

Referees' Decision Making in Handball and Transgressive Behaviors: Influence of Stereotypes About Gender of Players?

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The purpose of these studies was to examine gender's effect on transgressive behaviors and referees' decisions during handball games (Study 1) and the potential influence of gender stereotypes about players on referees' decisions as regards these transgressive behaviors (Study 2). In Study 1, 20 games (10 women's games and 10 men's games) were videotaped and observed. The findings indicated that men displayed transgressive behaviors more than women and that referees penalized women more than men. In Study 2, 30 referees answered a set of questions after they watched an edited video showing similar situations of female and male players. The findings showed that the similar situations in the video were judged in a different way by the referees. Thus, female players were granted more penalties than were male players. Gender stereotypes could effectively influence decision making.

KEY WORDS: decision-making; gender; handball; stereotypes; transgressive behaviors.

Studies about aggression in team sports and their perceived legitimacy are numerous (Conroy, Silva, Newcomer, Walker, & Johnson, 2001; Coulomb & Pfister, 1998; Rasclé, Coulomb, & Pfister, 1998). Yet, these studies have focused mainly on men's sport practices and less on women's sport practices, perhaps because aggressiveness is often considered a masculine behavior (Graham & Wells, 2001). Team sports also are more often considered masculine practices (Koivula, 1995). However, a study of the differences between men's and women's behaviors in team sports may prove relevant for a deeper understanding of the aggression process. Furthermore, few studies deal with refereeing and decision making in sport. Yet, referees have a central role in the control of transgressive behaviors (i.e., illegal behaviors in regard to the rules of the game, defined by the Handball International Federation).

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So, we aimed to study gender's effect on transgressive behaviors displayed by handball players and referees' decisions about these behaviors. Gender stereotypes are expected to be a relevant explanation of this latter phenomenon.

Male players are usually reported to be more aggressive or to consider aggression as more legitimate than female players at the same practice level (Conroy et al., 2001; Coulomb-Cabagno & Rasclé, 2004). Individual or cultural factors mainly account for this result: legitimacy of aggressive behaviors is perceived differently by male and female players (Conroy et al., 2001); goal orientation differs for men and women (Duda, Olson, & Templin, 1991); differential sporting and nonsporting socialization encourages boys and girls to meet social behavior expectations (Bandura, 1973). The influence of contextual factors is less often taken into account. As a result, an important actor is often left aside: the referee. And yet, the decisions made by the referees seem to influence largely the nature and frequency of transgressive behaviors during games. Strict refereeing could cause transgressive behaviors to diminish,

whereas permissive refereeing could have the contrary effect (Avanzini & Pfister, 1994). We can then wonder about the part the referee has in the explanation of the difference in the aggressive behaviors displayed by male and female players.

Refereeing is socially expected to be objective, that is, any referee would make the same decision confronted by the same situations. However, a recent study by Garnarczyk (1994) revealed (a) the existence of at least six different ideas of refereeing by handball referees at any level; (b) each of the six ideas acts as judgmental heuristics as decisions are taken; (c) match intensity and score also act as judgmental heuristics as decisions are taken. Trudel, Dionne, and Bernard (2000) showed that, in ice hockey games, referees judge transgressive behaviors more severely in a video format than they do in actual games they referee. Their view is that the law of advantage allows referees not to whistle a transgressive behavior if they deem that the attacker is not hindered by the contact; the influence of the coaches and spectators during the game can lead to the same result. Moreover, Nevill, Balmer, and William (2002) showed that crowd noise had an influence on the referees, who tended to favor local players over visitors, and Jones, Paull, and Erskine (2002) showed that referees are more severe with teams who have an aggressive reputation. The physiological demands when refereeing an ice hockey match, as well as the stress involved in assessing the game and making subjective decisions instantly, could also be considered sources of error (Wilkins, Petersen, & Quinney, 1991).

