BECOMING A SPORTS FAN: UNDERSTANDING COGNITIVE DEVELOPMENT AND SOCIALIZATION IN THE DEVELOPMENT OF FAN LOYALTY

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

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*****

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ABSTRACT

Loyal customers contribute to an organization’s continued survival by repeatedly purchasing a product or service. The importance of loyal customers is seen through attempts by organizations to retain those who repeatedly purchase a product or service. While loyal customers or fans are the lifeblood of sports, very little is known about when and how individuals form an enduring attachment to a particular team or player. The intent of this study is to examine the origin of fan loyalty and those factors which influence its development. This study represents a first effort to provide a theoretical overview that focuses on the role of cognitive development and socialization in the formation of fan loyalty.

Individuals characterized as loyal fans are thought to demonstrate particular behaviors: talking and reading about sports, watching sports, and purchasing sport-related products. While an individual may demonstrate fan behaviors, an accurate assessment of fan loyalty should consider an individual's behavior and their commitment to a sport, team, or player. Commitment is thought to be characterized by cognitive complexity, volition, and resistance to change. In order to form a psychological commitment to a sport, team, or player, a minimum level of cognitive development must be achieved, in
order to evaluate alternatives, to choose among alternatives, and to formulate reasoning which is resistant to change.

A clinical-observational interview protocol was utilized with two groups of children (5-6 year-olds and 8-9 year-olds, N=50), to determine when fan loyalty may first be demonstrated, based on level of cognitive development. Patterns of responses within the interviews were assessed using Q.S.R. Nudist; comparisons were made among and between children at different levels of cognitive development. Analysis of responses indicated that children characterized by concrete operational thinking were capable of demonstrating the behavioral and attitudinal components of loyalty, while those characterized as preoperational were not. The capacity for emotional, long-term attachment to a sport, team, or player may not be evident until children reach a concrete operational level of thinking, generally around 8 or 9 years of age.

Responses from the children interviewed provided an opportunity to not only characterize children in terms of cognitive development, but to also recognize distinct points of transition between preoperational and concrete operational thinking. Results further suggested that the development of loyalty may progress from attachment to a sport, then to a team, then to a player. From the analysis of the responses a potential progression in the development of fan loyalty emerged, which included a description of the socializing agents thought to provide the initial influence on the development of fan loyalty. Socializing agents, which had differing levels of influence at various stages of
cognitive development, included a child's family (father, mother, and an older sibling),
television, and personal participation (playing with friends and participation in organized
youth programs).
DEDICATION

To the memory of my mother, Nina Ruth James, who taught me through her life how to love and how to serve, and through her death, who showed me how to walk by faith and not by sight.
ACKNOWLEDGMENTS

I would like to first thank God for the continuing direction and blessings He has extended to me. The journey to this point has taken many paths, and at times has been very hard. Due to His grace and matchless love, I have been able to complete this work, which I pray will be the first of many.

Thanks and my deep appreciation are extended to my committee: Dr. Dennis Howard, Dr. Kimberlee L. Whaley, and Dr. Packianathan Chelladurai. The input, experience, and insight of these scholars and friends have combined to raise this finished project to a level of quality that I would never have reached alone.

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CHAPTER 1

INTRODUCTION

In November 1995, Cleveland Browns owner Art Modell announced that he would be moving the team from Cleveland, Ohio, to Baltimore, Maryland. Fans of the Browns were extremely upset by the announcement, particularly fans in Cleveland. In the days following the announcement radio call-in shows were filled with people venting their anger and their feelings of betrayal; local news programs showed scenes with fans burning their Cleveland Browns’ paraphernalia; the city of Cleveland voted on a tax increase to try and entice Modell to remain in Cleveland, legal action was filed to try and keep the Browns from leaving Cleveland. Though the team did move to Maryland, the reactions against the move from the fans in Cleveland and around the country demonstrate the presence of fan loyalty toward a professional sport.

If another business were to announce a similar move from Cleveland to Baltimore would there be as strong a reaction from the citizens of Cleveland? The reactions from the fans of the Cleveland Browns demonstrate that sports have become a prominent part of people’s lives and that people may have a strong allegiance with a sport, a team, and/or players. The expression of loyalty from the fans of the Cleveland Browns has resulted in an agreement with the National Football League (NFL) to bring another team to
Cleveland. The agreement to bring another team to Cleveland also shows that the NFL recognizes the importance of loyal fans. The prominence of sport within society and the strong allegiance that people form with a sport, team, and/or player suggests that fan loyalty is an important concept to understand.

**Prominence of Sport**

Sport is an important subset of the leisure industry. A large number of individuals listen to sporting events on the radio, read about sports in newspapers and magazines, spend time watching sports on television and attend “live” events. In 1960, a total of three hundred hours of sports programming was broadcast by the three major networks. In 1988, the time allotted to sports programming increased to over 1800 hours (Madrigal, 1995). These figures do not include programming on the Fox network, programming on ESPN, ESPN2, other cable sport channels, or special pay-per-view broadcasts.

It is estimated that sixty to seventy percent of American households watch professional and collegiate sports regularly (Madrigal, 1995). Ninety percent of American households are estimated to have watched at least some part of the 1984 Olympic games, and promoters expected to meet or exceed that figure in 1996. In 1991, attendance at professional hockey, baseball, basketball, and football games totaled nearly 106 million, while attendance at college football and basketball games exceeded 74 million (Madrigal, 1995).

People also spend money on sport-related products and use sport as a topic in daily conversations with others. The amount of money spent on licensed products in professional sports alone exceeded $9.5 billion in 1994 (Van Meter, 1995). These figures
emphasize that sport is a big business and they also show that people invest a considerable amount of time and money in sports.

Continued investment in sports by loyal fans is a vital part of the success of a sport organization. In order for a team to exist, there must be a fan base which purchases tickets, buys souvenirs and other team-related paraphernalia, and which demonstrates continued support for a team through attendance at games. Sports fans, or more specifically loyal fans, are important to a sport organization because they repeatedly engage in behaviors which benefit a team. The importance of loyal fans may be better understood from a consideration of the importance of customer loyalty in general.

**Customer Loyalty**

The idea of customer loyalty has been a topic of interest for some time in several fields including consumer behavior, sociology, and marketing (Assael, 1987; Hawkins, Best, & Coney, 1989). Pritchard (1991) points out that in an early business context the notion of customer loyalty was considered by Copeland (1923) in a study of “brand insistence.” Early research on customer loyalty looked at the idea in the context of brand loyalty, considering the repeat purchase of particular brands by consumers. Hawkins, Best, & Coney (1989) have discussed three types of purchase behavior: (1) nonloyal repeat purchasers, (2) loyal repeat purchasers, and (3) happenstance purchasers. Identifying different types of purchase behavior highlights the importance of utilizing different strategies to promote repeat purchasing behavior.

Recognizing that customers have varying levels of interest in a product or service underscores the importance of understanding what influences people to engage in repeat
behaviors and what makes them switch from one product or service to another. Viewing loyalty from the perspective of repeat purchase behaviors incorporates one aspect of the construct. A more complete perspective, however, includes not only a behavioral component but also a cognitive or attitudinal component.

The basic premise of the loyalty construct may be described as the steadfast allegiance to a person or cause (Pritchard, 1991). This perspective emphasizes that loyalty incorporates a strong, persistent attitudinal commitment to a person or belief. A demonstration of this psychological commitment or loyal attitude is found in an individual’s behavior. From this perspective, understanding fan loyalty involves a consideration of both a person’s behavioral and attitudinal disposition toward a sport, team, and/or a player. A loyal fan would demonstrate support for a given sport, team, and/or player through particular behaviors like repeatedly purchasing game tickets, attending games, watching games on television, purchasing souvenirs and other related products, and by maintaining a positive attitudinal commitment to a sport, team, and/or player (continuing to follow a sport, team, and/or player even during difficult times).

Looking at loyalty from both an attitudinal and a behavioral perspective is consistent with early research which has examined customer loyalty. Day (1969) emphasized that behavioral elements alone were not sufficient for distinguishing between segments of loyal customers. Presenting one of the first comprehensive views of brand loyalty, Jacoby (1971) emphasized that brand loyalty implies repeat purchasing based upon cognitive, affective, evaluative, and dispositional factors. Utilizing this perspective, a multi-dimensional view of loyalty allows for a consideration of not only the behavioral
aspects of loyalty, but also a consideration of the attitudinal components to help in understanding the formation and persistence of loyalty. Looking at both the behavioral and attitudinal components of loyalty also provides an opportunity to distinguish between different segments of fans based on loyalty.

**Loyalty Segmentation**

Segmentation is a process of dividing a market into distinct groups of buyers who might require separate products and/or marketing mixes (Kotler, 1988). More specifically, segmentation may be thought of as dividing a market into discrete groups or segments based on distinct characteristics. The objective of segmentation is to find differences between consumers (in this context, fans). Segmentation recognizes that there are differences between groups and attempts to focus on those differences in order to promote greater demand, usage, or support for a product or service. Mullin, Hardy, and Sutton (1993) suggested that markets are generally segmented on one of three bases: sociodemographics, behavioral characteristics, or geographic factors. Considering the idea of loyalty segmentation, focus may be placed upon usage (behavioral aspects) or psychological elements (attitudinal aspects), or a combination of the two aspects.

