
THE IMPACT OF SPORTS SEX-TYPING ON AGGRESSION AND MOTIVATION OF SELECT COLLEGIATE ATHLETES

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Abstract: Athletes by nature are motivated to pursue excellence in their respective field of sports for varying reasons. The study aimed to examine the association of the perception of gender role and sex-typing of sports on aggression and motivation of collegiate athletes. The present study also identified the mismatch between “socially acceptable” sports for both males and females, and the sex-type classification of each sport, as classified as either masculine, feminine, or neutral. A sample (n=220) of collegiate athletes were taken using purposive sampling and given the Bem Sex Role Inventory (BSRI), Buss-Perry Aggression Questionnaire (BPAQ), and Sports Motivation Scale (SMS). Results of the study showed that athletes differ in expressing their physical aggression and hostility. Meanwhile, factors of motivation between matched, mismatched, and neutrally-classified athletes differ in their intrinsic motivation to accomplish and amotivation, leading to the idea that these athletes are more extrinsically motivated.

Keywords: Sex-Typing, Aggression, Motivation, Athletes.

Introduction: Women are constantly underrepresented, trivialized, and sexualized by the media [1]. Women are also under pressure by which sports they are allowed to participate in [2]. Until the recent times, women were only allowed to participate in “socially acceptable” sports, which were usually activities that projected grace, aesthetics, and had little or no physical effort. These sports included dancing, gymnastics, and figure skating. Recently, women have been breaking the norm by participating in sports classified as “masculine.” The sex-typing of sports is the social acceptability of both males and females participating in various sports, or the perceived masculinity-femininity of the sports [3]. There is a role conflict experienced by females as a result of participating in different sex-typed sports, their perception of the difficulty of the sports, and their expectations of success in the sports. Several factors may be affected by this role conflict experienced by athletes, particularly aggression and motivation. The present study examines the impact sports sex-typing may have on athlete’s aggression and motivation.

Literature Review:

Aggression in the Context of Sports: Aggression has been evident across domains of sports. Several studies have suggested the potential role of self-control in aggressive behavior [4], [5]. In the context of

sports, aggression is defined as “the infliction of an aversive stimulus, either physical, verbal, or gestural, upon one person by another” [6]. Merging the ideas of physical and verbal aggression into one, instrumental aggression can be seen as “the main motive is to reach a certain goal.” This form of aggression has been a key in understanding how athletes engage in aggressive behaviors both in play and outside of the game [7]. Many athletes do not engage in aggressive behaviors outside of the context of their respective game, but are simply being aggressive for the sake of winning and performing.

Motivation in the Context of Sports: The current study utilizes motivation in the context of sports that motivation is both a developmental outcome of social environments and has a developmental influence on behavioral variables [8]. In the context of sports, it has also been seen that athletes participate either out of extrinsic or intrinsic motivation. Young athletes are typically in the developmental stage of their athletic careers, but also have to worry about losing interest in sports due to curiosity in other activities and dropout due to dual demands of sport and school commitments [9]. Meeting heavy demands of training and competition relies strongly on intrinsic motivation, persistence, and task orientation [10]. Many athletes rely on external sources of motivation – such as societal or parental pressure, tangible rewards like trophies and medals, or other tangible, monetary rewards [11]. Extrinsic motivation (EM) can be divided into three subscales, namely, EM for External Regulation (EME), EM for Introjection (EMT), and EM for Identification (EMI). EME pertains to behavior prompted by external motivators or constraints of others. EMT refers to external motivation pressuring the athlete to perform, such as when an athlete feels compelled to succeed and is fit for the sport, but feels embarrassed when they do not live up to the expectations held by them. EMI occurs when individuals acknowledge certain behaviors as significant, and, therefore, perform for extrinsic reasons such as achieving personal goals. However, it is internally regulated and self-determined. For example, if an athlete participates in a group dynamic activity or team building for personal growth and development [12]. On the other hand, intrinsic motivation arrives from internal sources, such as enjoyment, curiosity, and a desire for mastery and growth. However, it is difficult to gauge whether athletes are truly motivated by intrinsic needs in their collegiate athletic career. Three main factors under internal motivation (IM) should be noted on, namely IM to Know (IMK), IM to Accomplish (IMA), and IM to Experience Stimulation (IME) [8]. IMK pertains to an athlete’s will to explore, learn, and understand the sport. IMA refers to motivation to master the task, increase efficiency, and feel competent about one’s performance. IME refers to motivation to experience stimulating sensations, such as ecstasy, thrills and playing “for the love of the game,” from a particular activity [13]. Over-reliance on extrinsic motivation will eventually lead to athletic burnout and thus cause athletes to become amotivated, or having a lack of motivation where no contingency between actions and outcomes are perceived and there is no perceived purpose in engaging in the activity [8], [14]. Amotivated athletes may no longer identify any good reasons to train or play and may eventually disengage from the sport [12]. The present study is also making use of the Self-Determination Theory (SDT) to explain motivation among athletes [15]. It is a theory of motivation that is built on the organismic assumption that humans have innate tendencies to move in directions of greater self-regulation, competence, and integration in action [16].