So, some studies show that refereeing can vary, influenced by factors related to the referee, such as personal ideas about refereeing (Garnarczyk, 1994), expectations (stress or fair-play) based on the links between the two teams (Garnarczyk, 1994), the players' reputation for aggressiveness (Jones et al., 2002), the existence of personal links between the players (Trudel, Côté, & Sylvestre, 1996), or situational factors, such as the score (Garnarczyk, 1994), crowd noise (Nevill et al., 2002), the moment (beginning or end) when transgressive contact happens during the game (Trudel et al., 2000). Another variable, such as gender of the players, could be a potential source of variation in referees' decision making. Have referees, men in most cases, the same idea about female and male handball players? Are their views on physical integrity identical for women and men? Do they deem the technical or physical abilities of men and women comparable? Given the pervasive-

ness of gender stereotypes in society, it seems likely that they could result in different refereeing according to the gender of the players, stereotypes being defined as "beliefs about physical characteristics, personality traits, role-related behaviors, occupational preferences, specific competencies and emotional dispositions about men and women" (Deaux & LaFrance, 1998, p. 793).

In an exploratory study (Souchon, 2000), two interviews were conducted with two handball referees at league level after the referees watched a video recording of one match with female players and another with male players. That inquiry aimed at understanding referees' views and their arguments concerning the differences between men's and women's behaviors. According to the participants in this study, (a) no difference regarding physical integrity is made between men and women; (b) the female players with the ball in hand would tend to dash to clear areas more than would male players (hence fewer contact opportunities); (c) male players, on the contrary, would still remain capable of passing or shooting despite of transgressive contacts from the defenders; (d) female players would more often lose their balance, "walk," "fall," or, in most cases, pass the ball more or less awkwardly. Referees who profess the law of the advantage should, in consequence, whistle the women more rapidly because actions would be interrupted after contact, but allow men to play longer in those situations. So, the comments of these referees appear somewhat contradictory. Are they refereeing women and men so differently? As far as such differences do exist, what are they based on? It seems important to make a distinction between objective realizations of male and female players in contact situations, on the one hand, and subjective judgments of referees about these realisations, on the other hand. Therefore, is it possible to make an objective assessment of different actors' performances, or are these successive evaluations only a part of judges' expectations about players' performances (Plessner, 1999)? In the two following studies, we tried to answer these questions by considering first male and female players' real practices and the subsequent decisions taken by the referees and then the possible origins of the differences we observed.

STUDY 1

The first study was devoted to analyzing men's and women's behaviors in regard to their degree of involvement, transgressions, and contacts, as well

as the subsequent decisions of the referees in regard to the practice of handball. Contrary to studies about aggression in sport that only consider transgressive behaviors as implications of the physical and/or moral integrity of the performers, the purpose of our study was to take into account the whole of "corporal involvement situations" to permit us to better characterize the whole of male and female players' behaviors that are likely to influence the referees' decisions. Our definition of corporal involvement situations was the sum of the situations where a male or female player carrying the ball and taking part in a constructed attack will act toward the opposite goal in order to provoke the adversary. A constructed attack begins when a ball-carrier faces a line or a group that includes at least four adversary defenders; counterattack situations are not taken into account. On the basis of studies of sport aggression and our exploratory work, we hypothesized that (a) contacts would be more frequent with male players than female players and that (b) referees would make penalty decisions more frequently against male players than female players.

Method

Materials

A series of 20 games were videotaped, 10 with female players and 10 with male players, during the "prenational" French 2001–2002 championship (the highest degree at the league level). The time periods were the same in men's and women's games. The mean age of the players was 22.2 years for male players, and 23.2 years for female players. The male players had been practising handball for 6.8 years in general, and the female players for 8.2 years. All the referees were men.

Observations

The behaviors qualified as *corporal involvement* and appearing in constructed attacks, and decisions made by referees related to these behaviors, were observed with the help of an observational grid.

