Justifications of Aggressive Behavior in Contact and Semicontact Sports

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The present study examines the extent to which athletes in selected contact and semicontact sports report agreement or disagreement with the use of intentional acts of aggression during competition. Eighty-five male athletes responded to the Bredemeier Athletic Aggression Inventory–Short Form and the Mintah Huddleston Aggression Justification Inventory. Overall results revealed no significant differences between subjects' use of hostile and instrumental aggression in sport and between the hostile and instrumental justifications provided for such behavior. Results indicated that contact-sport participants disagree more with the use of instrumental aggression than semicontact-sport participants.

Few athletes and coaches would disagree with the notion that acts of intentional aggression or violence are unacceptable in everyday life. Yet, many individuals involved in athletic competition consider aggression (behavior intended to harm or injure another person) to be an acceptable component of today's contact and semicontact sports (Bredemeier, 1985; Silva, 1980a). Intentional aggression is classified as either hostile or instrumental. Hostile aggression usually involves frustration or anger along with the intent to harm or injure another. The primary goal, then, is the resultant pain or suffering of the victim. The focus of hostile aggression, therefore, might be to hurt one's opponent to the extent that the injured athlete must be removed from the game. Instrumental aggression also involves the intent to injure; however, the ultimate goal is a specific competitive outcome or tangible reward (Silva, 1980b). The intent of instrumental aggression is focused more on the aspects of the game, such as scoring or gaining possession of the ball. Research in the area of moral reasoning and intentional sport aggression has supported a differentiated or bracketed morality (Bredemeier & Shields, 1984a, 1984b). That is, the moral reasoning athletes use for sport-specific situations is generally lower (i.e., less principled) than for everyday life situations.

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Bredemeier and Shields (1984a), for example, explored the situational (sport vs. everyday life) moral reasoning of athletes (30 high school and 50 college) and nonathletes (20 high school and 20 college). Subjects responded to four hypothetical moral dilemmas in a 60-min interview. The interviews yielded one moral reasoning score for life situations and another for sport situations for each subject. Overall results indicated that the moral reasoning subjects used for sport-specific situations was lower than that used for everyday situations.

Additional work by Bredemeier and Shields (1984b) examined the moral reasoning of male (n = 24) and female (n = 22) high-school basketball athletes, coaches' rankings and ratings of player aggressiveness, and season statistics on fouls. Results suggested that principled moral reasoning was inversely related to intentional athletic aggression. In other words, low moral reasoning was typically seen with a higher occurrence of intentional aggression (hostile and instrumental). Though the association does not imply a cause-and-effect relationship, the findings do lend additional support to the notion that sport may allow for, if not encourage, an altered and differentiated morality for participants.

Further evidence to support the concept of a differentiated morality operative in sport settings has been provided by Bredemeier and Shields (1985). Results indicated that the differentiated moral reasoning may also be specific to activity or sport type. For example, basketball players' moral reasoning was lower than that of the swimmers tested. The authors surmised that the unique context of contact sports may present athletes with moral dilemmas that noncontact sport athletes do not encounter. The notion that participation in a contact sport may require athletes to make greater adaptations in moral reasoning requires further examination.

If intentional aggression is considered unacceptable in everyday life, then the process of developing a separate game morality for the use of intentional aggression would logically require athletes to rationalize such behavior or experience certain moral conflict. It might be expected, for example, that hostile and instrumental aggression would be justified or rationalized in a socially acceptable context. Athletes may not feel comfortable acknowledging or disclosing hostile justifications for either type of behavioral aggression. To date, however, empirical research has not been focused on the types of justifications provided by athletes who agree with the use of intentional aggression in sport. Also, in light of previous research (Bredemeier & Shields, 1985), it is important to investigate the use and the justifications for use of hostile and instrumental aggression by athletes in different types of sports (i.e., contact and semicontact). The present study, therefore, is designed to explore the relationship between the extent of agreement or disagreement with the use of hostile and instrumental aggression and the types of justifications (hostile or instrumental) provided by athletes in contact and semicontact sports.

Method

Participants

Voluntary participation was solicited by mailing two questionnaires to 177 male intercollegiate football (n = 110), basketball (n = 14), wrestling (n = 24), and soccer (n = 29) athletes at one NCAA Division I-AA university. Eighty-five (48% of the total sample) athletes (football, n = 31; basketball, n = 12; wrestling, n = 13; and soccer, n = 29) between 17 and 42 years of age (M = 22.69 years, SD = 4.39) consented to participate and returned completed questionnaires. Subjects responded to self-report questionnaires designed to identify the degree to which they agreed or disagreed with intentional acts of aggression committed in sport, and the extent of their agreement or disagreement with specific justifications for aggressive behavior.