Segmentation allows for the identification of different sport enthusiasts. Previous loyalty research suggested that different groups may be thought of as having high loyalty, spurious loyalty, low loyalty, or latent loyalty (Backman & Crompton, 1991) (see Figure 1.1). From an applied perspective, strategies or programs may be implemented for each customer group to focus on developing loyalty (provide opportunities for those with latent loyalty), increasing involvement from those having low or spurious loyalty (doing more
business with fans, an escalator approach - Mullin et al., 1993), or maintaining high levels of involvement from highly loyal fans (retention). From a basic perspective, identifying different groups of sport enthusiasts enables researchers to focus on particular segments in order to better understand that particular group. One group of particular interest is highly loyal fans.

![Psychological Attachment Diagram](image)

**Figure 1.1 Conceptual Model of Loyalty (Backman & Crompton, 1991)**

**Highly Loyal Fans**

Those with a strong psychological commitment to a sport, team, and/or player who persist in particular behaviors like purchasing tickets and sport-related products influence a sport organization’s revenues. Examining factors influencing spectator attendance, Wakefield and Sloan (1995) conducted a study to determine the extent to which stadium surroundings may play an important role in determining spectator attendance tendencies. Although the results indicated that stadium factors do have some
influence on a fan's desire to stay at a stadium and their intention to return to the stadium, a fan's loyalty to the home team was found to play the largest role in determining a fan's desire to be at the stadium. These findings suggest that several elements are important to consider regarding the success of a sport organization, and among those elements fan loyalty may be particularly important.

Loyalty has been used as an effective segmenting variable in a number of research studies. McQueen and Miller (1985) found that segmenting tourist visitors into first time and repeat visitors was an effective way to differentiate tourists. Other studies have also used the behavioral component of loyalty, repeat purchasing, to segment markets (Gitelson & Crompton, 1984; Roakainen & Woodside, 1980). In a sport context, loyalty segmentation has the potential to provide a distinct and effective means by which to develop marketing and promotional strategies for different segments of fans. Segmentation allows for the identification of fans who have differing levels of involvement with or attachment to a particular sport, team, and/or player. From an applied perspective, practitioners may identify different fan groups and utilize various means which will have the most impact on a specific group. One element which may be emphasized through segmentation is fan retention.

**Fan Retention**

Customer retention is considered an important means of remaining competitive (Rosenberg & Czepiel, 1983). A focus on loyal customers is also recognized as a cost-efficient and effective strategy in building and maintaining market share (Jarvis & Mayo, 1986). An emphasis on customer retention suggests that in a sport context one segment
for marketers and promotion strategists to target is loyal fans. Those that have a strong psychological commitment, and who persist in behaviors like purchasing tickets to games, buying sport, team, and/or player products (paraphernalia), reading and watching sporting events, and talking about sports on a daily basis are important to an organization’s continued welfare.

An example of the importance of loyalty segmentation is found in public recreation. Reports suggested that municipal park and recreation agencies experienced significant financial decline (McCarville & Crompton, 1988). With smaller levels of financial support, the importance of customer loyalty was identified as a primary goal (Bullaro & Edginton, 1986). Howard (1985) and Warnick and Howard (1985) have reported the extent to which public recreation agencies rely on repeat patronage. Roughly twenty percent of all who took part in recreation programs studied accounted for sixty percent of the total registered attendance. Repeat consumers are considered to be a vital part of the continued success of an organization and researchers advocate the importance of understanding the nature of a consumer’s loyalty in order to market a product or service effectively (Howard, Edginton, & Selin, 1988). In a sport setting, a similar perspective regarding the importance of loyalty is found in the “80-20” rule and Mullin’s (1985) Escalator Model.

The “80-20” rule suggests that eighty percent of an organization’s business will come from twenty percent of the customer base (Mullin et al., 1993). In terms of sport fans, those that are loyal to a sport, team, and/or player are likely to be those that invest the most time and resources in following a particular sport, team, and/or player.
According to the "80-20" rule, it is the loyal fans, those in the twenty percent group, who have a large influence on a sport organization's continued success. Mullin (1985) further elaborates on the importance of segmentation of sport fans through a discussion of a hierarchy of segments and the escalator model.

Mullin et al. (1993) identify four different sport consumer groups: (1) heavy users, (2) medium users, (3) light users, and (4) nonconsumers. As indicated, heavy users (loyal fans) are thought to contribute the highest percentage (80%) of consumption, even though they do not represent the largest percentage (20%) of customers. Considering different strategies to effectively reach different customer groups, Mullin (1985) has proposed the Escalator Model. The model emphasizes the importance of satisfying the different needs of each group, and at the same time, promoting movement from one group to the next (upward movement) (see Figure 1.2).

A strategy for nonconsumers focuses on increasing awareness of a sport, team, and/or a player, and providing the opportunity for consumers to experience a game or event. Through initial exposure to a game or event, it is proposed that a nonconsumer may become a light user as a result of a positive initial experience. The emphasis for light users is to identify those who have attended at least one game or event, and to provide incentives to increase their frequency of attendance. As light users attend additional games or events, they become medium users. Medium users have an interest in a sport, team, and/or a player. The objective with this group is to increase the psychological commitment through various means by which consumers identify with a sport, team, and/or a player. For heavy users, retention is the primary objective. It is important to
continue offering opportunities so that heavy users desire and do maintain psychological commitment.

One helpful aspect of the model is that it highlights the progression individuals may follow as they develop loyalty to a sport, team, and/or a player. Going further, Mullin et al. (1993) suggested that there may be a life cycle for sports fans. A life cycle perspective suggests that loyalty may develop over time, and that various elements may influence development at different phases of the cycle. A life cycle perspective suggests an important area in loyalty research which has received little attention - when loyalty may
develop and what elements may influence such development. Understanding loyal fans involves more than attempting to develop marketing programs or promotional strategies to encourage continued loyalty. In order to develop such programs and strategies, it may be instructive to understand several other concepts, such as why fans may form such loyalties (what influences the development of loyalty) and when such loyalties may develop. In other words, what elements influence a fan’s commitment, and does an individual’s commitment to a sport, team, and/or player change over time?

Understanding Loyalty

The potential for understanding loyalty and its use in segmentation has been recognized in many areas, including consumer behavior, sociology, and marketing (Assael, 1987). Jacoby and Chestnut (1978) point out, however, that research on loyalty has faced several problems. While research on loyalty has identified the multi-dimensional nature of the construct, the primary emphasis for the study of loyalty has been from a unidimensional perspective (see chapter two’s review of literature). Research on loyalty has faced two major problems: (1) a large amount of work has been conducted from a unidimensional perspective, and (2) there has not been a conceptual basis for many operationalizations of brand loyalty, resulting in measurement problems (Muncy, 1983).

Even though a multidimensional view of loyalty is widely accepted (Backman, 1988; Selin, 1986), unidimensional constructs of loyalty may still be found. In a sport setting, Wakefield and Sloan (1995) examined the effect of loyalty and other stadium factors on attendance at college football games. Loyalty was defined as allegiance or devotion to a particular team developed over time. While the definition incorporates the
idea of psychological commitment, the measures of loyalty were based on behavioral aspects. From a business context, Raj’s (1982, 1985) work on loyalty and the effects of advertising looked at the attitudinal loyalty of subjects, using measures based on behavior and frequency of purchase. The support for a multidimensional construct indicates that research on loyalty should consider both perspectives (Day, 1969; Jacoby, 1971; Jacoby & Kyner, 1973). More recently, attention has been given to overcome the problems of considering loyalty from a unidimensional perspective, and of using poor conceptualizations to operationalize the loyalty construct.

The majority of empirical research in loyalty has been conducted using operational definitions and has ignored the importance of a conceptual basis for such operationalizations (Pritchard, 1991). Without a theoretical focus on which to base operational measures, researchers may not have an accurate understanding of the loyalty construct. Jacoby and Kyner (1973) point out that “while operational definitions may be sufficient for specifying how to measure brand loyalty and may, under certain conditions, enable one to make reasonably good predictions regarding future behavior, they are quite arbitrary and provide nothing more than surface understanding” (p. 1). In the leisure field, Pritchard (1991) has addressed the importance of operationalizing loyalty from a conceptual basis.

The conceptualization and measurement of the behavioral component of loyalty (repeat purchase behavior) is relatively straightforward. For example, an individual that purchases season tickets year after year, or an individual who purchases sporting magazines or other sport publications on a regular basis to read about their favorite sport,
team, and/or player may be thought of as engaging in repeat purchase behaviors (or as
demonstrating the behavioral component of loyalty). Moving to the second dimension of
loyalty, a theoretical understanding of the attitudinal component is now being considered.

