



## Research Article

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# The Decision to Play Hurt: Contextual Moderators of Non-Stakeholders' Perceptions of Athletes

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### Abstract

This study examined how an athlete's decision to play (or not to play) hurt and the situational context in which the decision was made affected how the athlete was perceived by individuals without a vested interest in the athlete playing with an injury. After reading a scenario about an intercollegiate basketball player who elected to play hurt or not to play hurt, who had been playing well or playing poorly while injured, and whose team had been playing well or poorly, undergraduate students (131 women and 65 men) rated the player on 7 personal attributes. ANOVA revealed that although there were no significant effects when the player was depicted as playing well, the player was evaluated significantly more favorably when electing not to play hurt when the player was depicted as playing poorly. Thus, people who do not have a vested interest in an athlete participating in a game evaluate the athlete in a manner that is inconsistent with the prevailing expectations in sport culture that athletes should play hurt.

### Keywords

Culture of risk, Injury, Return to play, Sport ethic

## Introduction

According to Hughes and Coakley [1], the sport environment is permeated by the "sport ethic", a value system in which making sacrifices, striving for distinction, accepting risks, playing through pain, and refusing to accept limits are extolled as virtuous. Athletes, it has been argued, are socialized into this "culture of risk" [2] through exposure to media glorification of athletes who play through pain/injury and contact with members of their social networks (e.g., coaches, teammates, administrators) who reinforce the values of self-sacrifice and risky behavior for the good of the team [1-5].

Research has documented various aspects of the proposed process by which athletes learn and potentially internalize the sport ethic. Highlighting the role of the media in promoting the values of the culture of risk, Nixon [6] analyzed the contents of more than two decades of issues of a popular American sports magazine and determined that "athletes are exposed to...messages that tell them they must play as long as possible with pain and injuries" (p. 188). A more recent analysis of the same magazine yielded similar findings [7]. Along with the media, coaches may also play a key role in transmitting the sport ethic, as they have extensive contact with

and exert a high degree of control over athletes. In a survey of 26 intercollegiate sport coaches [8], the majority of the sample expressed at least partial agreement with statements that normalize pain and injury in sport (e.g., "No pain, no gain", "Athletes who endure pain and play hurt deserve our respect", "Playing with injuries and pain demonstrates character and courage").

In addition to endorsing tenets of the sport ethic, coaches have been shown to make different decisions about whether an athlete should play hurt as a function of contextual factors. Flint and Weiss [9] investigated the extent to which basketball coaches' decisions regarding whether to return a hypothetical injured player to a game was affected by the game situation and whether the player was a starter or a nonstarter. Coaches tended to ad-

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vocate for the return of starters during close games, but not games for which the result was not in doubt. In contrast, coaches decided to return players not in the starting lineup to action during games where the result was not in doubt, but not during close games. It has also been suggested that sports medicine clinicians' injury-related judgments may be influenced by situational factors such as the timing and importance of competitive events [10].

One consequence of the normalization of pain and injury in sport is that athletes may experience pressure to play while injured. Approximately 49% of the 156 inter-collegiate athletes surveyed by Nixon [11] reported that they had felt pressured by their coaches to play hurt, with 41% reporting feelings of pressure from their teammates and 17% reporting feelings of pressure from their athletic trainers to play hurt. Presumably underlying such feelings of pressure are concerns about going against the sport ethic if they choose not to play hurt. Athletes who decide not to play while injured face being evaluated unfavorably by others in their social networks and experiencing the potential social and monetary consequences of those unfavorable evaluations. Similar experiences of pressure have been reported in more recent research with professional, amateur, and recreational athletes [12-14]. Although the research of Nixon [11] suggests that the threat of unfavorable evaluation for choosing not to play hurt looms largest from those with a vested interest in the return of athletes to play (e.g., coaches, teammates, fans). It is not known, however, how non-stakeholders—people without such a vested interest in athletes playing hurt—evaluate athletes who decide not to play while injured. It is possible that the sport ethic is so pervasive and entrenched in the culture of sport that even people who have no stake in whether athletes return to sport would evaluate athletes who choose not to play hurt unfavorably.

The purpose of the current study was to examine the effect of the decision to play hurt on non-stakeholders' evaluations of an athlete and the extent to which this effect is moderated by two contextual factors: how well the athlete was performing prior to the decision and how well the team was performing with the athlete in the lineup. If vested interest is primarily responsible for the pressure to play hurt that athletes experience, it would be expected that non-stakeholders' evaluations of an athlete would not differ as a function of whether the athlete decided to play hurt, how well the athlete was performing prior to the decision, and how well the team was performing with the athlete in the lineup. In contrast, if the overriding influence on the pressure to play hurt is the sport ethic and its corollary that athletes are expected to play hurt, non-stakeholders' evaluations of an athlete should be more favorable when the athlete decides to play hurt,

particularly when the athlete is playing well and the team is playing well.

## Materials and Methods

### Participants

Participants were 196 undergraduate students (131 women and 65 men) with a mean age of 21.02 ( $SD = 3.61$ ) years. Approximately 88% ( $n = 173$ ) of the participants reported having been involved in varsity sport at the high school and/or college level.