Dependent Measures

Hostile and instrumental aggression. Wall and Gruber's (1986) shortened version of Bredemeier's (1975) Athletic Aggression Inventory was modified for the purposes of the present investigation. Bredemeier's Athletic Aggression Inventory–Short Form (BAAGI-S) is comprised of 30 items for the assessment of hostile, instrumental, and overall aggression. Items 29 and 30 on the BAAGI-S comprise the overall aggression subscale and, therefore, were deleted for the purposes of the present study. The resultant 28-item inventory assessed hostile/reactive and instrumental aggression on a 4-point Likert-type scale. Scores for each subscale range from a low of 14 (*strong agreement*) to a high of 56 (*strong disagreement*). The midpoint (*neutral*) response for each subscale is 35.

Wall and Gruber (1986) reported stability coefficients of .85 and .95 for the instrumental and the hostile subscales, respectively. Coefficients of internal consistency ranged from .09 to .57 for the instrumental aggression subscale items, and from .29 to .86 for the hostile/reactive aggression subscale items. The authors surmised that the hostile/reactive subscale was acceptably stable, while the instrumental subscale items lacked stability upon repeated administration of the inventory. Wall and Gruber (1986) recommended further research on the BAAGI-S in order to establish its validity as a measure of intentional aggression.

Justifications for hostile and instrumental aggression. A second questionnaire, the Mintah Huddleston Aggression Justification Inventory (MHAJI), was designed by the present investigators to explore the justifications that athletes provided for aggressive behavior in sport. A separate sample of 41 former interscholastic and intercollegiate athletes (basketball, football, ice hockey, rugby, soccer, and wrestling) were provided with operational definitions of hostile and

instrumental aggression and requested to furnish a maximum of six reasons/justifications for behaving aggressively in sport. The investigators then categorized the resultant 246 justifications as either hostile or instrumental aggression. Duplicate items were eliminated, and subsequent revision resulted in a 40-item questionnaire. A panel of three Division I level coaches, with knowledge in sport psychology, judged the remaining items for face validity and clarity. Further refinement, based on the judges' constructive criticism, resulted in a 24-item MHAJI that measures hostile and instrumental justifications for sport aggression on a 4-point Likert-type scale. Subscale scores range from a low of 12 (*strong agreement*) to a high of 48 (*strong disagreement*). The midpoint (*neutral*) response to each subscale is 30. High scores on both subscales reflect disagreement with hostile and instrumental justifications for aggressive sport behavior.

Procedures

An institutional Human Subjects Review Board approved the experimental protocol, and permission to contact university athletes was obtained from the athletic director. A cover letter, the BAAGI-S, the MHAJI, and a return envelope were mailed to each of the potential subjects. The cover letter briefly explained the purpose of the study and assured complete confidentiality of the athletes' responses. Furthermore, no identifying information was requested of the athletes, and participation was strictly voluntary.

Results

Participant Characteristics

An initial review of the data indicated that participants in contact sports might differ from those in semicontact sports in both age and number of years they had participated in their sport. The semicontact-sport participants were older (M = 24.9, SD = 1.24) than were the contact-sport participants (M = 20.49, SD = 5.26). The age difference between the groups was significant, $t(83) = -5.53$, $p < .05$. Participant age also proved to be correlated with the four dependent variables in the main analysis. The correlation with BAAGI-S hostile was .34; with BAAGI-S instrumental, $r = -.26$; with MHAJI hostile, $r = .29$; and with MHAJI instrumental, $r = .26$. Therefore, the older the athletes, the more likely they were to disagree with the use of hostile aggression and to agree with the use of instrumental aggression. In addition, the older the athletes, the more likely they were to disagree with the use of hostile or instrumental justifications for aggressive behavior. All correlations were significant with $p < .05$. The differences between the groups and the significant correlation with the dependent variables indicated the appropriateness of age as a covariate for subsequent analyses

(Keppel, 1973). Both contact- and semicontact-sport participants had been competing in their respective sports for a mean of 10.1 years.