Drawing from the suggestions of earlier researchers (Day, 1969; Jacoby &
Chestnut, 1978), Pritchard (1991) emphasized that the theory of commitment best
describes the attitudinal component of loyalty. Through development of a psychological
commitment instrument, Pritchard (1991) has provided a basis from which to better
understand the attitudinal component of loyalty. Combined with previous work on the
behavioral component of loyalty, it is possible to examine the importance of loyal fans
through an understanding of both the behavioral and attitudinal components of loyalty.

Limitations of Existing Research

Previous research focused first on understanding the behavioral component of
loyalty, a form of repeat purchasing of a specific product or service over time (Jacoby &
Chestnut, 1978). More recently, research has provided a better understanding of the
attitudinal component of loyalty (Pritchard, 1991). With a better understanding of the
construct it is reasonable to next consider when loyalty develops and what elements may
influence such development.

In a sport context, research on loyalty has examined the level of identification
individuals may have with a sport or team, demonstrating that people vary in their level of
reported that people do form an association with a sport or team. Wann and Branscombe
(1993) further explained that identification with a sport or team may range from high to
low. While not discussed in terms of loyalty, highly identified fans may be thought of as loyal fans. Wann and Branscombe (1990) have demonstrated that highly identified (loyal) fans maintain an association with a team even when the team does poorly. Those low or moderate in identification are likely to distance self from the team, showing through such behavior a lack of psychological commitment.

Wakefield and Sloan (1995) provided one of the few studies of fan loyalty. Examining the elements which are thought to influence attendance, they demonstrated that loyalty is an important influence. As indicated, however, loyalty was examined from a unidimensional perspective. Dealing with the broader topic of a sport consumer, McPherson (1976) examined the elements which influence an individual toward becoming a sport consumer, but did not examine loyalty to a sport, team, and/or player specifically. Smith, Patterson, Williams, and Hogg (1981) looked at a small sample of “highly committed sports fans.” Subjects were asked to identify what elements influenced them to become highly committed fans. While identifying some of the elements which may influence the development of loyalty, the study did not address loyalty specifically.

The work by McPherson (1976) and Smith et al. (1981) provide a starting point for better understanding the development of loyalty. This research provides a framework for considering what elements may influence the development of loyalty. Research has not, however, considered loyalty from a multidimensional perspective, and further, has not considered when loyalty may develop. In a sport context research has not focused on the development of loyalty, examining when loyalty may develop, how persistent loyalty may be over time, and what elements influence the development and persistence of loyalty.
Considering sport in particular, no research has yet determined the object around which loyalty develops. Do individuals form a commitment to a sport, a team, or a player? Is there a progression in the development of loyalty, from a sport to a team to a player, from a player to a sport, or some other progression?

**Purpose**

In professional sports continued patronage by fans is a vital part of the success of any sport organization. For a team to exist there must be a fan base which purchases tickets, attends games, buys souvenirs and other team-related paraphernalia, and which demonstrates continued support for a given team. Fans who engage in these types of behaviors which benefit a team, and who have a psychological commitment to a team, may be thought of as loyal fans.

Loyal fans are important to a sport organization in that they repeatedly engage in behaviors which benefit a team, like buying season tickets and licensed products. In addition to demonstrating consistent and persistent support for a team, loyal fans are also resistant to attempts to reduce their attachment to a chosen team. In a society where there has been a proliferation of professional sports and a strong challenge to attract and maintain loyal fans, an important concern for sport organizations is understanding when loyalty may develop and also understanding what factors may influence the development of loyalty.
The purpose of this study is to examine the point at which an individual may first develop loyalty toward a sport, team, and/or a player. Beginning from the premise that loyalties developed early in life tend to be persistent throughout one’s life (Guess, 1964), this study attempts to examine when an individual is capable of demonstrating loyalty. Loyalty is thought to be distinguished by a level of psychological commitment and persistent behavior toward a sport, team, and/or a player. The attitudinal dimension of fan loyalty, or psychological commitment, implies that an individual has made a conscious choice to form an association with a particular sport, team, and/or a player. Such a decision suggests that an individual has considered various alternatives and has chosen to identify with a specific sport, team, and/or player. Considering that an individual must be able to distinguish between various sports, teams, and players, and also must be able to make affective and evaluative judgments to identify with a particular sport, team, and/or player, one’s level of cognitive development is thought to be an important factor for understanding when fan loyalty may develop.

**Cognitive Development**

Development may be thought of as the process through which an individual’s thinking, emotions, and strategies for coping with the world around them grow (Singer & Revenson, 1978). In the literature of developmental theory there are various perspectives on how people develop. Regarding the early phases of an individual’s development, some theorists see the child as acting on their world, while others see the child as a passive and helpless being (Singer & Revenson, 1978). Since the mid-1960's, the nature of children’s thinking and learning has been influenced by the ideas of Jean Piaget (Wood, 1988).
Piaget’s theory presents a detailed and specific accounting of the phases in human development, providing a possible explanation as to when and how a child is ready to learn or develop specific forms of knowledge and understanding (Wood, 1988).

Piaget’s general hypothesis is simply that cognitive development is a coherent process of successive qualitative changes of cognitive structures, or schemata, with each structure and its concomitant change deriving logically an inevitably from the preceding one (Wadsworth, 1984). Piaget’s concepts view development as a process which takes place along a continuum, with changes in intellectual development occurring gradually.

To better conceptualize the process of cognitive development, Piaget has described the development process through four broad stages or phases (see Figure 1.3). Wadsworth (1984) has presented a concise description of Piaget’s phases of cognitive development.

| Sensori-Motor Development | Preoperational Thought | Concrete Operations | Formal Operations |

Figure 1.3 Piaget’s Phases of Cognitive Development

The first period is described as the phase of sensori-motor development, and is thought to occur between birth and age two. During this phase behavior is primarily motor, including actions like sucking, grasping, and crying. At this point a child does not yet represent events internally nor do they “think” conceptually. The second period is labeled the phase of preoperational thought. This phase is characterized by the
development of language and other forms of symbolic representation. Reasoning at this level is described as prelogical. A child in this phase of development is able to see objects and people from only one point of view, their own (Singer & Revenson, 1978). The reasoning of a preoperational child is based on contiguity and not on logic. Objects and events that occur together are assumed to have a causal relationship (Wadsworth, 1984). This phase of development is thought to occur between the ages of two and seven.

The third period of development has been identified as the phase of concrete operations. Between the ages of seven and eleven a child is thought to develop the ability to apply logical thought to concrete problems. At this phase of development a child is able to classify objects by some characteristic (like color, shape, size, etc.), and they are also able to recognize that there are hierarchies of classes (such as different levels of a sport - high school, college, professional) (Singer & Revenson, 1978). A concrete operational child is also able to mentally arrange objects along a quantitative dimension (such as size, weight, or length), which is known as seriation. Other important characteristics of this phase are the use of mental operations, thinking about actions which have been previously performed physically, and reversibility of thought. Reversibility involves changing the direction of one’s thoughts. For example, something that can be added may be subtracted; simple mathematical operations may be performed. The phase is labeled concrete operations because the various operations are only applied to object which are physically present.

In the fourth period, the phase of formal operations (ages 11-15), a child is able to think about the future, the abstract, and the hypothetical. According to Wadsworth
(1984), during this phase a child’s cognitive structures reach their greatest level of
development and a child is able to apply logical reasoning to all classes of problems.
Singer and Revenson (1978) have explained that during this phase of development a child
is capable of abstract thought and deductive reasoning, and they are able to look at a
problem or idea from several points of view.

Along with intellectual development, Piaget has identified another aspect of an
individual’s overall development - affective development. Affect is concerned with
emotions, values, moral reasoning, and “feelings” (Wadsworth, 1984). From Piaget’s
perspective, as intelligence is developing, there is a parallel affective development.
Children are thought to incorporate experiences to affective schemata in the same way
they incorporate experiences to cognitive structures (Wadsworth, 1984). Included in the
phases of development described by Piaget one also finds a description of the
characteristics of affective development.

In the sensori-motor phase of development, feelings are primarily perceptual.
Feelings such as pleasure, pain, pleasantness, etc., become attached to perceptions through
experience. During this phase feelings of “liking” and “disliking” arise and may begin to
be directed toward others. As the end of this phase is reached, likes and dislikes are
established and begin to play a role in a child’s actions (Wadsworth, 1984). In the
preoperational phase, the use of language and other symbols allow for the development of
social feelings. Feelings may be represented and recalled (or remembered). Wadsworth
(1984) has pointed out that where the sensori-motor child may “like” an object or person
one day but not the next, the preoperational child typically shows more consistency in
liking and disliking when the past is remembered and included as part of present or current reasoning.

In the phase of concrete operations, cognitive and affective development are considered inseparable. During the concrete operational phase affect acquires a measure of stability and consistency. A child is able to coordinate affective thoughts from one experience to another. Past feelings may be included in the reasoning processes directed at current or present experiences. A child is capable of utilizing past and present feelings (known as conservation of feelings) when making judgments or decisions, rather than just using present or immediate feelings to make judgments or decisions. Such interaction allows for a stability in feelings over time and across situations.