Corporal involvements could happen with or without contact with the adversary. *Corporal involvement with contact* is characterized by at least one defender entering into contact with the attacking player. This type of corporal involvement can in-

clude *transgressive* (e.g., bumping into the adversary) or *nontransgressive contacts* (e.g., the defending player blocks the attacking player, without repulsing him/her; the defending player keeps the arms bent) according to strict observation of the rule of the game. Among transgressive contacts, *pushing* and *holding back* actions have been identified. *Corporal involvement without contact* is produced when ball-carriers shoot directly at the opposing goal; no defender is present at least until the short has reached the goal.

Concerning referees' decisions, two categories have been taken into account: 9-m *throw* (i.e., the ball is given back to the team victim of the transgressive contact and a new constructed attack can be led) or 7-m *throw* (i.e., one player of the team victim of the transgressive contact has the possibility to shoot in the opposite goal, alone facing the opposing goalkeeper; this sanction is generally accorded when the transgressive contact is judged very intense or when the player is in a favorable situation to score).

Several transgressive contacts can appear successively before sanction by the referees, if they judge that there is no transgression of the rule or that the player is able to continue his/her action despite the transgression to which he/she is victim.

Procedure

Two complete games (one women's game, one men's game) were first observed by two observers in order to identify the different types of corporal involvement and referees' decisions. Interraters agreements analysis (kappa coefficients) were satisfactory, ranging between .89 and .93. All the other games were then observed by one observer.

Results

Table I reveals quantitative differences that were observed between male and female players as regards corporal involvements and sanctions. As a matter of fact, (a) male players were more frequently involved in corporal involvement situations than were female players (53.07% vs. 46.93%), $\chi^2(1) = 17.58, p < .001$; (b) transgressive contacts were more frequent with male than with female players (56.12% vs. 43.88%), $\chi^2(1) = 50.06, p < .001$; and (c) no significant difference appeared between female players and male players concerning frequency of sanctions (47.34% vs. 53.66%), $\chi^2(1) = 3.28$.

Table I. Frequency of Corporal Involvements and Penalties by Gender

Gender	Corporal involvements					
	Without contact	Nontransgressive contacts	With contact			
			Transgressive contacts			
			Pushing		Holding	
Penalty	No penalty	Penalty	No penalty			
Men	531	63	313	1213	240	109
Women	620	97	284	739	331	112

Nevertheless, to compare the two practices efficiently, these frequencies have to be related to the sum of corporal involvements with contact (for the transgressive contacts) and the number of transgressive contacts (for the sanctions or the type of transgressive contacts). The results (see Table I) indicate that the number of corporal involvements without contact related to the total number of involvements is greater for women than for men, $\chi^2(1) = 29.56$, $p < .001$; female players more often enter into empty spaces than male players do. Male players display transgressive contacts related to the total number of corporal involvements with contact more frequently than women do, $\chi^2(1) = 17.30$, $p < .001$. The number of attacks with only one transgressive contact related to the total of attacks with contacts is greater for women than for men, $\chi^2(1) = 12.28$, $p < .001$, but the number of attacks with two or more successive transgressive contacts is greater for men than for women. The analysis also reveal that male players use more transgressive contacts such as *pushing* than do female players, whereas women make greater use of transgressive contacts such as *holding back* than do men, $\chi^2(1) = 61.28$, $p < .001$. Concerning referees' decisions, penalized transgressive contacts (related to the sum of transgressive contacts) are more frequent for women than for men, $\chi^2(1) = 56.15$, $p < .001$, but this gender difference was significant only for *pushing*, $\chi^2(1) = 17.93$, $p < .001$.

