There may be many social psychological variables that influence or are influenced by children's behavior in organized sports. The major variable discussed in this paper is the child's motivation to participate. One cognitive theory—the attribution theory—offers insights into the child's view of his motivation, and the effects upon this motivation of rewards, authority figures, and winning and losing. In particular, the "overjustification" hypothesis of attribution theory may have implications for the physical education and athletic programs of children. Judging by their entrance into the gymnasium or onto sport's fields and playing areas, most children come to these activities with high intrinsic motivation. It is possible that through our grading and awards system we decrease the strength of this intrinsic motivation while we strengthen the need for external rewards, extrinsic motivation. It is also possible that our entire athletic system is designed to cause a shift in the intrinsic motivation to play to the extrinsic motive of playing for the reward. Many people have suggested external rewards for all who participate. If the overjustification hypothesis is correct, this might be the worst possible thing to do. The point is not the size of the reward, but simply that when a reward is offered it results in a logical reason to which the child can attribute his motive for playing, an extrinsic rather than intrinsic motivation. Other theories and principles discussed here that shed additional light on the subject of children's motivation to participate in sports activities are: self-perception theory; the discounting principle; the additive principle; and activation-arousal theory.

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Affective Behavior in Children's Athletics

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There may be many social-psychological variables which influence or are influenced by children's behavior in organized sports. The major variable of interest in this paper is the child's motivation to participate. We will also consider how the child views the motive, and the effects of rewards, authority figures, and winning and losing upon this motivation.

In formalizing Heider's (1958) attribution theory, Kelly (1967) includes an explanation of how observers use the "discounting principle" to explain why a person engages in an activity. This cognitive theory holds that when an individual observes another person engaging in an activity, he judges that the person is intrinsically motivated to the extent that there are not salient extrinsic rewards present to which this behavior can be attributed. Bem (1965, 1967, 1972) contends that self-perception is a special case of other-perception, in that a person uses the same information that observers would use in judging the cause of his behavior. Thus, if extrinsic salient contingencies are available, a person will attribute his own behavior to these circumstances. However, if these external reinforcements are not present or are insufficient, he will attribute his own behavior to his own motives and desires.

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Self-perception theory was originally formulated by Bem (1967) as an information-processing explanation of the cognitive dissonance theorists' "aversive" motivational view of the "insufficient justification" phenomena. An even more interesting application of self-perception theory, and one which might hold meaning for children's behavior in sports situations, involves the "overjustification" hypothesis. Essentially this hypothesis asserts that a person's intrinsic motivation to participate in a desirable activity may be undermined by inducing him to engage in this activity for an extrinsic goal or reward. That is, if the extrinsic justification to engage in an activity is very high, the person may attribute his behavior to the pressures of the situation rather than to his original intrinsic interest in the activity itself. Now the receipt of an external reward for participating in highly desirable activities may "overjustify" the individual's reasons for participating. "In short, a person induced to undertake an inherently desirable activity as a means to some ulterior end should cease to see the activity as an end in itself" (Lepper, et al., 1973, p. 130). A series of studies by Lepper and colleagues (Lepper et al., 1973; Lepper & Green, 1975; Green & Lepper, 1974) has tested this hypothesis and cross-validated it under various conditions with young children.

Their research paradigm (Lepper et al., 1974; Lepper & Greene, 1975; Greene & Lepper, 1974) has been to select a task for which children had previously shown high intrinsic motivation, and then have the children perform the task under conditions of first, expected reward, second, unexpected reward and finally, no reward. The children then returned several weeks later, and their interest in performing the original task in a free-choice setting was observed unobtrusively. Results indicated
that children who were expecting and received a reward repeatedly for task participation showed less subsequent interest in the task than children who received the reward unexpectedly or did not receive a reward. The type of reward varied from a "good player" certificate to an opportunity to play with a set of very desirable toys. In addition, in one of the studies (Lepper & Greene, 1975) the children were told that they either "were" or "were not" being observed by a television camera as they performed the tasks. The effects of this adult surveillance proved to have an undermining effect upon subsequent intrinsic motivation similar to the expected rewards in their previous experiments.