In the phase of formal operations, affective development is characterized by the development of idealistic feelings and the formation of personality (Wadsworth, 1984). During this phase an individual begins to have their own feelings or views about people; they develop their own ideas. An individual develops their own will with respect to the regulation and hierarchical organization of moral tendencies (Wadsworth, 1984).

Considering the development of fan loyalty, the phases of development of primary interest seem to be the preoperational phase and the phase of concrete operations. It is during these phases that an individual may first be able to distinguish between sports, teams, and between different players. At the same time, during these phases a child may develop particular likes and dislikes regarding particular sports, teams, and/or players. As a child continues their development, from preoperational to concrete operations, it should be possible to identify the stability of preferences by challenging an individual’s
preferences. A child in the preoperational phase is likely to show little resistance or stability toward a preference, while a child in the concrete operations phase is able to draw on past as well as present ideas and feelings and is likely to demonstrate stability (or commitment) toward a sport, team, and/or a player.

The framework presented by Piaget has proposed that cognitive and affective development flow along in a cumulative manner, with each new step in development built upon and becoming integrated with previous steps (Wadsworth, 1984). Piaget’s theory suggests that a child’s ability to understand what is said to them, and in turn, their ability to use language and to use logical thought, depends upon the child’s phase of development (Wood, 1988). The theory also suggests that young children at certain stages of development may not be capable of expressing ideas that involve specific forms of knowledge and understanding. For example, a child in the phase of concrete operations is able to classify objects and recognize hierarchies of classes. This indicates that a concrete operational child would be able to distinguish between sports, between teams within sports, and between different levels of a sport (high school, college, professional). A preoperational child who is able to represent the world through mental images or symbols may be able to distinguish between sports, but it is unlikely that they will differentiate between levels of a sport. In a similar manner, the affective development of a preoperational and a concrete operational child should allow for examining the development of loyalty. A concrete operational child is likely to demonstrate persistence and resistance to change regarding preference for a sport, team, and/or a player, while a preoperational child would demonstrate less consistency or stability.
Regarding fan loyalty, the ideas drawn from the phases of cognitive development suggest that until an individual reaches a particular phase of cognitive development and are capable of making affective and evaluative judgments, they would not be thought of as a loyal fan. Based on one’s level of cognitive development, it is proposed that an individual, a child, may first develop liking for a sport, team, and/or a player, but not necessarily loyalty. As cognitive ability develops, a child is capable of making affective and evaluative judgments, enabling them to form a psychological commitment to a sport, team, and/or a player, demonstrated through persistent behavior.

Social Context

In addition to examining when loyalty may develop toward a sport, team, and/or a player, this study also considers the elements which may influence the development of loyalty. Numerous studies have identified that within society there are a variety of factors which may influence the development of loyalty toward a sport, team, and/or a player (Kenyon, 1970; McPherson, 1976). In particular, during the “formative years” there are numerous socializing agents which may influence what an individual thinks, believes, and accepts, including family, peers, school, community groups, and media sources. This study seeks to identify those socializing agents thought to exert the primary influence on an individual during the early stages of developing fan loyalty.
As a first effort to look concurrently at the role of cognitive development and socialization on the formation of fan loyalty, this study will examine the following research objectives:

1. To identify, based on an individual’s level of cognitive development, when loyalty to a sport, team, and/or a player may first develop.
   a. Individuals at a pre-operational level of cognitive development are not expected to exhibit loyalty to a sport, team, and/or a player (a psychological commitment which is demonstrated through persistent behavior which is resistant to change).
   b. Individuals at a concrete operational level of cognitive development are expected to be capable of demonstrating loyalty to a sport, team, and/or a player (a psychological commitment which is demonstrated through persistent behavior which is resistant to change).

2. To identify those socializing agents which have a primary influence on an individual as they develop loyalty to a sport, team, and/or a player.
   a. At a pre-operational level of cognitive development, family members are thought to exert the primary influence on individuals as they develop loyalty toward a sport, team, and/or a player.
   b. At a concrete operational level of cognitive development, loyalty to a sport, team, and/or a player is thought to be influenced by family members, peers, and media sources.
3. To identify the object toward which loyalty first develops.

   a. Does loyalty develop in a progression from commitment to a sport, to a team, to a player, from commitment to a player, to a team, to a sport, or from some other sequence?

Definitions

Fan Loyalty: the degree to which an individual demonstrates continued support for a sport, team, and/or a player based upon cognitive, affective, and evaluative factors of psychological commitment (Jacoby, 1971). Fan loyalty will include two dimensions: a behavioral dimension (repeat purchasing of tickets and/or sport-related products, attending and/or watching sporting events, etc.) and an attitudinal dimension (psychological commitment to a sport, team, and/or a player).

Psychological Commitment: the psychological decisions or cognitions that fix or secure an individual to a particular choice (Crosby & Taylor, 1983), where an individual’s internal state resists changing an attachment to a sport, team, and/or a player in response to conflicting information or experience.

Socialization: the process through which an individual learns to perform various social roles through interaction with formal and informal socializing agents (Snyder & Spreitzer, 1973; Sage, 1974). Talking with family and/or friends about a sport, team, and/or a player, reading about, or watching programs about, a sport, team, and/or a player, purchasing sport-related products.
Socializing Agents: the formal and informal channels through which an individual learns the attitudes, values, knowledge, and behaviors (Sage, 1974) which are associated with being a loyal fan. Formal channels include schools, church groups, and community programs; informal channels include family, peers, and the mass media (Snyder, 1974).

Cognitive Development: the process through which an individual learns or acquires specific forms of knowledge and understanding (Wood, 1988).

Pre-Operational: a phase of cognitive development in which a child is able to represent the world through mental images and symbols, but only sees objects and people from one point of view (Singer & Revenson, 1978). Characterized by an inability to mentally arrange objects along a quantitative dimension (seriation), or to demonstrate conservation of thought (recognizing that the amount or quantity of an object stays the same regardless of changes in an irrelevant dimension) (Wadsworth, 1984).

Concrete Operational: a phase of cognitive development in which a child is able to perform mental operations (thinking about actions without physically performing them) (Singer & Revenson, 1978). Characterized by an ability to engage in seriation, conservation of thought, and reversibility of thought (able to mentally reverse the direction of thought; i.e. something that can be added may be subtracted, simple mathematical operations) (Wadsworth, 1984).

Limitations of the Study

Interviews were conducted with children from a private school, which did not provide a representative sample in terms of generalization, but did provide the information needed to illustrate a potential progression regarding the development of fan loyalty. The
total sample included interviews with fifty children; time constraints as well as man-power
constraints (only one interviewer) dictated that sample size be kept manageable.

Interviews were conducted in a large metropolitan city with strong collegiate
presence, but not a “strong” professional sport presence. While the city is home to several
professional sport organizations, none has what would be described as a “strong”
presence. It is possible that in another city, for example a city home to an NFL team, that
attachment to a particular team may be stronger. Considering level of cognitive
development, however, while there children in different cities might have more defined
preferences, there may not necessarily be any greater demonstration of loyalty (both a
behavioral and an attitudinal component).

Interviews were conducted in the fall and winter following the 1996 Summer
Olympic Games. It is possible that children’s preference for particular sports may have
been “prompted” by the recent Olympic games. Responses from the children, however,
did not suggest that there was undue bias or enhanced recognition of sports from having
watched the games during the summer.

As a first effort to examine the development of loyalty, the interview protocol was
implemented for the first time. The components of the protocol were developed from the
literature review and discussions with professionals in human and family development.
Field testing was utilized to determine whether or not the interview process would access
the desired information. Based on the responses given, the protocol was implemented for
the study. As with any dynamic process, there are some modifications that should be made in future research, to better communicate with children so that children understand the questions they are asked.

**Significance of the Study**

Understanding when fan loyalty may develop and the elements which may influence the development of loyalty, has the potential to influence researchers in academic settings and sport practitioners concerned with developing and maintaining a loyal fan base. The importance of market segmentation has been identified by loyalty researchers (Mullin, Hardy, & Sutton, 1993; Backman & Crompton, 1991). Within a sport context, researchers have recognized the importance of segmenting sport enthusiasts in order to develop programs or strategies which emphasize maintaining existing loyalties (Mullin, 1985; Mullin et al., 1993). Programs or strategies which emphasize maintaining existing loyalties do not take into consideration when loyalty may develop, and what elements may influence the development of fan loyalty.

Considering that loyalties developed early in life may be persistent (Guess, 1964), an understanding of when loyalty may initially develop provides the potential for implementing programs and strategies to develop loyalty, in addition to the maintenance of existing loyalties. An understanding of the elements which may influence the development of fan loyalty also provides the potential to focus efforts at developing loyalty on particular agents which exert a primary influence on the development of fan loyalty.
Additionally, this study provides a first effort to identify whether or not there is a consistent progression in the development of loyalty, and what, if any, is the primary object of loyalty.

