



## **Antisocial and prosocial behaviour in sport: Roles of motivation and gender among adolescent athletes**

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### **Abstract**

*The influence of motivational processes on engagement in behaviours that are intended to benefit or harm others in sports has been largely ignored in past empirical literature; however extant findings in other related areas of life suggest that there is need to pay more attention to the motivational factors in prosocial/antisocial acts among athletes during sporting events. This study examined the roles of different motivational profiles (intrinsic motivation, extrinsic motivation, and amotivation) in prosocial and antisocial behaviours among adolescent athletes in a southeast Nigerian state (N = 645; 54.7% females). Majority of them (64.3%) were engaged in field events. Data was collected using the Sport Motivation Scale (SMS-28) and the 20-item Prosocial and Antisocial Behaviour in Sport Scale (AABSS). Regression analyses indicated that gender neither predicted prosocial behaviour nor antisocial behaviour. Intrinsic motivation did not predict prosocial behaviour but greater intrinsic motivation was linked to lower antisocial behaviour. Extrinsic motivation was associated with more prosocial behaviour, but there was a nonsignificant prediction of antisocial behaviour by extrinsic motivation. Those who reported greater amotivation were more prosocial and less antisocial in their sport behaviour. Findings imply that engagement in behaviours that benefit others in sport may be largely motivated by reciprocity, whereas amotivated people may not be as ambivalent as assumed. Increasing research is needed to shed more light on the nature of these associations among older athletes.*

**Keywords:** *Antisocial behaviour, athletes, motivation, prosocial behaviour, sport.*

### **Introduction**

The proper functioning of society is of great importance and part of means to achieve such healthy society may be individuals behaving in synchrony to the norms and moral values of society. Thus, individuals must have the disposition to willingly regulate their thoughts, emotions, and behaviour in line with societal values; and volitionally, engage in prosocial behavior (Gagné, 2014).

Adolescence is a critical developmental stage where individuals are particularly susceptible to peer influence and identity formation. Sports can play a significant role in shaping moral and social behaviors during this period (Hodge & Lonsdale, 2011). Sports have a significant role to play in imbuing individuals with the volitional disposition to conducting themselves in

accordance with values of society; this is because traditionally, it has been observed that sport is a veritable tool for the development of societal values and moral standards (Kavussanu & Boardley, 2009).

In sports, the terms prosocial and antisocial behaviour have been referred to as the proactive and inhibitive aspects of morality (see, Hodge, & Lonsdale, 2011; Greenwood, & Kanters, 2009). Prosocial behaviours are acts intended to help or benefit another person (see, Eisenberg & Fabes, 1998; Weinstein & Ryan, 2010); while antisocial behaviours are acts with the motive to hurt or disadvantage another individual (Sage et al., 2006).

During sports participation, athletes tend to exhibit various forms of prosocial and antisocial behaviours. Some of such prosocial behaviours include, assisting fellow players get up from the floor if they fall on the pitch, aiding injured players, kicking the ball out of play if an opponent is injured, lending equipment to an opponent and verbally motivating or spurring teammates (Kavussanu & Boardley, 2009). Some equally exhibit antisocial behaviours, like faking an injury, intentionally injuring an opponent to take an advantage, lying to an official, pushing an opponent player when the referee is not looking, and arguing with an official over a bad call (see, Selfriz, Duda, & Chi, 1992; Iwasaki, 2015). Others include, intentional foul play targeted to gain advantage over their opponents and the use of verbal abuses towards teammates (see, Kavussanu & Boardley, 2009; Kavussanu, Seal, & Phillips, 2006).

Although many scholars have investigated predictive factors to prosocial and antisocial behaviors (see, Standage, & Ryan, 2020; Hanle, 2021), the influence of motivational processes on engagement in behaviours that are intended to benefit or harm others in sports has been largely ignored in past empirical literature; however extant findings in other related areas of life suggest that there is need to pay more attention to the motivational factors in prosocial and antisocial acts among athletes during sporting events.