In noting that the experimenter in the Lepper and Greene studies had described the "gold stars and good player certificates" in glowing terms to the children, Ross (1975) investigated the effects of altering the saliency of the external rewards. Results of this study indicated that in relation to nonsalient and no reward conditions, the receipt of salient rewards caused intrinsic motivation to decrease by a significant amount.

Implications from this series of studies may generalize to several types of situations. For instance, a part of the title of one of the studies "Turning Play Into Work" suggests the complaint of many of the critics of education, i.e., that many school children over a period of time lose their spontaneous interest in learning. Jackson (1968) suggests:

As preschoolers the students may have played with the concept of work, but their fanciful enactments of adult work usually lack an essential ingredient, namely: the use of some kind of an external authority system to tell them what to do and to keep them at their
The teacher, with his prescriptive dicta and his surveillance over the students' attention, provides the missing ingredient that makes work real.

More specifically, this series of studies may have implications for token economy programs or traditional extrinsic classroom rewards like grades, gold stars, etc. While there is evidence to indicate that extrinsic incentives may effectively increase interest in certain categories of activities (O'Leary & Drabman, 1971), it may be necessary to restrict this type of reward to situations where the level of intrinsic interest is low or where the attractiveness only becomes apparent through a good deal of experience in the activity (Lepper, et al., 1973).

In particular, the "Overjustification" hypothesis may have implications for the physical education and athletic programs of children. Judging by their entrance into the gymnasium or onto the sports' practice and playing areas, many, if not most, children come to these activities with high intrinsic motivation. Is it possible that through our grading and awards system we decrease the strength of this intrinsic motivation while we strengthen the need for external rewards? Consider for instance, physical fitness awards, ribbons and medals for field days, trophies and letters for age groups sports, playing before an audience, newspaper coverage, etc. Is it possible that our entire athletic system is designed to cause a shift in intrinsic motivation to play to the extrinsic motive of playing for the reward? In fact, many people have suggested external rewards for all who participate, not just the highly skilled. If the "Overjustification" hypothesis is correct, might this not be the worst possible thing to do? From my vantage point it certainly appears to be an area where carefully controlled research is needed since our
professional groups are already advocating the previously mentioned reinforcement strategy. The point is not the size of the external reward but simply that a reward is offered which results in a logical outcome to which the child can attribute his reason for performing.

A yet unpublished study by Karniol and Ross (1975) extends some of the work of Lepper et al. by examining children's ability to use the discounting principle (Kelly, 1967) associated with making causal attributions about behavior. Children listened to tape-recorded stories which differed according to whether the target child was playing of his own accord with a toy or was playing with it because he was commanded or bribed by an adult. How this bribe or command was perceived depended upon the age of the child. Young children (first grade) used an "additive" principle to describe whether the child playing with the toy wanted to or not, i.e., the target child was perceived as receiving a bonus for playing with the toy. Use of the "additive" principle is posited as being consistent with "preoperational" children's inability to decenter (Inhelder & Piaget, 1958). That is, their egocentrism causes young children to focus only on the consequences of behavior and not the intentions of the donor. Thus the young child perceives the reward as simply an improved consequence, getting to play and getting a reward. However, older children begin to question the adults' motives for giving the reward, i.e., if something is not unattractive about the toy-play situation, why is a reward being offered? Thus the older children begin to question the intrinsic motivation of the target child and see him as playing for the reward and not because the task is intrinsically motivating. If a child views others as doing this, might he not begin to ascribe similar behavior to himself?
It should be pointed out that Leiper and his colleagues' work has not been generalized to motor skill performance or age group athletics, so the previous statements are speculation, although interesting speculation. In addition, the "Overjustification" hypothesis has been applied when children were performing in order to attain some specific expected external reward. In conditions when the reward was unexpected, intrinsic motivation was generally not affected.

From "self-perception" theory it is relatively easy to extend one's thinking into other connections between motivation and behavior. Several early theories have attempted to explain the relationship in rather mechanistic terms (Weiner, 1972). Two of the theories which have resulted in considerable research in motor performance are Hull-Spence Drive theory and Activation-Arousal theory (Duffy, 1962). These theories attempt to explain the motivational variables associated with increases and decreases in performance. As you are probably aware, Drive theory suggests a linear relationship between activation and performance (higher activation - higher performance) while Activation-Arousal theory suggests a curvilinear or inverted U relationship. Activation-arousal theory has thus lead to research on "optimal levels of arousal" within individuals and/or within situations.