Outline of the Dissertation

Chapter one of this study has introduced the construct of fan loyalty, emphasizing the importance of the attitudinal and behavioral dimensions of loyalty, and the role of cognitive development in the formation of fan loyalty. Chapter two reviews the literature on loyalty in general and within sport in particular, examines theories of cognitive development, with an emphasis on the elements which characterize the different phases of cognitive development, and assesses the literature on sport and consumer socialization. Chapter three explains the research design used to achieve the research objectives, describing the clinical-observational interview process utilized and the procedures used for data analysis. Chapter four presents the results of the project, and chapter five provides a discussion of the findings, conclusions, and recommendations for future study.
CHAPTER 2

REVIEW OF LITERATURE

To better understand the concept of fan loyalty, this chapter provides a critical overview and synthesis of the research relevant to the concept of loyalty in general and within sport in particular, cognitive development, particularly the elements which characterize different phases of development, sport socialization, and consumer socialization. A closer examination of loyalty in general will provide an understanding of the two dimensions which characterize loyalty, an attitudinal dimension and a behavioral dimension. An understanding of the elements which characterize cognitive development during the early phases of development may have particular significance in terms of identifying when an individual may first demonstrate fan loyalty. It is also thought that a review and synthesis of research relevant to sport and consumer socialization will contribute to a better understanding of the development of fan loyalty by providing a framework which identifies those socializing agents which may influence the development of fan loyalty.
The chapter begins with a review of the research on loyalty, starting with a discussion of the elements which characterize loyalty, including an in-depth examination of psychological commitment, which is thought to characterize the attitudinal component of loyalty. A description of fan loyalty is next considered, specifically the items thought to characterize an attitudinal and a behavioral commitment. Building on the importance of psychological commitment, the next section provides an overview of relevant literature from cognitive development, drawing primarily from the work of Piaget and Vygotsky, to establish the framework for the development of fan loyalty.

Considering fan loyalty from a developmental perspective, the chapter next focuses on elements which may influence the development of an interest in sports, looking specifically at the socialization process by which an individual learns to value sports. Research in consumer and sport socialization is reviewed, providing the basis for identifying the agents which may influence the development of fan loyalty. The chapter concludes with a synthesis of the literature on loyalty, cognitive development, sport socialization, and consumer socialization, which provides the framework from which the development of fan loyalty is assessed.

**Loyalty**

As a basis for understanding fan loyalty, it is important to consider the concept of loyalty in general and to understand how the concept has been assessed and measured in previous research. In his development of a scale to measure psychological commitment, Pritchard (1991) presented a comprehensive review of the state of loyalty research. Drawing from the extensive review of Jacoby and Chestnut (1978), Pritchard points out
that there are three distinct approaches to loyalty measurement. One view holds that consistent purchasing and measurement of an individual’s behavior provides an indication of brand loyalty. A second view looks at loyalty using only attitudinal measures, based on cognitive theories which hold that behavior alone does not reflect brand loyalty. A third view combines the first two approaches and tries to assess and measure loyalty using both behavioral and attitudinal components.

Behavioral Component

A review of early research on brand loyalty found that most of the original studies used a behavioral approach. Loyalty was operationalized as the repeat purchase of a particular brand over time (Brown, 1952; Cunningham, 1956; Tucker, 1964). Brand loyalty was measured by the actual purchase behavior of an individual, or from their self-report of purchase behavior (Pritchard, 1991). Jacoby and Chestnut (1978) grouped the behavioral definitions of loyalty into four groups: (1) the sequence in which brands were purchased (successive choices of the same brand were thought to represent loyalty, Brown, 1952; McConnell, 1968), (2) the proportion of purchase devoted to a particular brand (the proportion of total purchases represented by the largest single brand used, Cunningham, 1956), (3) the probability of purchase (looking at the average number of purchases for which an individual stays with a particular brand, Assael, 1987), and (4) a combination of these criteria.

Early work in loyalty research focused on an individual’s behavior as the full representation of brand loyalty. Researchers began, however, in the 1960’s to question behavior as the sole indicator of loyalty. Day (1969) was one of the first to suggest that
behavioral operationalizations alone could not distinguish between the purchase intentions of those who are truly loyal and those who repeatedly select a particular brand because of price or other incentives. Day (1969) helped advance the definition of loyalty by including psychological attachment as a distinguishing component.

**Attitudinal Component**

One of the short-comings with using behavior as the full representation of loyalty is that there is a failure to consider what motivates such behavior. Attitudinal measures of loyalty provide the means by which to understand the factors which lead to the development and modification of loyalty (Pritchard, 1991). Research on loyal attitudes has examined brand preference (Guess, 1964) and price sensitivity to repurchasing a particular brand (Monroe & Guiltinan, 1975). In addition, some work has examined brand preference in terms of accepted and rejected brands as a means of measuring loyal attitudes (Jarvis & Wilcoxon, 1976; Jacoby, 1971). Recognizing that both components play an important role, some research has attempted to include both dimensions in measures of loyalty (Pritchard, 1991).

**Composite Measures of Loyalty**

Jacoby and Kyner (1973) indicated that a unidimensional measure is not sufficient for measuring a complex phenomenon like loyalty. Day (1969) also suggested that true loyalty includes a favorable attitude toward a brand along with repeated purchasing of the product. Researchers subsequently recognized the importance of examining loyalty from a
multidimensional perspective (Jacoby, 1971; Olson & Jacoby, 1971; Newman & Werbel, 1973). One of the major problems identified in previous research has been the failure of many researchers to use a clear, concise conceptual basis for operationalizing loyalty (Pritchard, 1991).

Jacoby (1971) presented one of the first comprehensive definitions of brand loyalty which has been substantiated empirically. Jacoby defined brand loyalty as “a biased (nonrandom), behavioral response (purchase), expressed over time, by some decision-making unit, with respect to one or more alternative brands out of a set of such brands, and is a function of psychological decision-making, evaluative processes” (p. 655).

*Loyalty may be viewed as a distinct form of repeat purchase behavior, characterized by psychological commitment.* Jacoby and Chestnut (1978) have suggested that the concept of commitment provides the essential basis for distinguishing between brand loyalty and other forms of repeat purchase behavior, and also provides a perspective from which to assess the degree of loyalty.

According to Pritchard (1991), during the 1970's loyalty research focused predominantly on refining measures of the behavioral dimensions of loyalty. Research examining loyalty from a composite perspective, related to a sport setting, has been conducted in the leisure field (Backman & Compton, 1991; Howard, Edginton, & Selin, 1988). Research has attempted to assess loyalty by examining first the behavioral dimension of loyalty, and second by administering commitment scales to measure
recreation consumers’ attitudinal dimension. One of the difficulties with previous research, however, has been the formulation of valid and reliable attitudinal measures (Pritchard, 1991).

Pritchard (1991) explained that different items used to develop measures of attitudes have come from descriptive features of loyal consumers. Items have been based on person-specific characteristics rather than on a theoretical premise. Day (1970) has argued that measures of an attitudinal component should be based on psychological processes. Muncy (1983) has also argued that many earlier measures were developed from operational definitions rather than from a theoretical conceptualization of loyalty. Drawing from the work of Jacoby and Chestnut (1978), Jacoby (1971), and Day, (1969), Pritchard (1991) has developed a Psychological Commitment Inventory (PCI) with which to assess the attitudinal component of loyalty based on the premise of psychological commitment.

**Psychological Commitment**

Commitment is believed to provide a measure of the psychological decision-making and evaluative processes that underlie loyalty (Jacoby, 1971). Understanding why commitment may be considered an important element of loyalty is found in a definition of the construct. Sociologists tend to define commitment in terms of the social factors which constrain or commit an individual to a consistent line of action (Becher, 1960). Psychologists define commitment in terms of decisions or cognitions that fix or bind an individual to a behavior (Pritchard, 1991).
Drawing from both sociology and psychology, research in consumer behavior tends to define commitment in terms of preference stability and resistance to persuasive communications (Robertson, 1976). Crosby and Taylor (1983, p. 414) define the construct as:

"The tendency to resist change in preference in response to conflicting information or experience. Psychological commitment is maximized when (1) the individual is motivated by a need to maintain consistent relationships between preference and salient aspects of cognitive structure (Rosenberg, 1960), and (2) important values and self-images are linked to the preference, leading to a state of position involvement (Freedman, 1964)."

Two important elements included in the definition of psychological commitment are cognitive consistency (Rosenberg, 1960) and position involvement (Freedman, 1964). Consistency between beliefs and feelings for an object are thought to develop a stable, behavioral intention toward that object (Rosenberg, 1965). Pritchard (1991, p. 24) explains that "the affective component of attitude is the overall positive or negative response to an object, while the cognitive component is made up of beliefs about the potentialities of the attitude object for attaining or blocking the realization of valued states." It is thought that the more a given object is viewed as instrumental to obtaining positively valued goals and to blocking negatively valued events, the more favorable will be an individual’s affect toward the object.