### Procedure

The procedures used in this study were approved by the Institutional Review Board at the institution where the research was conducted and were performed in accordance with the ethical standards specified in the 1964 Declaration of Helsinki. Participants were recruited during regularly scheduled class meetings of undergraduate health, physical education, and psychology courses at a small, private college. Participants were informed that return of the experimental questionnaire constituted their consent to participate in the study. Questionnaires were distributed to all students in attendance at the class meetings on the day that data were collected. No students declined to participate in the study.

On the experimental questionnaire, participants were asked to complete several demographic items (e.g., age, sex, varsity sport involvement) and read a paragraph about "a college basketball player named Chris", who "has been coping with a chronic shoulder injury for most of the season". The gender of the player was not specified. The name "Chris" was selected because pilot testing had indicated that the name was gender-neutral. Participants were told that as "the team prepares to play in an upcoming quarter-final league tournament game; Chris was faced with a decision about whether to play with the injury". Participants were instructed to rate their impressions of Chris on the back of the first page of the questionnaire using the scales provided. The experimental manipulations are presented in brackets below. Each participant read only one version of the paragraph about Chris: Chris, a starting forward on the basketball team, has been battling a chronic shoulder problem that will eventually require surgery. Chris' playing status for the upcoming league tournament quarter-final game has been listed as "possible" because the shoulder pain Chris feels raising the injured arm is becoming intolerable. Chris' team has [been doing very well, as they currently lead their conference and seem certain to receive an NCAA tournament bid/has played poorly, as they are currently in seventh place in their conference and seem certain to be out of NCAA Tournament consideration]. Chris has played [very well, despite/poorly with] the in-

**Table 1:** Means and standard deviations of overall evaluation scores by player performance, team performance, and decision to play.

Player performance	Team performance	Decision to play	M	SD	n
Playing well	Playing very well	Yes	28.03	3.51	25
Playing well	Playing very well	No	25.93	5.59	27
Playing well	Playing poorly	Yes	25.74	4.3	23
Playing well	Playing poorly	No	26.45	5.38	24
Playing poorly	Playing very well	Yes	23.79	3.54	24
Playing poorly	Playing very well	No	28.68	4.81	22
Playing poorly	Playing poorly	Yes	24.43	3.81	23
Playing poorly	Playing poorly	No	26.09	5.6	23

jury. The decision to play has been left up to Chris. Chris decides [to play/not to play] with the injury in the league tournament.

Participants were asked to rate Chris on seven personal dimensions by circling a number (ranging from 1 to 7) between pairs of descriptive scale anchors that best reflected their opinion of Chris on those dimensions. The items were adapted from previous research in which the items were used to create an overall evaluation of an athlete in a study [15] that used a scenario-based method similar to that used in the current study. Responses were given on 7-point Likert-type scales with the following anchors, for which the left/right position of the socially desirable endpoint alternated on the actual questionnaire: (a) "Chris puts forth very little extra effort" and "Chris puts forth above average extra effort", (b) "Chris plays for individual glory" and "Chris is a team player", (c) "Chris is not disciplined" and "Chris is very disciplined", (d) "Chris is emotionally unstable" and "Chris is emotionally stable", (e) "Chris is soft and easily hurt" and "Chris is tough and durable", (f) "Chris is a below average player" and "Chris is an outstanding player", and (g) "Chris is a loser" and "Chris is a winner", respectively.

## Data analysis

A principal component analysis was performed on the seven personal attribute items. Items with factor loadings greater than 0.40 were retained and items with cross loadings were removed. Cronbach's alpha was computed for the remaining items, which all loaded on a single factor. A general evaluation scale was created by summing items that were retained. The resulting general evaluation scores were inspected to ensure that they met the assumptions for univariate Analysis of Variance (ANOVA). A 2 (decision to play: yes or no) X 2 (player performance: very well or poorly) X 2 (team performance: very well or poorly) ANOVA was performed on general evaluation scores. Significant effects were followed up with appropriate simple effects tests.

## Results

The principal component analysis revealed two components with Eigenvalues greater than 1.00. When two

items with cross-loadings were removed from the analysis, a single overall evaluation factor (Eigenvalue = 2.40) accounting for 48% of the variance emerged. Factor loadings for the 5 items ranged from 0.56 to 0.82. Cronbach's alpha for the resulting scale was acceptable ( $\alpha = 0.72$ ), and deletion of any of the items would have reduced the reliability of the scale. Overall evaluation scores were normally distributed, with skewness and kurtosis values of less than |2.00| when divided by their standard errors.