The Vallerand (2015), hierarchical Model of Intrinsic and Extrinsic Motivation's explanation of the motivational processes in sport is hinged around Cognitive Evaluation Theory (Deci & Ryan, 2000; Ryan & Deci, 2000), where motivation is in a continuum, considered and refers to different dimensions with respect to self-determination level. With intrinsic motivation as the highest self-determination level which deals with those situations in which individuals volitionally engage in activities for their own personal pleasure, excitement and satisfaction inherent in the individual's participation. A second dimension of motivation is the extrinsic motivation. Here, because of the value for associated outcomes, individuals engage in activities this implies it has not a purpose on its own, and is divided in identified regulations, introjected regulation and external regulation. Lastly, the lowest self-determination level is amotivation. It constitutes a psychological state in which an individual lacks either a sense of efficacy or a sense of control with regards to achieving a desired goal.

The study of prosocial and antisocial behaviors in sports can be understood through the lens of self-determination theory (SDT; Deci & Ryan, 1985). SDT posits that human motivation exists on a continuum from intrinsic to extrinsic motivation, with amotivation representing a lack of motivation. Intrinsic motivation involves engaging in an activity for the inherent pleasure and satisfaction derived from participation (Deci & Ryan, 2000). In contrast, extrinsic motivation refers to engaging in an activity for external rewards or to avoid negative consequences (Ryan & Deci, 2000). Amotivation, the lowest level of self-determination, is characterized by a lack of intention to act, resulting from feelings of incompetence or a lack of value for the activity (Vallerand, 2001).

In the context of sports, intrinsic motivation has been linked to positive outcomes such as enjoyment and persistence, while extrinsic motivation can sometimes lead to negative behaviors, depending on the type of extrinsic regulation (Ryan & Deci, 2000). SDT provides a useful framework for understanding the motivational underpinnings of prosocial and antisocial behaviors in sports, suggesting that higher self-determination is associated with more prosocial behaviors, while lower self-determination may be linked to antisocial behaviors (Hodge & Lonsdale, 2011).

Prosocial behaviors in sports refer to actions intended to benefit others, such as helping an injured opponent or congratulating a teammate (Kavussanu, 2006). Research has shown that intrinsic motivation is positively associated with prosocial behavior. For example, Kavussanu et al. (2015) found that athletes who were intrinsically motivated displayed higher levels of prosocial behaviors compared to their extrinsically motivated counterparts. This is consistent with SDT, which posits that intrinsically motivated individuals are more likely to engage in behaviors aligned with their internal values, including prosocial actions (Deci & Ryan, 2000).

Antisocial behaviors, on the other hand, are actions intended to harm or disadvantage others, such as faking an injury or verbally abusing opponents (Kavussanu & Boardley, 2009). Studies have shown mixed results regarding the relationship between motivation and antisocial behavior. For instance, Hodge and Lonsdale (2011) found that amotivation was positively related to antisocial behaviors, suggesting that a lack of motivation can lead to negative outcomes. In contrast, Kavussanu and Boardley (2009) reported that extrinsic motivation, particularly external regulation, was associated with higher levels of antisocial behavior, as athletes may engage in such behaviors to secure rewards or avoid punishment.

Gender differences in prosocial and antisocial behaviors in sports have also been explored. Kavussanu and Roberts (2001) found that male athletes were more likely to engage in antisocial behaviors than female athletes, possibly due to different socialization processes and normative expectations. However, other studies have reported no significant gender differences, suggesting that the relationship between gender and sport behavior may be more complex and influenced by contextual factors such as the type of sport and cultural background (Kavussanu, 2006).

While there is extensive research on prosocial and antisocial behaviors in sports, much of the existing literature is centered around Western contexts. This study focuses on adolescent athletes in southeastern Nigeria, offering a culturally unique perspective that has been underrepresented in previous studies. Understanding these behaviors within different cultural settings is crucial for developing context-specific interventions and policies.