The notion of position involvement also contributes to the idea of consistency. One’s beliefs (cognitions) regarding their involvement with an attitude object are
evaluated in order to determine whether they are consistent with, and contribute toward the attainment of desired value states and self-images (Freedman, 1964). This suggests that the “values” and “self-images” perceived by an individual in their commitment to a particular sport, team, and/or a player, would be evaluated to determine if they are indeed consistent with an individual’s internal view of what values and self-images are, or should be true for them.

Utilizing the definition and description of the components of psychological commitment as a theoretical framework, Pritchard (1991) has developed a psychological commitment inventory (PCI). The PCI provides a measure of the dimensions thought to characterize psychological commitment. The first dimension, resistance, reflects an individual’s reluctance or resistance to change important associations with or beliefs about a particular object (in this setting, a sport, team, and/or a player). Pritchard (1991) explained that the elements comprising the resistance factor show the importance of symbolic association, awareness, and perpetuation of a public-self in ongoing relationships.

The second dimension, volition, incorporates the elements of free choice, control, and self-responsibility for one’s preference for a particular sport, team, and/or player. Pritchard (1991) has suggested that the internal perception that one may freely act in some way will contribute to the degree to which they feel committed to the act or decision. In other words, when an individual perceives that their attachment to a sport, team, and/or a player is a result of personal choice, they are likely to feel a stronger or higher degree of commitment to the sport, team, and/or player.
The third dimension, *complexity*, captures the concept of cognitive complexity. The richness of idea content or the number of ideas regarding an attitude object are thought to determine the ease with which an attitude or preference may be changed (Day, 1970). The more complex the ideas one has regarding a sport, team, and/or player, or the greater the number of ideas about a sport, team, and/or a player, may influence the ease or difficulty of changing an attitude or a preference. Complexity is also thought to result in greater attitude polarization and more complex schema structure (Millar & Tessar, 1986). Robertson (1976) suggested that low-commitment behavior is characterized by a relatively simple cognitive structure. Changing one’s preference would require little change in cognitive structure, resulting in less resistance to changing one’s commitment to a sport, team, and/or a player. Individuals with higher levels of commitment tend to have more complex cognitive structures, and are more likely to resist efforts to change their association with an attitude object, like a sport, team, and/or a player (Freedman, 1964).

Moving beyond earlier research which focused primarily on the behavioral components of loyalty, a better understanding of the loyalty construct may be achieved by considering both the behavioral and the attitudinal components. Work by Jacoby and Chestnut (1978), Day (1970), and Pritchard (1991) provides an understanding of the theoretical premise of commitment. Considering both the behavioral component, and the psychological commitment involved in loyalty a basis is now available from which to more accurately explain the loyalty construct and to consider implications for developing and maintaining loyalty.
As indicated, previous research has focused on measurement of the behavioral component of loyalty. With attention being given to developing instruments from a theoretical premise, researchers are able to more accurately examine the attitudinal component of loyalty. Having a better understanding of the loyalty construct, recognizing both the behavioral and the attitudinal components, attention may now be directed toward understanding more in-depth when loyalty may develop and what elements may influence such development.

**Fan Loyalty**

The elements within the definition of fan loyalty may provide a starting point for better understanding when loyalty may develop and what elements may influence such development. As suggested, fan loyalty includes two dimensions: behavioral (repeat behavior such as purchasing tickets, attending sporting events, watching sports on television, reading and talking about sports, purchasing sport-related products) and attitudinal (commitment to a particular sport, team, and/or player, including the dimensions of personal choice, resistance to changing one’s preference, and cognitive complexity). Considering *when* loyalty may develop and what elements may influence that development involves looking at when commitment to a sport, team, and/or player forms.

The dimensions of commitment - resistance, volition, cognitive complexity - indicate that when forming a linkage or a bond to a particular sport, team, and/or a player, an individual has engaged in, and continues to engage in, a minimum level of cognitive activity. Resistance to changing one’s affiliation indicates that a person has evaluated
other alternatives and continues to evaluate new information with existing schemas regarding a particular sport, team, and/or player. Volition indicates that a person's attachment to a sport, team, and/or player is a result of personal choice, suggesting that an individual has purposively and thoughtfully made the decision to identify with a particular sport, team, and/or player. Complexity incorporates the idea of cognitive complexity, which suggests that an individual has not only considered a variety of ideas and thoughts, but also that such ideas and thoughts have a level of depth. The greater the number of thoughts about, and the complexity of one's thoughts regarding a sport, team, and/or player, influence the ease or difficulty of changing a fan's loyalty.

Taken together, these ideas suggest that an important part of studying the development of fan loyalty is considering an individual's level of cognitive development. For fan loyalty to develop, in order for an individual to demonstrate resistance, volition, and complexity regarding their commitment to a sport, team, and/or player, it is essential for one to have reached a particular level of cognitive development. An individual must have reached the point at which they are able to evaluate thoughts and ideas, to make preference decisions between attitude objects and, as suggested by Millar and Tessar (1986), to have developed schemas of sufficient complexity to resist efforts to change loyalty to a sport, team, and/or a player.

Cognitive Development

As suggested in chapter one, there are a different perspectives from which to consider the concept of cognitive development. One perspective has suggested that a child achieves cognitive development through changes in cognitive functioning that occur
as a result of interacting with their environment (Wadsworth, 1984). It has also been proposed that a child achieves cognitive development as a result of external reinforcement or conditioning (Wood, 1988), suggesting that cognitive development results from observing the world and imitating what one observes (Singer & Revenson, 1978).

Prior to the 1960's, cognitive development was thought to result from reinforcement and its roles in learning and instruction (Wood, 1988). Psychology in the United States developed from a strong tradition of behaviorism, with a primary interest in stimulus-response relationships and the notion of reinforcement (Wadsworth, 1984). B.F. Skinner proposed the ideas of reinforcement, showing that to maintain a response given a particular stimuli, an individual's behavior results from the relationship between a response and subsequent reinforcement. Wood (1988) has suggested that theories of learning based on external reinforcement were heavily emphasized because they provided opportunities to develop theories identifying directly observable and manipulable variables. Emphasis was placed on the objective relationships between conditions of learning and observable responses, but there was little, if any, consideration for internal, mental states. Wadsworth (1984) further suggested that traditional theories of learning arising from the behaviorist school, prior to the 1960's, had not even inferred the existence of internal mental processes during early cognitive development. Since the mid-1960's, however, an understanding of cognitive development, how children think and learn, has been influenced by the ideas of Jean Piaget (Wood, 1988; Sutherland, 1992).
Piaget's Theory of Cognitive Development

Early research in cognitive development was concerned with rigorous control of experimental variables and treatment of data with sophisticated statistical procedures (Wadsworth, 1984). Piaget evolved a clinical-descriptive technique through which he was able to provide systematic and detailed analyses designed to detect developmental changes in cognitive development. Wadsworth (1984) has explained that while much of Piaget's early work may be viewed as intuitive, utilizing nonexperimental procedures, a large portion of Piaget's later work has incorporated rigorous, experimental procedures. While some criticize Piaget's approach to research because it is a different style, no one has disputed the systematic, rigorous, and insightful nature of the research (Wadsworth, 1984). Sutherland (1992) suggests that Piaget's theory of cognitive development still retains an explanatory power that seems to survive criticism, providing some of the best insight available into children's thinking.

Piaget's perspective of cognitive development focuses on mental processes such as perceiving, remembering, believing, and reasoning (Singer & Revenson, 1978). Piaget presents the view that a child has an active role in development through learning how to act on the world and discovering the consequences of action; the world is not just observed and imitated, it is interpreted (Wood, 1988). This perspective views development as an individual's ability to cope with the changing world through continuous organization and reorganization of experience (Singer & Revenson, 1978). According to Piaget, the organization and reorganization of experience occurs within a set of mental structures, which include the nervous system and sensory organs (Singer &
Revenson, 1978). As these structures become more developed, a child uses them more effectively to deal with the environment. This suggests that cognitive development is cumulative, understanding a new experience grows out of what was learned during a previous experience. A key distinction in Piaget’s perspective is the notion of interpretation. Rather than viewing behavior in terms of stimuli and responses, Piaget has described development as a process of adaptation.