Sex-Typing of Sports: The sex-typing of sports is the social acceptability of both males and females participating in various sports, or the perceived masculinity-femininity of the sports. Sports have their own classification, whether being masculine, feminine, or neutral. Having a “match” in the perception of sport means that the sport being played by the athlete is a sport that is “socially acceptable” for the athlete because it is in accordance with his or her gender role as being either masculine or feminine. Therefore, if an athlete is not playing a sport congruent to his or her, the sport may not be “socially acceptable” for him or her to play because of the classification of the sport – thereby calling it a “mismatch” in their perception of their gender role and the sex-typing of the sport. Physicality, power, and effectiveness of one toward a sport, attitude of aggressiveness, competitiveness and one’s discipline toward a certain goal, biological advantages are all measures to gauge masculinity [17]. Women athletes have often found that they need to develop and maintain stereotypically “male” qualities, thereby stepping out of their stereotyped gender role (even if temporarily) in order to succeed in sport [18].

Method: The present study revolves around the impact of sex typing that leads to motivation and instrumental aggression among collegiate athletes of the University of Santo Tomas. The Bem Sex Role Inventory (BSRI) is one of the first instruments that considered masculinity and femininity as independent dimensions, resulting in four possible gender identities: individuals are masculine when they endorse masculine characteristics, feminine when they adopt feminine characteristics, androgynous when they endorse both, and undifferentiated when they adopt neither of these characteristics [19]. The Buss–Perry Aggression Questionnaire (BPAQ) is a four-factor model questionnaire that provides a global measure of aggression and four subscales: Physical Aggression, Verbal Aggression, Anger, and Hostility [20]. The Sport Motivation Scale (SMS) is a 28 item test that consists of seven subscales that measure three types of Intrinsic Motivation (IM; IM to Know, IM to Accomplish Things, and IM to Experience Stimulation), three forms of regulation for Extrinsic Motivation (Identified, Introjected, and External Regulation), and Amotivation [13]. The respondents were college athletes from seven different sports (n=220) selected using purposive sampling, after considering exclusion criteria.

Results: Subscales of aggression and motivation were analyzed separately using the One-Way ANOVA – both with an independent variable of gender roles with three levels (matched, mismatched or neutrally-classified). All data were then subjected to Scheffe post hoc test. The basis of the matching and mismatching of an athlete were determined using the subscales found in the Bem Sex-Role Inventory (BSRI). All participants' mean score for the feminine and masculine mean score were then normed based on the suggested norming procedure in the manual of said test (with computed means of 5.3 for females and 5.2 for males). Athletes who obtained mean scores higher than 5.3 and lower than 5.2 were classified as feminine, while those who scored lower than 5.3 but higher than 5.2 were classified as masculine. Those who scored higher than both mean scores were classified as androgynous, and those who scored lower than both means were classified as undifferentiated. Androgynous participants were classified under matched athletes as their identity indicate that they can either be masculine or feminine - making them flexible in whatever sport they play.

On the other hand, athletes who classified under undifferentiated were not used in the study, as it could not be determined whether or not they are matched or mismatched with their sport. Each participant's gender identity was then "matched" or "mismatched" with the sex-type of the sport they played, whether if it may be masculine or a feminine (See Table 1). The neutral group was chosen from a gender-neutral sport wherein each participant's gender roles were not needed to be classified, since the sport they play does not have a specific sex-type (See table 1). The basis of sex-typing of sports were from Metheny's postulate of sports appropriate for female athletes to participate in [21]. It was decided to use such since participants in the study were all in the collegiate level and her system was the closest and most valid at the time. Male athletes were not limited to the sports that they could participate in - however, some sports were classified as "feminine", which were also based from the same system of postulated.

Table 1: Classification of sports based on Metheny (1965)

Masculine Sports	Feminine Sports	Neutral Sports
Basketball	Fencing	Track and Field
Judo	Volleyball	
Football/Soccer	Salinggawi (Dance)	

Results of the BSRI showed that 16% of male athletes (N=62, n=9) were labelled as "mismatched" and 29% of female athletes (N=65, n=19) were "mismatched" (see Table 1).