Discussion

The first hypothesis stated that contacts, in particular transgressive contacts with ball-carriers, would be more frequent among men than among women. Results confirm this hypothesis. This result corroborates those obtained in other studies (Conroy et al., 2001; Coulomb-Cabagno & Rascle, 2004). Female ball-carriers would more often dash to empty spaces than males to try and score, as suggested by the referees at the time of the exploratory study

(Souchon, 2000). This could be explained by gender socialization. Women might try to make the game more feminine by purposely avoiding contacts. Men might search for contact as they believe these transgressions to be more legitimate than women do (Conroy et al., 2001). Hence, different strategies to attack the opposite goal could be adopted. Female players could stay far from the opposite goal and try to negotiate the obstacle of the defenders while looking for a large free area to dash into. Male handball players seem to favor frontline attacks and narrow spaces. This could explain why men's attacks more often fall into the class two, three, and four transgressive contacts in succession than do women's attacks. Yet, these explanations in our view cannot be considered satisfying. It seems that by the use of penalties referees could prevent women from practising a handball style similar to that of men.

The second hypothesis, that women might be more frequently penalized than men, was confirmed. Transgressive contacts that women make are more often penalized than are those of men. Thus, we think that refereeing does influence the transgressive contacts and strategies adopted by male and female players. In effect, attacks conducted by women strongly consist of involvement without contact or penalized contact, whereas those by men mainly consist of nonpenalized involvements with contacts. Perhaps women try to score by rushing into empty spaces because they learnt by experience that solutions with contacts are of no avail; the ball will frequently be given back for a 9-m throw. There may also be more transgressive contacts among men because referees find them more legitimate, or accept them more readily, than they do among women. This difference among referees could simply be accepted as a difference of practice, without any further investigation. Yet, refereeing decisions in handball have to be made rapidly despite the strong information load implied (Garnarczyk, 1994). So, we can have doubts about the actual acknowledgment of the information

available. Some authors consider that in such situations (i.e., restricted time) individuals refer to judgmental heuristics to simplify their decision making as much as possible (Fiske & Neuberg, 1990). This might lead to biased decisions (Hastie & Dawes, 2001). Therefore, the purpose of the second study was to identify whether refereeing might be biased as a function of gender of players.

STUDY 2

Previous research indicates that we need time, important cognitive abilities, and strong motivation in order to personalize our view of an individual (Fiske & Taylor, 1991). On the contrary, in restricted time, with little interest in a particular problem that is not a priority, or when we are already processing a lot of important data, we primarily use our available knowledge about social groups as a basis for our judgments (Fiske & Neuberg, 1990). Our capacity for information processing is limited, but we would be then able to react and adapt ourselves rapidly to intricate situations beyond our capacities otherwise (Fiske & Taylor, 1991). Therefore, this process acts as a cognitive information saving tool; it enables us to free or save capacities in order to process more information (Kunda, 1999). Thus, we can assume that handball referees would use as an assistance, or judgment basis, their available knowledge about women and men to form their own impressions, when decisions are complex and to be made instantly (Garnarczyk, 1994). Referees may say that they try to individualize their refereeing, but time and informational constraints may not permit them to escape the strong influence of their knowledge of gender stereotypes.

The phenomenon of social categorization (Macrae & Bodenhausen, 2001) permits us to abstract and remember our physical and social environment, the major characteristics of groups of objects, or the essential features of persons belonging to social groups (Kunda, 1999). Our knowledge of social groups is made up of stereotypes and can be defined as the cognitive structures that integrate our knowledge, beliefs, and expectations concerning social groups (Hamilton & Sherman, 1994). But, if stereotypes allow decisions to be made more easily in complex tasks by acting as judgmental heuristics (Hastie & Dawes, 2001), then they are structures that require a real stability. As a consequence, they resist change and may lead to biased processing of

the information (Macrae & Bodenhausen, 2001). Stereotypes notably act as expectations that draw our attention in a selective way so as to consider only the relevant information related to the stereotypes themselves (Macrae, Stangor, & Hewstone, 1996). The information that totally contradicts the stereotypes is interpreted as exceptions to the rule, and so we do not question whether the stereotypes are valid; ambiguous data, however, are interpreted in a way that confirms stereotypes (Fiske & Neuberg, 1990; Hamilton & Sherman, 1994).