Discussing the process of cognitive development, Wood (1988) has presented a synopsis of Piaget’s perspective. Cognitive development is described as acts of organization of and adaptation to the environment. Adaptation is described as “the continuous process of using the environment to learn, and learning to adjust to changes in the environment” (Singer & Revenson, 1978, p. 13). Through this process an individual organizes the various sensations and experiences they encounter into some kind of order, they adapt to their surroundings. The process of adjustment described by Piaget consists of two complementary processes, assimilation and accommodation (Piaget & Inhelder, 1969; Wood, 1988). Assimilation is the process of taking in new information about things, people, ideas, customs, tastes, etc., and fitting them into one’s own notions about objects or about the world. Accommodation is the process of adjusting to new experiences or objects by revising old conceptions to fit new information. Initially a child is thought to attempt to understand a new experience by applying old situations or information (assimilation). If that does not work the child must change existing conceptions or ideas about the world in order to interpret a new experience (accommodation) (Singer & Revenson, 1978).
The dual processes of assimilation and accommodation, which lead to adaptation, enable a child to form what Piaget calls a schema (Piaget & Inhelder, 1969; Wood, 1988). A schema is “a simple mental image or pattern of action, a form of organizing information which a person uses to interpret the things they see, hear, smell, and touch” (Singer & Revenson, 1978, p. 13). As a child develops language skills, they use words or symbols to represent people, ideas, or objects. A word such as “dog” may invoke a schema of a four-footed, barking animal. Explaining the influence of assimilation and accommodation on schemas, Wadsworth (1984) described assimilation as the integration of new perceptual, motor, or conceptual matter into existing schemata or patterns of behavior. As a child encounters new experiences, they try to fit new events or stimuli into existing schemata. In other words, assimilation may be thought of as the cognitive process of adding new stimulus events to existing schemata.

Assimilation provides for the growth of schemata, but not for change in a schemata (Wadsworth, 1984). Change of schemata occurs through accommodation. When a child is confronted with new stimuli they try to fit the information into existing schemata. If this is not possible, a child may try to create a new schema to place the information into, or they may modify an existing schema so that the stimulus will fit (Wadsworth, 1984). Either process is a form of accommodation, the creation of a new schemata or the modification of an existing schemata. Either action results in cognitive development. Schemata are the cognitive or mental structures by which individuals adapt to and organize the environment (Wadsworth, 1984). These are the structures thought to adapt and change with mental development.
From a simple perspective, schemata may be thought of as concepts or categories. These structures are used to differentiate between events, information, objects, ideas, etc., according to common characteristics. As a child develops, the various schemata become differentiated and more numerous and they form an increasingly more complex network. While schemata are defined by, or reflected in, overt behavior, it is important to recognize that they are the *internal structure* from which behavior emerges (Wadsworth, 1984).

Working together, the processes of assimilation and accommodation lead to what Piaget has called *adaptation* (Singer & Revenson, 1978; Siegler, 1991). As indicated, adaptation is the process of using the environment to learn, and learning to adjust to changes in the environment. An important element of adaptation is the balance between the two processes. Piaget has referred to adaptation as a “process of seeking an equilibrium between the self and the environment” (Singer & Revenson, 1978, p. 16). This equilibrium is a balance between assimilation and accommodation. Wadsworth (1984) has pointed out that with too much assimilation an individual would be unable to detect differences in stimuli, and with too much accommodation one would be unable to detect similarities in stimuli. A balance is important to experience cognitive growth and development.

Wood (1988) has suggested that through interaction with the environment, an individual desires to maintain the balance between assimilation and accommodation. Piaget describes the process of seeking mental equilibrium as *equilibration* (Wood, 1988; Siegler, 1991). When an individual experiences disequilibrium, the desire to achieve a balanced state (equilibration) is activated. Equilibration is the process of moving from
disequilibrium to equilibrium, which results in activating the appropriate process, assimilation or accommodation, to process particular stimuli. According to Piaget’s perspective, development takes place as an individual experiences disequilibrium, and is stimulated to return to a state of equilibrium. Four factors have been identified which are thought to stimulate an individual, to create a sense of disequilibrium which motivates an individual to progress in their cognitive development.

The first factor suggested by Piaget that is related to development is maturation and heredity (Wadsworth, 1984). Piaget believed that heredity sets limits for development at any point in time, and that maturation is the mechanism through which these limits are set. In other words, maturation is thought to determine the range of possible development at a specific phase in one’s life. A second factor thought to influence development is experience. Actions may be characterized as physical manipulations of objects or events, or mental manipulations of objects or events (thinking) (Wadsworth, 1984). Through active experiences, or exposure to a variety of experiences, a child makes discoveries and is able to learn (Singer & Revenson, 1978). Emotions are thought to be a third factor influencing development. Piaget has suggested that emotions create feelings which are thought to motivate an individual to action, or to question, which in turn guide learning (Singer & Revenson, 1978). The fourth factor thought to influence development is social interaction. Interaction with others (family, peers, teachers, etc.) provides opportunities for an individual to act on their environment, and also provides the transmission of ideas and information to an individual (Wadsworth, 1984). Social interaction is suggested to provide information necessary for the construction of schemata,
and also confirmation or validation of ideas and information which contribute to the
growth or creation of schemata. The four factors are suggested to work together to guide
development and to initiate disequilibrium which motivates learning.

Piaget's general theory suggests that cognitive development is a coherent process
of successive qualitative changes of cognitive structures (or schemata) (Wadsworth, 1984.) Each structure and its subsequent change is derived logically and inevitably from
the preceding structure. New schemata do not replace prior ones, they incorporate them,
resulting in qualitative change. Piaget's conception of development may best be thought
of as a process along a continuum, with changes in development occurring gradually. To
better understand the process of cognitive development, Piaget has proposed to divide the
continuum into four broad stages or phases (Piaget & Inhelder, 1969). Viewing
development along a continuum suggests that as an individual moves from one phase to
the next, later stages evolve from and are built upon earlier stages.

**Phases of Development**

At each phase of development a child is thought to acquire more complex motor
skills and cognitive abilities. Different behaviors are thought to characterize different
phases of development (Piaget & Inhelder, 1969). While Piaget has been criticized for the
use of stages, it is important to recognize that Piaget has not suggested that children move
from discrete stage to discrete stage in development (Wadsworth, 1984). Piaget has
proposed that cognitive development is a continuous *process*; the use of stages or phases
is a definitional convention through which one is able to conceptualize or characterize
distinctive elements of a particular phase. By identifying characteristic elements of a particular phase, observers are able to ascertain the approximate position of an individual along the continuum of cognitive development.

The four stages or phases of development proposed by Piaget (see Figure 2.1) are the sensori-motor stage (birth through age 2), the preoperational stage (ages 2-7), the stage of concrete operations (ages 7-11), and the stage of formal operations (ages 7-11) (Piaget & Inhelder, 1969). It is important to recognize that the age marks are not absolute. The ages are provided as an average range at which particular behaviors are thought to occur, which characterize different phases of development (Singer & Revenson, 1978). What is important is not the age at which a child reaches a particular phase of development, but that a child follows the particular sequence in their cognitive development.

| Sensori-Motor Development | → Preoperational Thought | → Concrete Operations | → Formal Operations |

Figure 2.1 Piaget’s Phases of Cognitive Development

The sensori-motor phase focuses primarily on motor behavior, including actions like sucking, grasping, and crying. At this point a child does not yet represent events internally nor do they “think” conceptually. During this phase an infant is thought to modify motor movements, such as sucking and grasping. For
example, newborns reflexively suck objects that are placed in their mouths; in the first month, however, they begin to suck differently on a milk-beariing nipple than on a different object (Sutherland, 1992). During the second month, Piaget proposed that infants engage in primary circular reactions, in which an action that produces some interesting effect is repeated in an attempt to duplicate the effect. As secondary circular reactions develop, it is thought that infants begin to make connections between their actions and the effects of their actions (Sutherland, 1992). Infants next begin to coordinate secondary reactions by combining activities to achieve a result. Piaget describes how, when a pillow was placed in front of an object, an infant capable of coordinating reactions would push the pillow aside in order to grasp an object (Piaget & Inhelder, 1969). When infants begin to demonstrate tertiary circular reactions, they continue to repeat actions, but now they actively search for new ways to interact with items and explore the various ways in which objects may be used. At the end of the sensori-motor phase, a child begins to form internal mental representations. As external actions become internalized, a child is entering the phase of preoperational thinking.

At the phase of preoperational thought Piaget suggested that children cannot discriminate classes hierarchically, or categorically. For example, a preoperational child may not understand that oranges and apples are both fruit (Sutherland, 1992). At this phase of development, immediate perceptions dominate a child's thinking. As a result, a child is easily tricked by apparent change in appearance. As cognitive development progresses, a child is thought to become better at decentering, or seeing the whole of any scene, instead of concentrating on one aspect of a scene (Sutherland, 1992). In terms of
fan loyalty, an inability to classify items in a hierarchical sense suggests that a child would not demonstrate an understanding of levels within sports, such as the distinction between high school, college, and professional football. All teams would be thought of as football, regardless of their classification.

To demonstrate the preoperational phase Piaget focused heavily on what preoperational children cannot do (Siegler, 1991). Piaget viewed preoperational children as being unable to solve problems that were indicators of logical reasoning. To assess preoperational thinking, Piaget posed a variety of problems to children, focusing on conservation tasks. The purpose of such tasks was to demonstrate that in the preoperational phase, children tend to focus on static states rather than transformations (Siegler, 1991). An example of such a task would be a problem involving conservation of mass.

