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Condoning Aggressive Behaviour in Sport: A Comparison between Professional Handball Players, Amateur Players, and Lay People.

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The present study examined the cognitive processes by which persons who are differently involved in the practice of sport judge the extent to which an aggressive act performed by a player during a match in handball could be condoned. Thirty professional handball players, 35 amateur handball players, and 48 non-sporting individuals indicated this "condonability" in 48 scenarios. The scenarios were all combinations of 5 factors: (a) the consequences of the aggression (the victim is injured and must leave the game or the victim is not injured), (b) the current score (the team is winning or the team is losing), (c) the time left to play (very little time or quite some time), (d) the context of the aggression (the aggressor has been the victim of a previous act of aggression or not), (e) the relative importance of the game (friendly match or competitive match or European match). For 62% of the participants, violently pushing an opponent was considered as practically never condonable. For 38% of the participants, this behaviour was sometimes condonable. Professional handball players (60%), more frequently than lay people (27%) or amateurs (34%), supported the view that pushing an opponent can sometimes be condonable. Different positions on moral judgment were observed according to the involvement in the practice of sport.

The field of sport reveals behaviour with moral virtues such as respect and fair play and conversely behaviour that can be considered by individuals as immoral or unethical such as aggression, doping, and cheating (Kavussanu, 2007). Immoral behaviour and ethics in sport are very visible issues because they often take place in the presence of a large public, and are usually reported to a still larger public through the media (Weiss & Smith, 2002). We are interested in the moral judgment of the violation of rules in sport, which is shared by the general public.

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Ethics in sport is, amongst other things, a question of judgment. In fact, an aggressive act is not in itself ethical or unethical but can be judged as conforming or not to ethics. Problems of ethics arise often in situations considered as complex and emotionally charged in which the available information can lead you in opposite directions. A code of ethics is little help when deciding what it is advisable to do or not to do. A report has been published by members of the medical profession stating that it is always in concrete situations that problems of medical ethics arise (for a review, Mullet & al., 2012).

In their early studies on human forgiveness, Mullet, Houdbine, Laumonier, and Girard (1998) considered two questions: what is the averaged level of willingness to forgive? Which factors influence that willingness to forgive? They highlighted a cumulative process with four dimensions such as sustainable resentment, forgiveness versus vengence, circumstances of the offense and social and personal circumstances (Mullet et al., 1998). The forgiven schema has been examined by Girard and Mullet (1997) by looking at its constituents and its structure. They considered six factors (proximity, intent, severity, cancellation of consequences, apologies, and attitude of others). Among the dimension circumstances related to the insult and to the offender, the elements which appeared the most important were the consequences of the act, the intentionality of the act the apologies and the proximity with the offender. According to these authors, the forgiven schema obeys an additive rule: Forgiveness = Intent + Cancellation of consequences + Proximity with the offender + Apologies. Subsequent studies on forgiveness meaning have been conducted among different populations sharing different cultures and different religious traditions and have provided support for this basic schema (Azar, Mullet, & Vinsonneau, 1999; Mullet & Azar 2009; Azar & Mullet, 2001).

Moral judgments in sport depend on several factors too (for a review, Kavussanu, 2007, 2008), so the approach of information integration appears best suited (Anderson, 1996, 2008). It may complete a patchy knowledge of ethical judgment in sport by studying the manner in which persons take into account numerous elements of information of all types to arrive at a global ethical judgment (Anderson, in press).

Individual differences are probably operative in moral judgment in sport (e.g., Mullet et al., 2012) since moral judgment is linked to personal values which often differ considerably according to an individual's past. Therefore, this is taken up by studying several groups of persons: lay people, amateur players and professional players. Statistical methods like

cluster analysis are used to unravel individual differences in moral judgment (e.g., Nann et al., 2012).

Handball is chosen because it is in a specific area in sport, that requires contact and social interaction. It presents complex situations in which some elements point in one direction and some others in the opposite direction. That can lead to problems of aggressive behaviour. Numerous factors are very often in play, and they are likely to contribute in a complex way to the final judgment relating to conformity with ethics.