In regard to sports, Frank and Gilovich (1988) noticed that lots of teams were dressed in black, a color with a strong aggressive connotation in Western cultures. A video of playing actions that featured white-dressed players and black-dressed players was shown to a group of football referees. The results revealed that the referees involved in the study perceived the players in black as more aggressive than those in white, even though the situations had been previously found similar by a panel of experts. Plessner (1999) showed that the stereotypes of gymnastic judges about the order of appearance of the athletes ("the later the athlete appears, the better he is") influenced the mark that the athletes obtained even when the moments that they appeared were located at different places in the video viewed by the judges. Jones et al. (2002) showed that identical fouls were penalized more or less severely depending upon the reputation of the team. Players with an aggressive reputation were judged more aggressive and penalized more severely than those with a nonaggressive reputation. Coulomb-Cabango, Rasclé, and Souchon (2004) wondered if similar situations concerning men's and women's transgressive interactions might be judged in a different way by referees. As a consequence, we can assume that handball referees might perceive and penalize differently transgressive contacts that are similar among men and women at the same competition level, based on their own different expectations in regards to the way women and men will continue playing after the contacts, because gender stereotypes are so deep-rooted (Deaux & LaFrance, 1998). We can also expect them to justify their decisions differently with women and men.

Method

Participants

Thirty referees were aged 26.5 years on average, with roughly 7.4 years of handball refereeing

experience. All the referees were men. They were voluntary participants, who officiated at a pre-natal competitive level.

Materials

The video consisted of four situations that showed transgressive contacts (two *pushing* and two *holding back*) by female players and four similar situations (as judged by a panel of experts) by male players. The transgressive contacts chosen were of the same class, with the same degree of intensity, and located at the same place on the playground for men and women (the referee was never seen on the video). These test situations were shown at random intervals among a set of nontransgressive contacts and other situations not relevant to our hypotheses. A 3s visual countdown was shown before each situation started. The beginning and ending of the situations were made clear by the use of frozen picture technology (i.e., a steady picture or photo of 1s duration). The situations began as long as possible before the contacts happened so that only one contact appeared in each segment and that so the referees could not take another contact into account in their judgments (contrary to Study 1 in which successive transgressive contacts could occur). The situations stopped just after contact so that the referees could not infer the decision that the actual referee had taken on the spot. The situations were also ambiguous so as to allow referees to penalize or not at their choice. Situations were shown with no sound track.

Questionnaire and Procedure

Three open-ended questions were to be answered concerning each situation: (a) can you describe the situation briefly?; (b) what decision would you make?; (c) how do you justify your decision? The referees had to answer the questions about each situation within 30 s. The referees viewed the videos in three groups of 10 over 3 days. They were welcomed by the experimenter, who handed them a sheet to introduce the study, a personal information form (age, sporting qualification, years of experience as a player and referee), and the questionnaire to be completed anonymously. Completion of the questionnaire did not exceed an average of 16 min.

Table II. Frequency of Penalties Related to the Type of Sanction and Gender

Transgressive contacts	Penalties					
	9-m throw		7-m throw		Disciplinary penalty	
	Women	Men	Women	Men	Women	Men
Pushing	40	20*	5	20*	36	19*
Holding	31	22	13	15	30	14*
Sum	71	42*	18	35*	66	33*

*Significant difference between women and men, $p < .05$.

Results

Decisions

Responses to the first question showed that the different situations were clearly identified by the participants. Responses to the second question revealed a significant difference between men's and women's situations. Penalties are more frequent for women than for men (155 vs. 110), $\chi^2 = 7.64$, $p < .01$. The results also show differences in the nature of the penalties (see Table II). The total amount of 9-m throws and 7-m throws is not significantly different for women and men (89 vs. 77, $\chi^2 = 1$), but female players were granted more 9-m throws than were male players, $\chi^2 = 14.06$, $p < .001$, whereas the latter were granted more 7-m throws than the former, $\chi^2 = 9.77$, $p < .01$. These last differences were significant only for *pushing* situations. Women also received significantly more disciplinary penalties (i.e., exclusion of the game for 2 min, this sanction adding to the sportive sanction: 9-m throw or 7-m throw) than men did, $\chi^2 = 18.7$, $p < .001$.