To obtain an initial estimate of how athletes' agreement with the use of hostile or instrumental aggression compared to their agreement with justifications for hostile or instrumental aggression, scores on the BAAGI-S and MHAJI subscales were converted from total scores to mean scores per response on each subscale. Athletes, regardless of type of sport, disagreed more with using hostile justifications for aggressive acts ($M = 3.14$, $SD = 0.60$) than they did with the use of hostile aggression ($M = 2.50$, $SD = 0.41$). The difference was significant, $t(84) = -9.40$, $p < .001$. The same discrepancy was found on the instrumental subscales. Athletes disagreed more with the use of instrumental justifications for aggression ($M = 3.16$, $SD = 0.61$) than they did with the use of instrumental aggression ($M = 2.38$, $SD = 0.33$). The difference was significant, $t(84) = -10.53$, $p < .001$. While athletes were essentially neutral about the use of hostile aggressive acts in the sport setting, they agreed slightly with the use of instrumental aggression, and disagreed that either hostile or instrumental justifications for aggressive acts were appropriate.

Preliminary Analysis of Subscales on Both Questionnaires

The partial correlations procedure was used to control for the effect of age on the dependent variables and to determine the relatedness of the subscales on the BAAGI-S and the researcher-generated MHAJI. As illustrated in Table 1, neither of the BAAGI-S subscales correlated with the MHAJI subscales, nor were the BAAGI-S subscales correlated with each other ($p > .05$). The MHAJI hostile and instrumental subscales, however, were found to be highly related ($r = .80$, $p < .001$).

A paired t test was used to determine whether there was a difference in the extent to which athletes, regardless of sport type, agreed with the practice of hostile and instrumental aggression in sport. Overall results revealed no significant difference between the hostile ($M = 35.02$, $SD = 5.81$) and instrumental aggression scores ($M = 33.36$, $SD = 4.68$) on the BAAGI-S, $t(84) = 1.87$, $p > .05$.

A paired t test was also employed to determine whether there was a difference in the agreement on the use of hostile and instrumental justifications for aggressive behavior. For all subjects, results showed that the difference between hostile ($M = 37.68$, $SD = 7.24$) and instrumental ($M = 37.97$, $SD = 7.32$) justification scores were not significant.

Main Analysis

The primary interest in this study was whether athletes competing in contact and semicontact sports differed in their agreement with the use of hostile and

Table 1

Partial Correlations Between the BAAGI-S and MHAJI Subscales

	BAAGI-S		MHAJI		
Subscales	Hostility	Instrumental	Hostility	Instrumental	*M* (*SD*)
BAAGI-S					
Hostility	1.00	-.09	.20	.09	35.02 (5.81)
Instrumental		1.00	.10	.11	33.36 (4.68)
MHAJI					
Hostility			1.00	.80*	37.68 (7.24)
Instrumental				1.00	37.97 (7.32)

*$p < .001$.

instrumental aggression, and in the types of justifications for aggressive behavior they thought appropriate. MANCOVA was employed to examine differences between the two sport groups on the BAAGI-S and MHAJI subscales. Age was the single covariate entered into the analysis.

The mean vectors for the four dependent variables treated simultaneously differed between the two sport groups as indicated by a significant main effect for sport, Wilks's $\Lambda = 0.88$, $F(4, 79) = 2.56$, $p < .05$. The semicontact-sport participants scored slightly higher than did the contact-sport participants on both the BAAGI-S hostile ($M = 36.29$, $SD = 5.72$, and $M = 33.98$, $SD = 5.36$, respectively) and the MHAJI hostile ($M = 39.09$, $SD = 5.15$, and $M = 36.51$, $SD = 8.27$, respectively). Semicontact-sport participants ($M = 38.5$, $SD = 5.86$) also scored higher than the contact-sport participants ($M = 37.6$, $SD = 8.27$) did on the MHAJI instrumental subscale. However, none of these differences were significant. Only on the BAAGI-S instrumental subscale was there a significant difference in the two sport groups. On this assessment, the participants in semicontact sports scored significantly lower than did the participants in contact sports ($M = 31.97$, $SD = 4.48$, and $M = 34.57$, $SD = 4.40$, respectively). This difference was reliable, univariate $F(1, 82) = 5.28$, $p < .05$.