Moreover, Prior studies have established that intrinsic motivation is often linked to positive outcomes, such as enhanced well-being and ethical behavior in sports, while extrinsic motivation can sometimes lead to negative outcomes, like increased pressure and unethical behavior (Ryan & Deci, 2000). However, the mixed findings and varying methodologies across studies necessitate further investigation to clarify these relationships, particularly in diverse settings (Vallerand, 2001). Hence this present study examined the roles of different motivational profiles (intrinsic motivation, extrinsic motivation, and amotivation) and gender in prosocial and antisocial behaviours among adolescent athletes in a southeast Nigerian state. This study is relevant and necessary because it addresses a contextual gap, focuses on a critical developmental stage, explores under-researched motivational factors, and aims to provide practical recommendations for improving sportsmanship among adolescent athletes in a unique cultural context.

The theoretical and empirical literature suggests that motivation plays a crucial role in influencing prosocial and antisocial behaviors in sports. Intrinsic motivation is generally associated with more prosocial behavior, while extrinsic motivation and amotivation are linked to antisocial behavior. However, the relationship between motivation and behavior is not straightforward and can be influenced by various factors, including gender and the specific context of the sport.

## **Methodology**

### **Study Area**

This cross-sectional study was carried out in Abakaliki Ebonyi state, located in the southeastern part of Nigeria. Ebonyi state is bordered to the north and northeast by Benue State, Enugu State to the west, Cross River State to the east and southeast, and Abia State to the southwest. It has a projected population of 3.4 Million (3,242,500)

### **Participants**

The study sample consisted of 645 adolescent athletes (54.7% females) from various secondary schools in Abakaliki Ebonyi State, in southeastern Nigerian. The participants ranged in age from 12 to 19 years, with a mean age of 14.95 years ( $SD = 1.57$ ). The majority (64.3%) were engaged in field events, while the rest participated in other sports activities. The participants were selected using a stratified random sampling method to ensure a representative distribution across different sports and gender groups.

### **Instruments**

Two instruments were used for data collection namely: Sport Motivation Scale (SMS-28) The SMS-28, developed by Pelletier et al. (1995) and Prosocial and Antisocial Behavior in Sport Scale (PABSS); both instrument have been used previously in the Nigerian setting. Sport Motivation Scale (SMS-28) The SMS-28, developed by Pelletier et al. (1995), was used to assess the different types of motivation (intrinsic motivation, extrinsic motivation, and amotivation) among the participants. The scale consists of 28 items, divided into seven subscales, each representing a type of motivation. The responses were measured on a 7-point Likert scale, ranging from 1 (does not correspond at all) to 7 (corresponds exactly).

**Prosocial and Antisocial Behavior in Sport Scale (PABSS)** The PABSS, developed by Kavussanu and Boardley (2009), was used to measure prosocial and antisocial behaviors. The scale consists of 20 items, with two subscales assessing prosocial behavior (e.g., "I helped an opponent off the ground") and antisocial behavior (e.g., "I deliberately tried to injure an opponent"). Participants rated each item on a 5-point Likert scale, ranging from 1 (never) to 5 (very often).

### **Procedure**

Consent forms were distributed to participants and their guardians, with a detailed explanation of the study's purpose, procedures, and ethical considerations, including confidentiality and the right to withdraw at any time. Only participants with signed consent forms were included in the study. Trained research assistants administered the questionnaires in group settings at each school. The questionnaires were completed anonymously to encourage honest responses and minimize social desirability bias.

### **Research Design**

This study utilized a cross-sectional survey design to investigate the roles of motivation and gender in predicting prosocial and antisocial behaviors among adolescent athletes. This design was chosen to collect data at a single point in time from a large sample of participants, allowing for the analysis of relationships between variables without manipulating the study environment.