Present study

The present study in sports psychology applies Anderson's theoretical framework to highlight the issue of ethical judgments in sport. More particularly, it was aimed at complementing the set of ethical studies by (a) examining the cognitive processes whereby persons with distinct degrees of involvement in sport judge the acceptability/legitimacy of an "aggressive" act, and (b) identifying diverse ethical positions in sport. It supplemented the lack of knowledge about the cognitive structure of moral judgment when athletes deal with aggression (Roman, Pantaléon, & Cabagno, 2009).

The study used the same technique that has recently been developed in the field of medical ethics (for a review, Mullet et al., 2012). The concrete case, i.e., the situation which really exists in handball, that has been chosen by the authors is the one in which a handball player has pushed an opponent player at the end of a match in order to prevent this player's team from scoring. We have chosen it because this specific scenario is sufficiently prevalent when settling a score with an aggressor (Stornes & Roland, 2004). The choice of handball was guided by the fact that this activity can be described as a team contact sport where physical contact is frequent (Silva, 1983) and where aggressive acts have been looked at by certain authors (e.g., Rascle & Coulomb-Cabagno, 2003). These choices have been confirmed by one of the three authors of the present study who has been a professional handball player for seventeen years and is therefore very familiar with this sort of situation.

The situational factors that were considered in the current study were the ones that usually characterise this type of situation in handball (Fruchart, Rulence-Pâques, Dru, & Mullet, 2010), and whose effect on acceptability/legitimacy has already been suggested by various authors: (a) the relative importance of the game (friendly match or championship match, see Maxwell, Visek, & Moores, 2009), (b) the current score (whether the aggressor's team is losing or winning, see Rascle, Traclet, Souchon, Coulomb-Cabagno, & Petrucci 2010), (c) the time left to play (see Rascle et

al., 2010), (d) the fact that the current aggressor has been the victim of a previous aggressive act from the opponent player (see Maxwell & Moores, 2006), and (e) the severity of the consequences of the act (injury or not, see Duda, Olson, & Templin, 1991).

As a result, in the present study, we expected (Hypothesis 1) to find several individual ethical positions. In the many studies to date that have been conducted in medical ethics using the approach described above, different individual positions have, most of the time, been found. For instance, in the medical study by Teisseyre, Vanraet, Sorum and Mullet (2010), no less than five positions were evidenced among participants, and these positions ranged from complete unacceptability, irrespective of circumstances (an extreme position), to quasi-complete acceptability. One of them would reflect the conviction that, irrespective of circumstances (the four situational factors mentioned above), an aggressive act during a match is never condonable. Another position would reflect the conviction that an aggressive act is sometimes condonable depending on the circumstances in which it was performed. This result could confirm that there are divergences in moral reasoning in sport (e.g., Bredemeier & Shields, 1984).

We expected (Hypothesis 2) in the second position that when the game was important, when the team was losing, when time left to play was short, when the aggressive act was in retaliation to a previous act of the same nature, and when the consequences were not severe, the aggressive act would be considered as more condonable than when the game was not important, when the team was winning, when time left to play was not short, when the aggressive act was not in retaliation to a previous aggressive act and when the consequences were severe.

In addition, and as indicated before, three different groups of participants have been considered: professional handball players, amateur handball players and lay people. The reason for considering these three groups was based on the fact that the effect of direct involvement in sport on ethical judgment has been understudied (Kavussanu, 2007). The only exception is, to our knowledge, the study by Bredemeier and Shields (1986) who examined moral growth among athletes and non-athletes using sports-specific dilemmas. These authors demonstrated that high school basketball players displayed a lower maturity of moral reasoning than non-athletes. One can, however, also mention the study by Visek and Watson (2005) who compared the legitimacy judgments of male ice hockey players at the youth, high school, college and professional levels and showed that aggressive behaviour was increasingly viewed as legitimate as participants aged. As a result, we expected (Hypothesis 3) the first position would be more frequent

among lay people and amateurs than among professionals and the second position would be more frequent among professionals than among lay people and amateurs. This evidence could support a socialization process in which players accept more easily aggressive behaviours when sport participation increases (Visek & Watson, 2005).

