predicted from ratings of coach's verbal aggressiveness, a series of simple regression analyses were conducted. The results indicated that perceived verbal aggressiveness could predict significant variance in the variables of intrinsic motivation and external regulation. Perceived verbal aggression explained 8% of the variance in athletes' intrinsic motivation ($F_{4,162} = 20.103$, $p < .001$) and 6% of the variance in athletes' external regulation ($F_{4,162} = 20.103$, $p < .001$). The results of the regression analyses are presented in Table 4.

Table 4. Regression Analysis Results

	B	95% CI B	SE	b	t
Intrinsic motivation	-.43	-.66, -.21	.11	-.52	-3.75**
External regulation	.37	.14, .61	.12	.38	3.12**

** $p < .001$

Discussion

The purpose of this study was to examine how coaches' verbal aggressiveness, as perceived by the athletes of basketball teams sport, is related to athletes' intrinsic-extrinsic motivation. This is the first study aiming to examine the link between verbal aggressiveness and SDT. According to the results of the study, statistically significant differences are observed in coaches' verbal aggressiveness, intrinsic motivation, identified regulation, external regulation and amotivation between the two genders of the athletes. Additionally, it was shown that perceived coaches' verbal aggressiveness would have a negative significant relationship with athletes' intrinsic motivation and identified regulation, but there was a positive significant relationship with external regulation and amotivation. Moreover, it was revealed that perceived coaches' verbal aggressiveness could significantly predict the variables of athletes' intrinsic motivation and external regulation.

According to Infante (1989), educators tended to be less verbally aggressive toward girls. Boys are usually less obedient toward instructors, which in turn results to an increased verbal aggressiveness on behalf of the instructors in their attempt to impose discipline. The findings of the present study revealed that male athletes perceived as more verbally aggressive persons than female ones and is in similar with these of above study. In addition, boys are more familiar with physical violence or bullying episodes than girls (Athanasiaides & Deliyanni-Kouimtzi, 2010). Based on the findings of Weiss and Ferrer-Caja (2002) study, it was found that male should be more skillful and competitiveness than female according to social stereotypes. Additionally, male

athletes of the present study perceived coaches as more verbally aggressive and their selves as more extrinsically motivated and in the absence of motivation than female athletes do, during basketball training.

Relationships between the investigated variables, as correlations showed, were to the expected directions. Intrinsic motivation and identified regulation were negatively correlated with coaches' verbal aggression, while external regulation and amotivation were positively correlated with coaches' verbal aggression. The aggressive verbal communication was influential in determining athletes' intrinsic-extrinsic motivation. Athletes are more likely to be intrinsically motivated when the coach is not verbal aggressive. On the contrary, athletes were more likely to score higher on the amotivation scale as coach becomes more verbal aggressive. The explanation for this issue probably lies on the causes of the use of verbal aggressiveness. A person becomes verbally aggressive when he/she is trying to show authority (French & Raven, 1960; Gorham & Christophel, 1992). Moreover, findings of previous studies indicated that instructors' verbal aggressiveness is negatively related with students' state motivation (Myers, 2002; Myers & Rocca, 2000; Myers, & Rocca, 2001). State motivation seems to share common background with intrinsic motivation.

The results also showed that there is a link between self-determination continuum and verbal aggressiveness. Coaches' verbal aggression was negatively correlated with intrinsic motivation and identified regulation and was positively correlated with external regulation and amotivation. Findings were consistent with prior relative research (Edwards, & Myers 2007; Infante, et.al., 1989; Infante & Wigley, 1986; Infante, et.al., 1990; Myers, Edwards, Wahl, & Martin, 2007; Sabourin, et.al., 1993). According to our findings, the use of verbal aggression by the coach resulted to an additional negative result: athletes' intrinsic-extrinsic motivation. In particular, when coaches use an aggressive communication language with their athletes, it seems that they decrease the probability to appear intrinsic motivation and identified regulation during sports lesson, namely self-determined types of motivation considered internal motivational factors that lead to increased levels of performance and lifelong exercise (Papaioannou, et al., 2003).

Conclusion

In the light of the afore-mentioned findings and based on the findings of the present study, it can be **concluded** that coaches tendency to use negative communication techniques such as verbal aggressiveness, not only do not lead to performance enhancement but could additionally be harmful for their athletes (Martin, Rocca, Cayanus, & Weber, 2009). Thus, it is imperative that coaches adopt a motivational climate avoiding verbally aggressive behaviours in order to increase their athletes' intrinsic motivation. In this study it was examined the direction of the relationships between athletes' intrinsic-extrinsic motivation with coaches' verbal aggression as perceived by athletes. In future research, it should be examined the mechanisms of the relationship between coaches' verbal aggression with athletes' intrinsic-extrinsic motivation, during training sessions. In depth interviews with athletes would reveal useful information for this and would provide practical implications – guidelines for coaches.

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