Means and standard deviations of overall evaluation scores are displayed in Table 1. In the 2 (decision to play) X 2 (player performance) X 2 (team performance) ANOVA, the decision to play X player performance X team performance interaction,  $F(1, 183) = 5.13, p = 0.03, \eta_p^2 = 0.03$ , and the decision to play X player performance interaction,  $F(1, 183) = 8.73, p = 0.004, \eta_p^2 = 0.05$ , were statistically significant. The simple effects of decision to play, team performance, and the decision to play X team performance interaction were examined within levels of player performance. In the Chris playing well condition, there were no significant effects (all  $p$  values  $> 0.14$  and all  $\eta_p^2$  values  $< 0.024$ ). That is, when an injured Chris was said to be playing well, Chris was evaluated equally favorably irrespective of the team's performance and the decision to play hurt. In the Chris playing poorly condition, however, the effect of decision to play was statistically significant,  $F(1, 88) = 12.13, p = 0.001, \eta_p^2 = 0.12$ . Specifically, when Chris was said to be playing poorly, Chris was evaluated more favorably when deciding not to play ( $M = 27.36, SD = 5.33$ ) than when deciding to play ( $M = 24.11, SD = 3.65$ ). The size of the decision to play effect is considered medium [16].

## Discussion

In the current study, individuals without a stake in whether a hypothetical athlete played with a painful injury tended to evaluate the athlete more favorably when the athlete decided not to play as compared to when the athlete decided to play when the athlete's team was playing poorly (but not when the team was playing well). The findings suggest that the sport ethic and its emphasis on the importance of making sacrifices and playing through pain may not be salient in the evaluation of athletes by

people with no vested interest in the outcome of the athletes' decision of whether to play hurt. In particular, the non-stakeholders made overall evaluations that were not influenced by the sport ethic in the condition where Chris was playing well and were in direct contradiction of the sport ethic in the condition where Chris was playing poorly. The overall evaluations in the latter condition seemed to indicate that Chris was given credit for deciding *not* to play hurt when doing so was unlikely to benefit the team, regardless of how the team had been playing with Chris in the lineup. Thus, without vested interest in the outcome of Chris' decision, participants appeared to evaluate Chris favorably for making a rational, health-focused choice that trumped the socio-cultural pressure to do otherwise within the sport environment. This outright defiance of the sport ethic cannot be attributed to a lack of familiarity with the values and expectations of the sport system given the extensive varsity sport participation history of participants.

In contrast to the results of studies showing that athletes report experiencing pressure to play hurt from people with a vested interest [11] or that stakeholders indicate a greater willingness for athletes to play hurt [9], the current findings suggest that rational choices about health and well-being can be made when vested interest is removed. Although it may not be possible for vested interest to be taken away completely from those with whom athletes interact regularly, sports health care professionals (e.g., athletic trainers, physical therapists, sports medicine physicians, sport psychology consultants, athletic counselors) may be best-positioned to go against the culture of risk and establish a "culture of precaution" in which "sensible risks" to the health of athletes are taken only after the potential consequences of exposure to such risks are carefully considered [17].

Several limitations should be considered when interpreting the results of the current study. First, the findings pertain to a single group of non-stakeholders (i.e., college students), a single sport (i.e., basketball), a single level of competition (e.g., intercollegiate), and a single type of injury (i.e., chronic shoulder injury). Additional research is needed to ascertain the generalizability of the current findings to non-stakeholders less proximal to Chris in terms of age and life situation (e.g., adults outside the college environment) and for a target athlete in a sport other than basketball at a different level of competition (e.g., professional) with a different type of injury (e.g., concussion, acute ACL tear). Also, because a gender-neutral name was given to the target athlete in the current study and it is not known how participants interpreted the gender of Chris when reading the scenario, the gender of the target athlete could be manipulated and the effect examined in future investigations. Second, over-

all evaluations of Chris were not obtained from a group of stakeholders, thereby preventing a direct comparison of how stakeholder and non-stakeholder evaluations might differ. Although previous research with coaches and teammates [9,11] strongly suggest that stakeholders would evaluate Chris less favorably in the decision not to play hurt condition than in the decision to play hurt condition, future studies similar to the current one should include both stakeholders and non-stakeholders. An easy way to create stakeholders using the methodology of the current study would be to make Chris affiliated with the participants' home (or favorite) institution. Stakeholders could also be created by having coaches, athletic administrators, or alumni supporters serve as participants. Third, the data are based on participants' reports, not their actual behavior. Non-stakeholders might say that they would evaluate an athlete who decides not to play hurt favorably, but their actual behavior might reveal otherwise. Further, even if non-stakeholders were to hold favorable perceptions of athletes who decided not to play hurt, there is no guarantee that the athletes would not (erroneously) perceive pressure to play hurt from the non-stakeholders. Consequently, there is a need for research examining non-stakeholder (and, for that matter, stakeholder) behavior in association with decisions to play or not to play hurt and the cognitive, emotional, and behavioral impact of that behavior on the athletes in question in real life situations.

The current research demonstrates that although the expectation those athletes should play hurt is pervasive in sport culture; there may be boundaries to the extent of its influence. Deciding against playing hurt did not have an adverse effect on evaluations of an athlete by individuals who had no stake in the athlete's participation, regardless of the situational context in which the evaluations were made. A potential implication of the findings is that it may be prudent to have people without a vested interest in athletes playing hurt participate in the decision-making process to the extent possible.

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