METHOD

Participants. The participants were 113 male adult unpaid volunteers living in France. They constituted a practical sample. The participants were 48 non-players from French universities aged 20-25 (M = 22.48, SD = 6.45), 35 amateur handball players (M = 20.69, SD = 4.84) who trained at least three times a week, and 30 professional handball players (M = 25.8, SD = 4.34) who trained once or twice daily. The aim of the study was explained to the participants who were then invited to participate, and, if they accepted, given the questionnaire.

Material. In accordance with Anderson's methodology (Anderson, 1996), the material was composed of 48 cards containing a story of a few lines, a question, and a response scale. One example card is presented in Figure 1. The stories were composed according to a five within-subject factor design: (a) the consequences of the aggression (the victim is injured and must leave the game or the victim is not injured), (b) the current score (the team is winning or the team is losing), (c) the time left to play (very little time or quite some time), (d) the context of the aggression (the aggressor has been the victim of a previous act of aggression or not), (e) the relative importance of the game (friendly match or competitive match or European match). All possible combinations of these factors yielded $2 \times 2 \times 2 \times 2 \times 3 = 48$ stories.

The question under each story was: "To what extent do you consider that such an act is condonable?" Beneath each story was an 11-point (0-10) response scale with "*Not at all condonable*" indicated on the left of the response scale, and "*Completely condonable*" indicated on the right of the response scale.

Procedure. After having obtained the coach's consent, players were tested individually, generally before or after training. After having obtained the approval of the dean of the university, non-players were met at a university in the North of France. Testing took place in a quiet room (in the club house for amateur handball players, in a team room for professional

handball players and in a classroom for lay people). Participants were instructed to read the scenarios (presented one at a time in random order), and to rate their responses along the response scale. There were two phases: a familiarization phase and an experimental phase (see Anderson, 2008). In the familiarization phase the experimenter explained to each participant what was expected, i.e., that he was to read a certain number of stories in which a player violently pushes an opponent player, and to indicate the degree to which he thinks that the act was condonable. During this phase, participants were presented with eight scenarios taken randomly from the set of 48. The choice of these 8 scenarios was guided so as to expose participants to the full range of stimuli. The purpose of this phase was to make participants as familiar as possible with the test material and the task (Anderson, 2008). Each story was read aloud and participants provided ratings.