However, an attribution theory of performance (Kelley, 1973; Weiner, 1972) suggests a more cognitive and less mechanistic view in explaining motivational variables to which people attribute their behavior. Essentially attribution theory suggests that people perceive four major causes of success and failure: ability, effort, task difficulty and luck. These variables are arranged in a 2 x 2 table in which one dimension is "Locus of Control" and the second dimension is "Stability." Thus, ability is a stable characteristic under internal control while effort is an unstable characteristic under internal control. Task
difficulty is a stable variable under external control while luck is an unstable variable under external control. A person's success or failure may be under his own control (internal) and either changeable (e.g., effort) or invariant (e.g., ability). Further, his success or failure may not be under his own control (external) and may be variable (e.g., luck) or invariant (e.g., task difficulty).

Someone suggested that in attribution theory, it's not whether you win or lose but where you place the blame. For example, I know some golfers who throw their clubs when they miss a shot. Of course I don't do that, but I did get a new putter for Christmas because my old one was costing me strokes. However, it turns out it wasn't the putter but the type of golf balls I've been using.

A recent review of attribution theory and suggested application to sports psychology in general and social facilitation research in particular has been presented by Winkel (1975). Essentially, previous research has found that self-enhancing strategies are used by individuals following success or failure, i.e. success is attributed internally and failure externally (Simon & Feather, 1973; Wortman et al, 1973).

Two very recent studies by Iso-Ahola (1975) and Roberts (1975) have applied this theory to explain achievement behavior in "Little League" baseball players. As Roberts (1975) suggests, most of the attribution research has dealt with individuals and how they attribute their success or failure. In the real world, however, we are frequently concerned about group behavior. Do children in fact attribute their individual and team performance in "Little League" baseball to the same factors, and do they use the same self-enhancing strategies? Or do they adopt logical information-processing strategies to explain outcomes of games? Results of Roberts' (1975) study on 200 "Little League" players offers
some interesting findings for speculation. For instance, teams which have consistently won did not perceive the task as any more difficult when they lost; other unstable factors explained the current outcome. However, teams with a history of losing indicated that the task had become easier when they won.

Teams which had consistently won attribute winning to their high ability and did not see their ability as lessened when they lost on occasion. However, teams which had consistently lost attributed losing to poor ability level. Attributions to luck were a function of outcomes alone, i.e. losing was attributed to luck more than was winning.

The effort factor supported the self-serving rather than the logical information processing strategy. Teams which had lost consistently attributed a winning performance to increased effort, while winning teams did not attribute a win to increased effort. In addition, losing teams which had lost consistently claimed exertion of the least amount of effort.

When the individual’s attributions were considered, players on winning teams who lost attributed high efforts to themselves but low to the team. Thus it appears that a view by Nichols (1975) of logical information processing strategies for achievement tasks received some support in Roberts’ study, but players on occasion do resort to self-enhancing strategies. A summary statement by Roberts (1975) seems particularly appropriate:

In short, teams which consistently lost were more likely to attribute success to unstable factors than successful teams. Thus, losing teams did not expect that winning a game would insure success in the future. Previously successful teams, on the other hand, attributed
failure to unstable factors, thus expecting to win in the future (regardless of the current outcome). Significantly, winning teams which lost did not differ in their ability ascriptions from previously winning teams which won. (p. 322)

In a second study in this area, Iso-Ahola (1975) concludes "that the young player's judgments of their team success and team failure are quite ego-centric" (p. 336). That is they want the credit when their team wins but prefer to place the blame elsewhere when their team loses. When they lose they place the blame on environmental variables, which does not take away from their individual efforts and abilities.

Roberts (1975) suggests the implications for both these studies when he points out that "consistent success-failure experience may socialize the child to achievement behavior" (p. 322). Thus consistent failure may lead to low achievement behavior, and players who feel they have low ability will give up and "drop out." However, frequent success may lead to more effort and persistence and the attribution of occasional losses to unstable factors, i.e. expectancy of success on future occasions.

While many people suggest that attribution theory offers a post hoc explanation of behavior, the attributional model of performance formulated by Kukla (1972) may provide an explanation of how causal cognitions, personality descriptors, and expectancy are both consequences and precursors of human behavior.
References


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