Justifications of Decisions

A content analysis was done in order to establish various classes of justifications. The whole of the 30 referees' justifications were categorized (see Table III). Two groups of justifications have been identified: *justifications for sanction* and *justifications for no sanction*. Justifications for sanction are composed of *technical reasons*, *physical integrity*, and *clear chance of scoring*. Justifications for no sanction are composed of *advantage rule*, *no fault*, and *fault by attacking player*. An adjustment Khidex test was made for the two gender configurations. It is clear that the justifications given by the referees were not issued randomly for women,

Table III. Frequency of Justifications by the Referees Related to Gender and Categories of Justifications

Categories of justifications	Women	Men
Justifications for sanctions	89	77
Technical reasons or related to the rules	45	38
Physical integrity	43	26*
Clear chance of scoring	1	13*
Justifications for no sanction	31	43
Advantage rule	18	26
No fault	9	16
Attacking player fault	4	1

*Significance $p < .05$.

$\chi^2 = 113.33, p < .001$, or men, $\chi^2 = 59.66, p < .001$. Independence Khideux tests were conducted to compare the results obtained for each category for both women and men. Significant differences appear for the categories *physical integrity* and *clear chance of scoring* (see Table III). Thus, the referees were significantly more likely to justify their decisions regarding physical integrity with women than with men, $\chi^2 = 5.87, p < .02$ (which can explain why the referees granted more penalties for women), and they considered that male players were more often in a clear chance of scoring than were female players, $\chi^2 = 10.91, p < .001$ (which can explain why more 7-m throws were granted to men than women).

Discussion

The first hypothesis stated that the referees might perceive and penalize differently similar transgressive contacts among women than among men at the same competition level out of different expectations regarding how male and female players develop their next actions. The results confirm this hypothesis only in part. In fact as many fouls were identified with female and male players because as many 9-m throws or 7-m throws were granted wholly to the two genders. However, the nature of perceived fouls was different, as more 7-m throws were granted to male players and more 9-m throws were granted to female players. Furthermore, female players were penalized more severely than male players, as more disciplinary penalties were granted to female than male players.

The referees, on the basis of gender stereotypes about technical and physical abilities, might have perceived differently the fouls produced by men and by women when making their decisions based on the video. Gender stereotypes give a different meaning

to situations that were similar at first (Hamilton & Sherman, 1994). Thus, the referees might have considered that female players were more prejudiced than male players in the same circumstances. More 9-m throws or 7-m throws would then have been granted to the women than to the men. But no bias appeared concerning the number of fouls perceived and penalized by throws. This result may be accounted for by the length of time (30 s) the referees had to make and justify their decisions (Fiske & Neuberg, 1990). Researchers who have used this type of procedure usually leave 6 s for the participants to answer in order to place them in a situation of strong cognitive constraint (Jones et al., 2002; Nevill et al., 2002). It might be possible in fact that beyond 6 s, the referees escaped the mode of heuristic decisions (Macrae & Bodenhausen, 2001) and considered some contacts on the video as transgressive contacts, although they would not find these contacts transgressive in reality when time is briefer. Besides, referees taking part in a questionnaire study of a video might expect to see transgressive contacts, and therefore would be led to penalize situations that they would not penalize in reality (Trudel et al., 2000). We can also assume that the transgressive contacts chosen for the video and approved by a panel of experts were not ambiguous enough to require difficult judgments. Stereotypes in theory do not have much influence over the perception of an obvious situation, but are relied upon mainly in ambiguous situations (Fiske & Neuberg, 1990). The selected situations should have shown less obvious and yet transgressive contacts. A further study could be done that would make a distinction between transgressive contacts with an ambiguous character and obviously transgressive contacts.