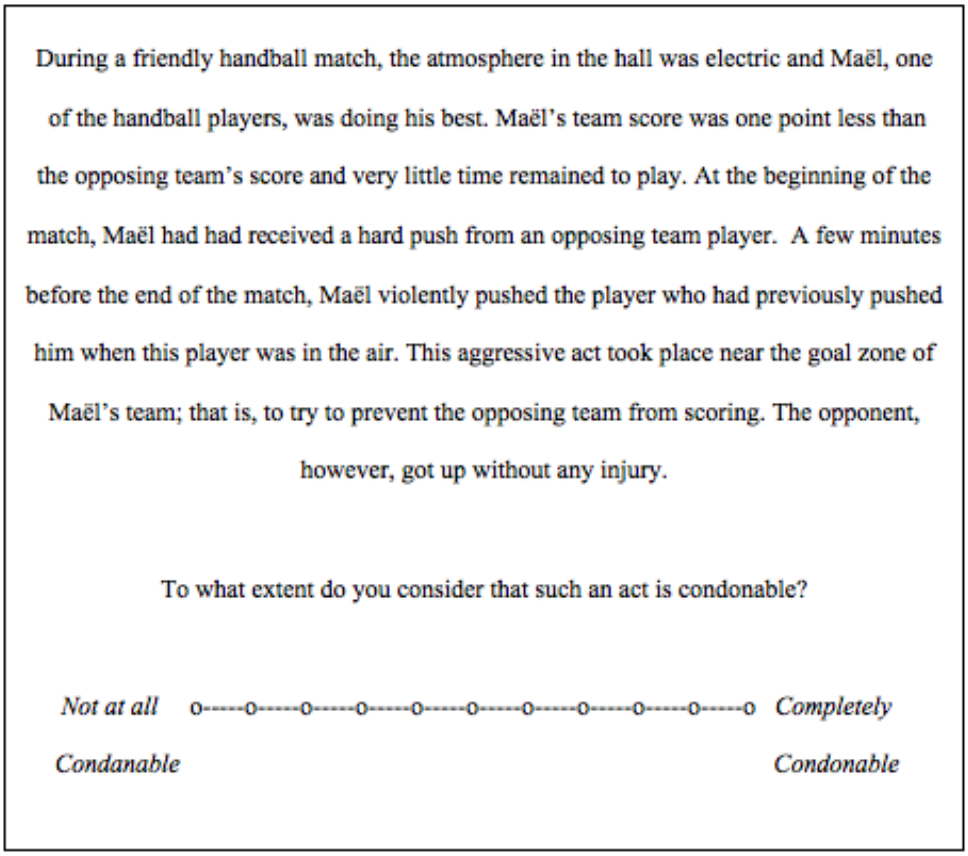

Figure 1. A sample card of the material.

During the second or experimental phase, participants were presented with the whole set of 48 scenarios. They provided the ratings at their own pace but they were not allowed to compare their responses or to go back and make changes as in the familiarization phase. The whole session lasted about one hour.

RESULTS

Participants' ratings from the experimental phase were converted to a numerical value expressing the position on the response scale, the left anchor serving as the starting point. These numerical values were then subjected to statistical and graphical analyses. As we thought that participants were going to respond in very different ways from one another, a cluster analysis was performed on the raw data using a technique that was advocated by Hofmans and Mullet (2011, K-means, Euclidian distances). It is a procedure for identifying individual differences in integration rules and scale values (Hofmans, Shanteau, & Massin, 2012). Two clusters were identified.

The first cluster (N = 70) was termed Seldom Condonable since the mean response was always close to the left hand of the scale (M = 1.48 on a 0-10 point scale). This cluster is shown in Figure 2 (top panels). The mean ratings are on the y-axis. The three levels of importance of the game are on the x-axis. Each curve corresponds to one level of the injury factor. Each panel corresponds to one level of the previous act of aggression factor. The slope of the curves hardly rises, which indicates the very weak effect of the importance of the game. The curves are separate, which indicates the effect of injury. In the left panel, the curves are slightly more elevated in relation to the y-axis than they are in the right panel, which indicates the weak effect of previous aggression. All the curves are parallel, which indicates that there was no interaction between factors. An ANOVA was conducted on the data from this cluster 1. The results are shown in Table 1 and Table 3.

The second cluster (N = 43) was termed Sometimes Condonable since in at least in four cases, the response level was higher than 6 (the mean-point of the scale was 5). These four cases correspond to the situation where the stakes at hand were high, the player had been the victim of a previous aggression and retaliation did not result in injury. This cluster is shown in Figure 2 (bottom panels). The mean value of the 45 responses was 4.23. The slope of the curves is clearly ascending, which indicates the effect of the importance of the game. The curves are clearly separate, which indicates the effect of injury. In the left panel, the curves are more elevated in relation to the y-axis than they are in the right panel, which indicates the effect of

previous aggression. As in the previous cluster, all the curves were parallel, which indicates that there was no interaction between factors. An ANOVA was conducted on the data from this cluster 2. The results are shown in Table 2 and Table 3.

In Figure 2 the parallelism of the curves shows that the integration rule was additive in both clusters. Differences in both clusters were visible in the effect sizes. To test this, an ANOVA with a Cluster × Consequences × Score × Time × Context × Importance design using cluster as between-subject variable was conducted on the set of data. The members of cluster 1 judged less condonable the aggression (M = 1.48; SD = 1.28) than the members of cluster 2 (M = 4.23; SD = 2.28), $F(1.111) = 360.62$, $p < 0.001$, $\eta^2_p = .76$.

Table 4 shows the composition of the two clusters in terms of demographic characteristics. The 3 (Type of participants) × 2 (Cluster) Pearson's chi-square test was significant, χ^2 (2) = 8.79, $p < .02$. Professional players (60%) were significantly more numerous in the Sometimes Condonable cluster than non-players (27%). The 2 (Type of participants [non-players, professionals]) × 2 (Cluster) Pearson's chi-square was significant, χ^2 (1) = 8.35, $p < .005$.