### Data Analysis

The data were analyzed using SPSS software version 25.0. Descriptive statistics, including means and standard deviations, were computed for all variables. Pearson correlation coefficients were used to examine the relationships between gender, types of motivation, and prosocial and antisocial behaviors. Hierarchical multiple regression analyses were conducted to determine the predictive roles of gender and motivation types on prosocial and antisocial behaviors. Gender was entered as a predictor variable in the first step, followed by intrinsic motivation, extrinsic motivation, and amotivation in the second step.

### Ethical Considerations

The study adhered to ethical standards in psychological research. Ethical approval was obtained from the Ebonyi State University Ethics Committee. Informed consent was secured from all participants and their guardians. The confidentiality of the participants' responses was maintained throughout the study, and all data were anonymized for analysis and reporting purposes.

## Results

**Table 1: Descriptive statistics and correlations of demographic variables, motivation, prosocial and antisocial sports behaviour**

Variables	Mean	SD	1	2	3	4	5	6
1 Gender	-	-	-					
2 Age	14.95	1.57	-.07	-				
3 Intrinsic Motivation	47.61	9.25	.17***	.05	-			
4 Extrinsic Motivation	42.83	9.12	.12**	.03	.52***	-		
5 Amotivation	11.31	3.95	.10**	.08*	.25***	.17***	-	
6 Prosocial behaviour	17.34	3.57	.01	.08	.07	.15***	.130**	-
7 Antisocial bahviour	41.15	5.91	-.02	-.01	-.10**	-.04	-.10**	-.19***

Note. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; Gender (Coded 0 = males, 1 = females).

Table 1 showed that gender was not associated with prosocial behaviour and antisocial behaviour. Older age was associated with greater amotivation, but the relationship between age and prosocial behaviour as well as antisocial behaviour. Intrinsic motivation correlated positively with extrinsic motivation and amotivation. The relationship between extrinsic motivation and amotivation was also positive.

**Table 2: Hierarchical linear regression predicting sport prosocial behaviour by gender and motivation**

Predictors	Step 1			Step 2		
	B	B	T	B	B	T
Gender	.06	.01	.20	-.12	-.02	-.41
Intrinsic motivation				-.01	-.03	-.68
Extrinsic motivation				.06	.12	3.16**

Amotivation		.11	.12	2.87**
$R^2$	.00		.03	
$\Delta R^2$	.00		.03	
$F$	(1, 640).04		(4, 637)5.58***	
$\Delta F$	(1, 640).04		(3, 637)7.43***	

Note. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ;  $\Delta R^2$  = Change in  $R^2$

In step 1 of the hierarchical multiple regression in Table 2, it was found that gender did not significantly predict prosocial sport behaviour. The factors of motivation were added to the regression model in step 2. Intrinsic motivation did not significantly predict prosocial sport behaviour. Extrinsic motivation and amotivation positively predicted prosocial sport behaviour. Specifically, those who were more extrinsically motivated reported greater prosocial behaviour in sport. Similarly, those with more amotivation reported greater prosocial behaviour in sport. The predictor variables accounted for 3% of the variance prosocial sport behaviour.

**Table 3: Hierarchical linear regression predicting sport antisocial behaviour by gender and motivation**

Predictors	Step 1			Step 2		
	$B$	$B$	$T$	$B$	$\beta$	$T$
Gender	-.23	-.02	-.49	.02	.00	.03
Intrinsic motivation				-.06	-.10	-2.05*
Extrinsic motivation				.02	.03	.61
Amotivation				-.13	-.08	-2.05*
$R^2$		.00			.02	
$\Delta R^2$		.00			.02	
$F$		(1, 639).24			(4, 636)2.85*	
$\Delta F$		(1, 639).24			(3, 636)3.72*	

Note. \* $p < .05$ ;  $\Delta R^2$  = Change in  $R^2$

Table 3 indicated that gender did not significantly predict antisocial sport behaviour. The motivation subscales were added to the regression model in step 2. Intrinsic motivation negatively predicted antisocial sport behaviour, but extrinsic motivation did not predict antisocial sport behaviour. Adolescent athletes who were more intrinsically motivated reported less antisocial behaviour. Amotivation negatively predicted prosocial sport behaviour, indicating that greater amotivation was associated with reduced antisocial behaviour in sport. The predictor variables accounted for 2% of the variance antisocial sport behaviour.