Discussion

The main purpose of this study was to investigate the extent of agreement or disagreement with the use of intentional aggression and justifications for aggressive behavior between athletes of contact and semicontact sports. A significant difference between sports was observed for the means of the BAAGI-S instrumental subscales. That is, contact-sport athletes agreed with the use of

instrumental aggression less than did the semicontact-sport athletes. Interestingly, the observed means for the BAAGI-S hostile subscale were in the opposite direction. Although not significant, the BAAGI-S hostile means indicated that contact-sport athletes may agree with the use of hostile aggression more than the semicontact-sport athletes. This inference supports previous research findings. Bredemeier and Shields (1986) surmised that contact-sport athletes considered intentional aggression to be tantamount to intense competitive play. It is also possible, therefore, that contact-sport athletes might not recognize examples of instrumental aggression as being intense enough for contact-sport competition. It might be that athletes in sports that are based on full body contact view instrumental aggression as natural game behavior and hostile aggression, perhaps, as a more appropriate means to the desired outcome of winning. Bredemeier and Shields (1984b) proposed that interactive full-body contact sports may require more adaptation of moral reasoning than parallel, individualistic sports. It is conceivable, therefore, that full-body contact-sport athletes' concept of acceptable competitive behavior is different from that of semicontact-sport athletes. Obviously, further testing on a larger and more representative sample is warranted before conclusive explanation can be provided.

Preliminary analyses revealed that the two BAAGI-S subscales did not correlate with each other; therefore, they are apparently measuring two distinct concepts. Even though athletes viewed hostile aggression as something different from instrumental aggression, there was no significant difference between the overall mean scores on the BAAGI-S hostile and instrumental subscales. In other words, all athletes were essentially neutral on the use of hostile aggression, and slightly in favor of the use of instrumental aggression (M_{df} = 2.38, SD = 0.33), $t(84) = -3.22$, $p < .05$. The responses indicate that the athletes neither disagreed nor strongly agreed with the use of hostile or instrumental aggression in competition. Our results do not entirely support earlier findings that athletes agree with the use of both types of intentional aggression in the sport realm (Bredemeier, 1994; Bredemeier & Shields, 1984a, 1984b, 1986).

Preliminary results showed that the MHAJI subscale scores were highly correlated. Overall, athletes moderately disagreed with the use of both hostile and instrumental justifications. The MHAJI indicated that athletes in the present investigation generally disagreed with both hostile and instrumental justifications for aggressive behavior in sport. If athletes in contact and semicontact sports consider intentional aggression to be normal sport behavior, they may believe that no justification is necessary or warranted. This would account for the lack of correlation between agreement with the use of intentional aggression and agreement with justifications of that behavior. A second alternative seems possible. Athletes' approval or disapproval of justifications for behavior they find acceptable in the sport setting may be masked by attempts to present their reasons in a way which is more acceptable in the broader social context. It is possible that

the general disapproval of both hostile and instrumental justifications for aggressive behavior reflect some moral conflict between athletes' acceptance of aggressive behavior in sport and acceptable behavior in other aspects of living.

The BAAGI-S subscales were also found not to correlate with the MHAJI subscales. The lack of agreement indicates that the new MHAJI instrument is measuring something different from that measured by the BAAGI-S. One possibility, of course, is that there is a difference between agreement with the use of intentional aggression and the ability or willingness to justify the behavior. That is, athletes may find it difficult to justify a behavior that is a learned response to specific competitive situations. The other possibility that must be considered is that the MHAJI is not a valid instrument for the measurement of different reasons or justifications for the use of intentional aggressive behavior in sport.

Multivariate analysis indicated no significant between-sport differences in the MHAJI hostile and instrumental subscales. The contact-sport and semicontact-sport means were all somewhat high for hostile (M = 36.5, SD = 8.27, and M = 39.0, SD = 5.15, respectively) and instrumental (M = 37.5, SD = 8.27, and M = 38.5, SD = 5.86, respectively) justifications. The high means (30 is neutral) indicate disagreement with the use of hostile or instrumental justifications for aggression. The high means suggest that sports involving any degree of contact may alter moral reasoning to the extent that participating athletes do not feel the need to justify or defend aggressive behavior (Bredemeier & Shields, 1985). An alternative explanation, of course, would be that athletes do not feel that aggressive behavior can be justified. Such an interpretation would be counter to findings by Bredemeier and Shields (1984a, 1984b, 1985).

It is important to note that the results should be viewed as preliminary. The possibility that the BAAGI-S and the MHAJI were invalid tools for the assessment of aggressive behavior and justifications, respectively, cannot be disregarded. Wall and Gruber (1986) showed that further work was needed on the BAAGI-S to ascertain its effectiveness, and the present authors concur. Although we believe further research regarding how athletes justify acts of intentional aggression is warranted, it is recognized that the MHAJI requires validation prior to its continued use. It is also recommended that future research be designed to investigate aggression differences between sports, and the justifications provided by participants in different sports to further our understanding of aggressive athletic behavior.

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