On the basis of Souchon's (2000) findings about the cognitive sides of referees' stereotypes about female and male players, we believe that stereotypes had a part in how the situations were interpreted and assessed by referees in our study. In effect, more 7-m throws were granted to men, and more 9-m throws were granted to women. As, on the one hand, the rules of handball state that a penalty shot has to be decided when "a clear chance of scoring is destroyed anywhere on the court, also if it is done by a team official" (rule 14a; IHF handball rules) and, on the other hand, women's and men's situations were chosen so that the location of transgressive contacts on the ground and their distance from the goal was identical, there was a bias related not to the number but to the nature of the decisions men and women

experienced. The justifications given by the referees indicate that they thought that the men were more likely than the women to shoot goals. However similar the situations were, they were interpreted differently. This clearly supports a different stereotype application (Kunda, 1999). Our results are partly in favor of our hypothesis: the referees' stereotypes, or their expectations about the various capacities of female and male players, could take place when referees work in actual games where the heuristics decisions mode is paramount (Garnarczyk, 1994).

On the other hand, it also appears that the referees in the study more often justified their decisions when women were concerned when physical integrity was a major factor. Yet, the two referees interviewed during the exploratory study (Souchon, 2000) said that they did not take this dimension into account differently whether women and men were concerned. But the results of the video procedure show that more disciplinary penalties were issued by the referees after viewing women play than after viewing men play. The purpose of disciplinary penalties is to warn or punish a player whose behavior is considered dangerous. In consequence, the referees involved in the study reacted affectively and differently to the contact situations on the video. In effect, stereotypes consist of a cognitive part and an affective or emotional part (Mackie, Hamilton, Susskind, & Rosselli, 1996). Most stereotypes develop in close contact with the particular culture of the society in which individuals live (Bodenhausen, Mussweiler, Gabriel, & Moreno, 2001). The contents of the most recent social categories are not different from what has been learnt since childhood. What referees classify as a *female handball player* is consequently derived from the more general category *women*. Some strong affective or emotional contents are learnt prior to any cognitive contents of stereotypes (Mackie et al., 1996). In our culture, women must be protected from any physical danger, and nongracious physical effort and risk taking is reserved for men. Therefore, referees would be more shocked at fouls by women than by men. Moreover, this affective side of attitudes is all the more highlighted in sport. As a matter of fact, time or informational constraints on an individual in a social situation are not the only reasons that explain how or why one or several social categories are activated and stereotypes applied (Fiske & Taylor, 1991). Background could also have a paramount part (Kunda, 1999). Handball, as all team sports, is considered a masculine practice (Koivula, 1995). Being women in a field where men occupy a territory that

is symbolically, socially, and culturally their own is an important factor in activating social categories. Consequently, cultural learning might lead referees to take into account the dimension male–female in sport though, as individuals, they might be unaware of this distinction in their daily lives. Social expectations regarding men and women exist in any society, and affective aspects related to these expectations might be still more important in sport, in which to strike a blow at physical integrity is easy. Men who referee female players are therefore a worthwhile subject of study where affective phenomena might have more importance than cognitive phenomena. As a result, these two dimensions should be considered simultaneously without a preference for the cognitive aspects. The results of the present study favor this theory.

CONCLUSION

The decisions made by referees might explain partly why men are more aggressive than women at the same competitive level. Gender stereotypes appear as significant elements in refereeing activity that might explain differences between men and women. But it appears that their affective components should not be left aside.

Further studies are necessary to make our comprehension of these phenomena more complete. Interviews with referees at different competitive levels could be conducted based on the results of the present studies to lead us to a deeper understanding of the referees' stereotypes concerning women and men at different practice levels. In effect, female and male players do not show the same characteristics at different competition levels; notable, the higher their competition level, the more numerous their number of aggressive behaviors (Coulomb-Cabagno & Rasclé, 2004). These aggressive behaviors might be related to more and more permissive refereeing as well as to refereeing expectations that differ by gender.

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