DISCUSSION

The present study examined, in a very analytical way, i.e., in a comparison of diverse personal philosophies, the cognitive processes by which persons who are differently involved in the practice of sport judge the extent to which an "aggressive" act performed by a player during a match could be condoned. The first hypothesis was that different positions on moral judgment would be observed. As already indicated, two very different positions were found. The truly important finding in the present study was that, for 62% of the participants, violently pushing an opponent when he is in the goal zone is considered as practically never condonable; that is, even when the game is important, even when the team is losing, even when the aggressive act is in retaliation to a previous act of the same nature, and even when the consequences are not severe. For 38% of participants an aggressive behaviour is sometimes condonable depending on the circumstances in which it was performed. This confirms that there are divergences in moral reasoning in sport (e.g., Bredemeier & Shields, 1984). This confirms the use of the functional measurement to identify different individual positions in ethical sport.

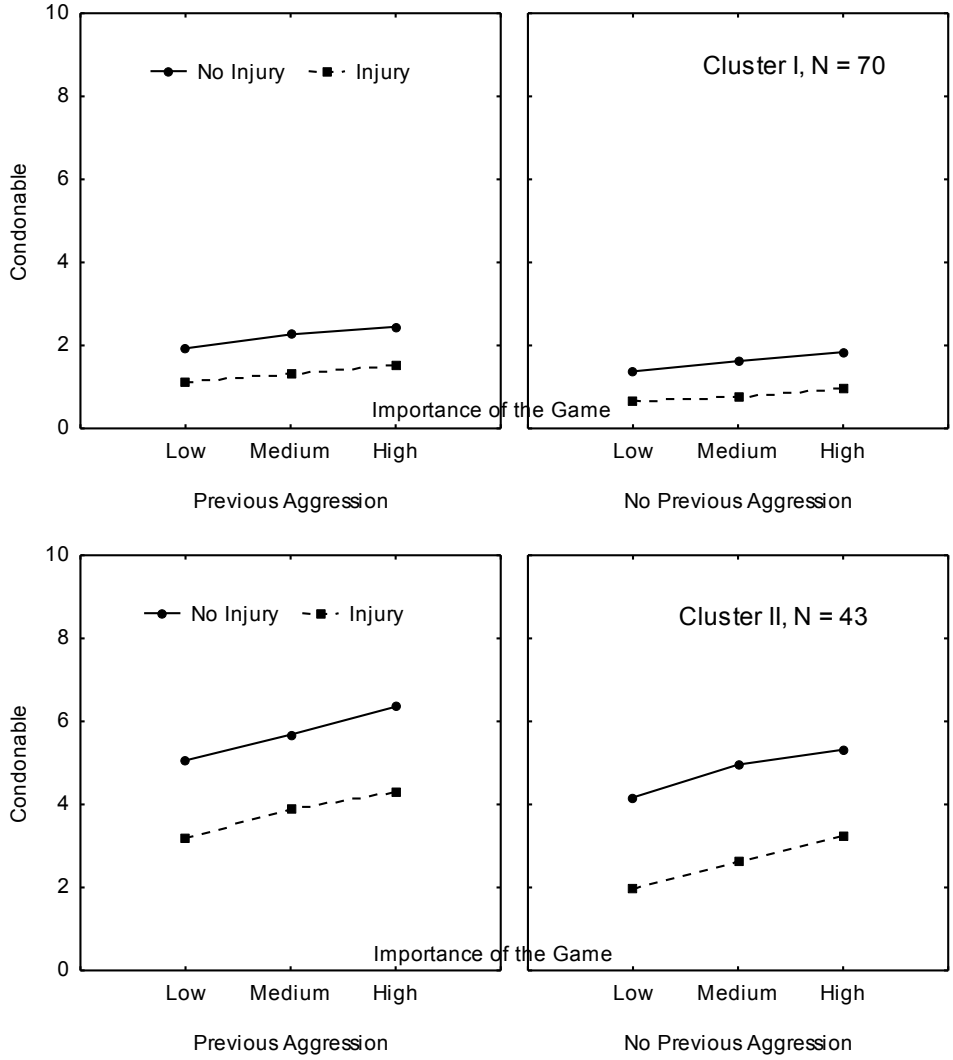

Figure 2. Combined effect of injury, previous aggression, and importance of the game on moral judgments in both clusters

***Note*. Both graphs at the top present Cluster 1's results. Both graphs at the bottom present Cluster 2's results. Each graph of both graphs corresponds to previous aggression values (previous aggression from the left graph and no previous aggression from the right graph). For each graph, moral judgments are plotted along the y-axis. Each curve corresponds to one level of the injury factor. Importance of the game values are positioned along the x-axis.**

Table 1. Main results of the ANOVA performed on Cluster I.