## Discussion

The present study explored the relationships between different types of motivation (intrinsic, extrinsic, and amotivation) and prosocial and antisocial behaviors among adolescent athletes in a Southeast Nigerian state. The findings provide valuable insights into how motivational factors influence these behaviors in sports settings, contributing to the existing literature on sports psychology and moral behavior.

Contrary to previous studies that suggested gender differences in prosocial and antisocial behaviors (Kavussanu & Boardley, 2009; Kavussanu et al., 2006), the results of this study indicated that gender did not significantly predict either prosocial or antisocial behaviors among adolescent athletes. This finding aligns with the work of Danioni and Barni (2019),

who found no significant gender differences in these behaviors within team sports contexts. The lack of gender influence suggests that both male and female athletes may be equally likely to engage in prosocial or antisocial behaviors, challenging traditional gender stereotypes in sports.

The study found that intrinsic motivation was negatively associated with antisocial behavior but did not significantly predict prosocial behavior. This result supports the Cognitive Evaluation Theory, which posits that intrinsic motivation characterized by engagement in activities for inherent satisfaction may reduce the likelihood of engaging in negative behaviors (Deci & Ryan, 2000). These findings are consistent with the research by Kavussanu et al. (2015), which showed that athletes with higher levels of intrinsic motivation are less likely to exhibit antisocial behaviors. The lack of a significant relationship between intrinsic motivation and prosocial behavior may suggest that the desire for internal satisfaction does not necessarily lead to behaviors intended to benefit others in a sports context.

Interestingly, extrinsic motivation was found to positively predict prosocial behavior but did not significantly predict antisocial behavior. This finding diverges from some previous studies that suggested a positive relationship between extrinsic motivation and antisocial behavior due to external rewards (Vallerand, 2015). The positive association with prosocial behavior may indicate that externally motivated athletes could engage in positive actions to enhance their social image or gain external rewards, such as recognition or praise from coaches and peers. This aligns with the findings of Kavussanu and Al-Yaaribi (2021), who observed that extrinsically motivated athletes might perform prosocial behaviors to gain external rewards.

The study's most unexpected finding was the positive relationship between amotivation and prosocial behavior and the negative relationship between amotivation and antisocial behavior. This contradicts the traditional view that amotivation, characterized by a lack of intent and control, leads to disengagement and negative behaviors (Ryan & Deci, 2000). One possible explanation for this finding is that amotivated athletes might engage in prosocial behaviors as a means of conforming to team norms or avoiding conflict, despite their lack of motivation. This observation suggests a complex interplay between amotivation and social dynamics in sports, warranting further investigation.

## **Conclusion**

The study's findings highlight the nuanced roles that different types of motivation play in shaping prosocial and antisocial behaviors in sports. While intrinsic motivation appears to inhibit antisocial behavior, extrinsic motivation may encourage prosocial actions. Surprisingly, amotivation was associated with both increased prosocial behavior and decreased antisocial behavior, suggesting that athletes' motivations and their manifestations in behavior are more complex than previously thought.

### *Suggestions for further studies*

Future research should further explore these dynamics, particularly focusing on how contextual factors, such as team culture and coaching styles, might influence the relationship between motivation and behavior in sports. Additionally, longitudinal studies could provide more insights into how these relationships evolve over time, offering a more comprehensive understanding of the factors that promote positive behaviors in adolescent athletes.

### *Implication for practice*



These findings have practical implications for coaches and sports psychologists, who can tailor their approaches to foster intrinsic and extrinsic motivations that encourage prosocial behavior while mitigating antisocial actions. By understanding the motivations behind athletes' behaviors, interventions can be designed to promote a positive and inclusive sports environment.

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