Table 2: Means (and Standard differentiations) of matched, mismatched, and neutrally sports sex-typed athletes on different subscales of the Bem Sex-Role Inventory

Sport sex-type	Aggression			
	Physical Aggression	Verbal Aggression	Anger	Hostility
Matched	34.066 _b (10.312)	21.429 _b (5.706)	27.857 _b (7.895)	33.451 _b (10.334)
Mismatched	26.963 _a (11.788)	18.740 _a (6.808)	23.926 _a (9.211)	27.444 _a (11.164)
Neutral	32.461 _b (9.136)	20.000 _b (6.456)	26.231 _b (10.160)	32.615 _b (8.242)

Results showed that levels of aggression among collegiate athletes in the subscales of Physical Aggression ($F = 4.850, p = 0.009$) and Hostility ($F = 3.670, p = 0.028$) were significantly different – mismatched athletes being the most different of the three (see Table 2). When taking into effect situational cues, athletes in contact sports such as judo, basketball, and football/soccer need to be aggressive to succeed, to score goals, and to take down their opponents. Verbal aggression does not differ much with physical aggression, aside from the fact that their avenues of expression are different. Hostility, on the other hand is the cognitive component of the aggressive behavior itself. Athletes have different environments in the sport they play. Some require them to be more hostile, while some allow them to have an avenue for expressing certain forms of aggression more. Anger refers to feelings and attitudes, which then represents the emotional or affective component of behavior or at least some kinds of it [22]. Culture-bound gender roles may restrict some behaviors in men and women. These factors may contribute as to how much one is limited and free to express aggression among other behaviors – thus showing one or more significant differences among subscales of aggression in the study. One reason why mismatched athletes differ significantly in all subscales of aggression on the BPAQ may be due to the fact that their gender roles do not match with the sport they play, which may require them to be extra aggressive in order to succeed, or be recognized altogether. Also, some sports such as basketball, judo, and football require athletes to be aggressive in general. Most participants in the said sports identified themselves as masculine, therefore being a little more aggressive in nature than women. Research claims that men are more physically aggressive than women while women were more verbal in expressing their aggression [23]. Hostility also appeared significant in the study. Such significance may also exist due to the fact that mismatched athletes’ gender role and sports sex-type are not congruent with each other that leads to more hostile behavior in order to perform better in the sport they play.

Table 3: Means (and Standard differentiations) of Matched, Mismatched, and Neutrally Sports Sex-Typed Athletes on Different Subscales of the Sports Motivation Scale.

Sport sex-type	Motivation						
	IM to Know	IM to Accomplish	IM to Experience	EM for Identification	EM for External Regulation	EM for Identification	Amotivation
Matched	24.568 _b (3.362)	23.727 _b (3.390)	23.886 _b (3.640)	23.432 _b (3.648)	21.796 _b (4.302)	21.148 _b (4.872)	13.886 _b (6.663)
Mismatched	23.321 _b (4.064)	22.964 _b (3.626)	23.179 _b (3.590)	22.393 _b (3.938)	20.464 _a (4.864)	18.821 _a (5.907)	10.964 _a (6.530)
Neutral	22.846 _a (3.865)	21.731 _a (3.047)	22.384 _a (3.047)	21.923 _a (3.543)	21.115 _b (3.266)	21.077 _b (2.670)	16.539 _b (5.721)

In terms of motivation, all athletes were significantly different in terms of their intrinsic motivation to accomplish ($F = 3.507, p = 0.33$) wherein the neutrally classified athletes differ the most, and amotivation ($F = 5.014, p = .008$), mismatched athletes being the most amotivated amongst the three. This could be because athletes saw their motivation within their respective sports as more extrinsic in nature. Most athletes tested were on a scholarship from the University for their expected performance in their sports.

This scholarship is a driving factor for athletes to perform well as their scholarship would be lost if they do not perform to standards set by the department or fail to maintain their status on their respective teams. Their intrinsic drive to truly learn and understand the sport and to master skills necessary for the sport diminishes as their extrinsic motivation increases. Several sports among those tested have higher media coverage than other sports: Basketball, Volleyball, and Salinggawi (Dance). These athletes face external, societal pressure as the expectation to perform on television may cause athletes to perform only for winning and to avoid shame and guilt, and not for true intrinsic reasons. An over-reliance on extrinsic motivation could lead to burnout by the athletes and cause them to lose interest altogether. This is the reason for the significant difference in amotivation amongst athletes.

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