Factor	Effect		Error				
	df	*MS*	*df*	*MS*	*F*	*p*	η^2_p
Injury (I)	1	620.58	69	8.31	74.71	.001	.52
Score (S)	1	16.58	69	3.01	5.50	.022	.07
Time (T)	1	9.86	69	2.05	4.82	.032	.07
Previous Aggression (A)	1	262.98	69	5.23	50.26	.001	.42
Importance (G)	2	47.31	138	4.13	11.47	.001	.14
I x S	1	0.02	69	0.95	0.02	.888	.00
I x T	1	0.27	69	0.82	0.33	.570	.01
S x T	1	0.43	69	0.67	0.64	.425	.01
I x A	1	1.54	69	0.86	1.80	.184	.03
S x A	1	0.93	69	0.87	1.07	.304	.02
T x A	1	1.46	69	0.90	1.62	.207	.02
I x G	2	2.23	138	1.09	2.05	.133	.03
S x G	2	2.52	138	0.65	3.87	.023	.05
T x G	2	1.26	138	0.70	1.81	.168	.03
A x G	2	0.88	138	0.98	0.90	.411	.01

However, no individual differences appeared in the integration of five moral informers which is shown by the parallelism of the graphs and the absence of statistical interaction in both clusters. Individual differences were presented in the extent of condoning high versus low. This result correlated with the cognitive rule which is found in bioethics (e.g., Nann et al., 2012) or the forgiven schema following the additive rule (e.g., Mullet & Azar, 2009). We can synthesise the current finding from the following equation: Condoning = Injury + Context of Aggression + Importance of the Game. Like the results in medical ethics (Mullet et al., 2012) or in forgiven schema (e.g., Girard & Mullet, 1997), the acceptability judgments in sport obeyed stable rules.

Table 2. Main results of the ANOVA performed on Cluster II.

	Effect		Error				
Factor	*df*	*MS*	*df*	*MS*	*F*	*p*	η^2_p
Injury (I)	1	2 167.26	42	24.23	89.46	.001	.68
Score (S)	1	0.59	42	5.43	0.11	.743	.00
Time (T)	1	22.81	42	6.39	3.57	.066	.08
Previous Aggression (A)	1	543.35	42	47.97	11.33	.002	.21
Importance (G)	2	256.01	84	16.89	15.16	.001	.27
I x S	1	0.02	42	2.00	0.01	.914	.00
I x T	1	2.44	42	2.30	1.06	.309	.02
S x T	1	4.75	42	1.77	2.69	.109	.06
I x A	1	10.76	42	3.42	3.14	.083	.07
S x A	1	0.06	42	2.36	0.02	.876	.00
T x A	1	0.17	42	2.67	0.07	.799	.00
I x G	2	0.01	84	2.29	0.01	.994	.00
S x G	2	0.86	84	3.01	0.29	.751	.00
T x G	2	0.88	84	2.05	0.43	.651	.01
A x G	2	0.32	84	3.09	0.10	.903	.00

The second hypothesis was that participants from cluster II would take into account for judging, the five information factors that described the situations: importance of the match, current score, time left to play, previous aggression, and severity of consequences. This hypothesis can be considered as partly supported by the data. Only three of the sets of circumstances (the consequences of the act of aggression, the context of the act aggression and the current score) were taken into account, and the severity of the consequences factor was clearly the dominant one over the importance of the match and the existence of a previous act of aggression.

Table 3. Means and SDs for each factor for both Clusters.

Factor	Cluster I		Cluster II	
	M	*SD*	*M*	*SD*
INJURY				
No injury	1.91	0.54	5.26	0.75
Injury	1.05	0.40	3.21	0.87
SCORE				
Team is losing	1.55	0.43	4.25	0.72
Team is winning	1.41	0.43	4.22	0.61
TIME				
Very little time	1.54	0.43	4.34	0.74
Quite some time	1.43	0.42	4.13	0.61
PREVIOUS AGGRESSION				
Victim	1.76	0.46	4.75	1.05
No victim	1.20	0.43	3.72	0.88
IMPORTANCE				
Friendly match	1.27	0.37	3.59	0.84
Competition match	1.49	0.34	4.30	0.51
European match	1.68	0.44	4.81	0.77

Time left to play and current score had no significant impact on judgments.The findings from these 38% of the participants were thus consistent with previous results about the effect of the consequence of the act of aggression (Duda et al., 1991), the effect of the relative importance of the game (Maxwell et al., 2009) and the effect of the current score (Rascle et al., 2010) on the legitimacy of aggressive behaviour. The highest rating that was observed in this cluster corresponded to the situation in which the consequence of the act was benign, the match was an important one and the player had himself been the victim of a previous aggressive act. The moral disengagement / attribution of blame mechanism (Bandura, 1991) can explain why the behaviour was condoned more when it was retaliatory in nature. Sportsmen assessed that their act of aggression was just a response to the act of aggression of which they had been the victim in the first place. Even in this case, however, the rating was moderate: 6.60 on a 0-10 point scale. In other words, even in the most favourable situation, pushing an opponent was not fully condoned.

Table 4. Composition of the Clusters in terms of involvement in sport.

	Cluster		
Participants	Seldom Condonable	Sometimes Condonable	Total
Lay People	35 (73%)	13 **(27%)**	48
Amateurs	23 (66%)	12 (34%)	35
Professionals	12 (40%)	18 **(60%)**	30
Total	70	43	113

Note: Percentages in bold are significant at $p < .005$ in the 2 (Type of participants [non-players, professionals]) x 2 (Cluster) Pearson's chi-square test. Percentages in normal character are significant at $p < .02$ in the 3 (Type of participants) x 2 (Cluster) Pearson's chi-square test.

The third hypothesis was that the percentage of lay people and amateurs that develop the first ethical position would be more important than the percentage of professionals and the percentage of professionals that develop the second ethical position would be more important than lay

people and amateur. This hypothesis can be considered as supported by the data. Professional handball players, more frequently than lay people, supported the view that pushing an opponent can sometimes be condonable. The difference between the moral judgment of amateur handball players and that of lay people was not significant. As a result, it can be stated that the level of involvement in the practice of sport seems to have a significant effect on moral judgment. This result could be explained by the concept of the professionalization (and concept of socialization) of attitude among athletes which submits that professional athletes place increasing importance on winning at the expense of fair play (Visek & Watson, 2005) but also, in view of our findings, at the expense of moral judgment. We could refer to professionals, amateurs and non-players are not looking for the same things in sport and do not conceive aggression in the same manner according to personal goal orientations (Dunn & Causgrove-Dunn, 1999; Rascle & Coulomb, 2003). In some situations, professionals can perceive this as necessary in order to reach their sports aim. Going in quest of positive results inclines them to employ aggression as a tool. On the contrary, non-players and amateur players would not be able to imagine using aggressive behaviour as a sports strategy.

As limitation, we used vignettes, not real situations. Even though reading vignettes is very different from seeing players on the court, vignettes are commonly used in studying the judgments and decisions of professionals and non-professionals, and their use has been validated (for a review regarding the ethics setting, see Ulrich & Ratcliff, 2007). The external validity of the methodology used in the present study was found to be good by Levin, Louviere, Schepanski and Norman (1983) and by Fruchart, Rulence-Pâques and Mullet. (2007). In the present study, we used genuine sportsmen, used typical information cues from a sports environment, and presented plausible situations in the vignettes (which could have described sports situations in any place in the world). The participants had little trouble in making judgments. This is an important sign of the validity of the vignettes. If the situations had been unacceptable, the judgment process would have been much more laborious for participants. In addition, the rules used by our participants were similar to the judgment rules found in many other types of studies in the moral-ethical field (Anderson, in press), and the differences observed between participant groups (professionals, amateurs, and lay people) were meaningful. Moreover, in the present study, we needed to use vignettes for the following reason. We examined how information cues were weighed, how they were combined and how different categories of participants differed in weighing and combining the factors. One condition for examining the processes of

weighing and combining, independently of other processes, is that each participant has the same information presented in the same way.

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