To test conservation of mass, a child would be shown two balls of clay (equal in size), and asked if they believed the two balls were equal; upon agreement that the two balls were equal, a child would be asked to explain why they thought the two balls were equal. Responses such as, “because they look the same,” were thought to indicate an emphasis on immediate perception. In front of the child, one of the clay balls would be flattened so that it was thinner, but much wider than the remaining ball of clay. A child would be asked a second time which item had more clay. If a child responded that one of the balls had more clay, they were asked why they thought it had more clay. Responses which included comments like “it’s bigger” or “it’s wider” were thought to demonstrate a
focus on the static state, not the transformation (since the amount of clay in each ball was equal). Piaget performed additional tasks using conservation of volume and conservation of number (Piaget & Inhelder, 1969; Wood, 1988).

At the phase of concrete operational thought Piaget suggested that a child was no longer bound by immediate perceptions, and that a child at this phase would be able to represent an object internally (or mentally), and would also be able to manipulate such a representation (to perform a mental operation) (Sutherland, 1992). According to Siegler (1991), two important features of this phase are that operations are reversible and that they are organized into larger systems (or schemata). At this phase of development a child is able to order items hierarchically or to classify items. The distinctive element of this phase is the premise that the item or object upon which a child operates must be physically present, concrete operations. To demonstrate that concrete operational thinking has been attained, children have been asked to complete conservation tasks.

Tasks involving conservation of mass, volume, and number (along with others) have been used to demonstrate concrete operational thinking. For example, Wood (1988) has described a task measuring conservation of volume. A child is shown two containers with equal amounts of a liquid (generally water). The child is asked which container has the most liquid; upon agreement that the containers have equal amounts, the water from one container is poured into a taller, thinner container, then placed next to the original container which still has water. The child is then asked again which container has more liquid. A child using concrete operational thought would respond that the containers have equal amounts of water; transferring the liquid from one container to another would not
change the amount. In contrast, a child using preoperational thinking would respond that one of the containers has more liquid, because of the size of the container (immediate perception, inability to transform).

When a child achieves what is thought to be formal operations, it is thought that an individual is able to perform operations on operations (Siegler, 1991). Sutherland (1992) explains that in this phase, an individual is able to reason in a logically consistent way, without the help of any concrete objects. An individual engaged in formal operational thought may conceive of a new idea, try it out in their head, and test it out (Sutherland, 1992). A formal operational thinker is able to organize and structure elements of a problem through systematic thinking. An important element of this phase is the ability to think abstractly.

Initial research on Piaget’s theory of cognitive development provided support for the different phases of development (Inhelder & Piaget, 1958; Piaget & Inhelder, 1969). More recent research, utilizing the same procedures as Piaget have also demonstrated some support for the stage theory of cognitive development (Wadsworth, 1984). The same type of reasoning that Piaget described from his analysis of Swiss children has been demonstrated in children from a variety of countries, including North America, Great Britain, Canada, Australia, and China (Siegler, 1991). In general, attempts to replicate Piaget’s findings have been successful, in different countries and in different time periods (see Siegler, 1991, for a synopsis; Byrnes, 1988). Research attempting to do more than replicate has, however, brought into question some of the ideas proposed by Piaget.
Criticism's of Piaget's Theory

Piaget's phase of concrete operations has elicited the greatest amount of follow-up work (Sutherland, 1992). Peter Bryant and Margaret Donaldson have examined Piaget's ideas, raised questions about Piaget's methods, and subsequently modified certain ideas. One of the primary concerns regarding Piaget's methods is the manner in which questions are phrased to children. Many of the conservation tasks presented to children involve attempts to "catch" a child; answers given to children to select from many times did not include the correct answer. It is further argued that the phrasing of questions in the conservation tasks may not have been understood by children (Sutherland, 1992). Using experimental and control groups, rather than Piaget's clinical observation methodology, Bryant has conducted research investigating concrete operational thinking. Using a set of beads and match sticks, Bryant and Trabasso (1971) examined the question of when children realize that a quantity remains the same, even though it has undergone an apparent change in appearance.

Instead of showing children two rows of similar objects, then manipulating the length of the rows to assess number representation, Bryant and Trabasso (1971) showed children a top row of beads and a bottom row of beads; the bottom row was spaced further apart than the top row (similar to Piaget's conservation of number task). Between the two rows, match sticks were placed so that they extended from a bead in the top row to a bead in the bottom row, serving to "connect" the beads. The objective was to determine if a child recognized that despite different appearances, the same number was represented in both rows. Results indicated that children as young as age four were able
to demonstrate conservation of number. Additional research has demonstrated that children may achieve conservation skills (Gelman, 1972) and an understanding of object permanence (Baillargeon, 1987) at earlier ages than those predicted by Piaget. One conclusion which has been reached is that Piaget’s observations about children’s thinking suggest several important ideas, but they tend to underestimate children’s understanding in that attainment of different concepts, like object permanence and conservation skills, may occur at earlier ages than first suggested (Sielger, 1991).

Work by Donaldson has also led to a modification of some of Piaget’s ideas. Donaldson’s criticism of Piaget’s perspective focused on the way in which Piaget asked children questions. Piaget’s approach was viewed as trying to “catch” children, rather than trying to help them understand a problem. Research conducted from Donaldson’s perspective has focused on providing more natural situations that children may better understand (as opposed to an artificial setting), and using language that children understand (McGarrigle & Donaldson, 1974; McGarrigle, Grieve, & Hughes, 1978). McGarrigle and Donaldson (1974) devised a screen test to assess how well children could see another’s point of view (similar to Piaget’s mountain problem). Through the use of children’s toys and with some training, results indicated that children between three and a half and five years of age could see another’s point of view (demonstrating operational thinking). It is important to recognize, however, that Donaldson’s focus was not on assessment of cognitive development per se, but on what children are capable of understanding given optimal help.
Relevance of Piaget’s Theory Today

While there are issues to be addressed regarding Piaget’s theory of cognitive development, Sutherland (1992) argues that much of Piaget’s work is still relevant today. Elements of Piaget’s theory which are particularly relevant include the scope of the theory, looking at development from birth to adolescence. The concepts of concrete operational thinking and abstract thinking are also important items to consider. Investigations of Piaget’s initial ideas suggest that while Piaget may have underestimated younger children’s reasoning abilities, a modified version of his ideas is plausible. One modification suggested by Sutherland (1992) is that the “phenomenon of operational thinking does exist and that this is sometimes attained at an earlier age than Piaget indicated” (p. 114). In terms of experiencing cognitive development, Sutherland (1992) emphasizes that children need optimal help, which may take the form of making situations as stimulating and natural as possible, providing cues to help children understand task requirements, and using language that is clear to children.

Siegler (1991) also suggests the continuing relevance of Piaget’s framework. One of the important elements of the theory is that it provides “an almost tangible sense of what children’s thinking is like” (Siegler, 1991, p. 18). The development of fundamental concepts, including concepts of space, time, and number, into a single framework makes the theory a significant contribution. “There remains an explanatory power to Piaget’s stage theory that seems to survive criticism. It provides the best insight we have into children’s thinking, particularly in abstract subjects” (Sutherland, 1992, p. 117). Other theories focus on the individual act of learning, such as the information-processing
perspective, or emphasize particular steps within cognitive development. Other theories have not, however, offered a description of cognitive development over the whole continuum from infancy to adulthood in the way that Piaget has.

Taking into consideration modifications suggested to Piaget’s theory, assessment of the development of fan loyalty, in terms of when an individual may first demonstrate loyalty based on cognitive development, is plausible. Important considerations include using language which is understandable to children, making situations as natural and stimulating as possible, and providing cues to help children understand task requirements. Including such considerations in an examination of a child’s level of cognitive development may help in understanding when a child may first demonstrate fan loyalty.

To gain a more complete picture regarding the development of fan loyalty, an understanding of the elements which may influence development requires looking not only at an individual’s level of cognitive development, but also looking at those elements around an individual, or the socializing elements which may influence an individual.

**Elements Influencing Development**

To Piaget the social aspect of children’s learning centered on the idea of social interaction. Piaget suggested that one way concepts are learned, particular concepts which may be socially defined, is through interaction with others (parents, peers, other adults) (Wadsworth, 1984). It is important to note, however, that Piaget’s focus was not on the elements which provided input to a child, but rather on the processes by which a child internalized stimuli in the development of schemata. Piaget held the view that social understanding and social interaction is the result of prior cognitive activity; in other words,
social interaction and social understanding develops as a result of having achieved
particular phases of cognitive development.

While Piaget's theory of cognitive development provides guidelines to help in
assessing an individual's level of cognitive development, the theory does not address the
items which may influence the development of fan loyalty. The focus of this research is to
examine when fan loyalty may develop and what elements may influence such
development, not the process of cognitive development per se. Consequently, while
Piaget provides an understanding of the level of cognitive development needed to
demonstrate fan loyalty; a clearer picture of the elements which may influence the
development of fan loyalty may be found from the perspective proposed by Vygotsky.

Vygotsky's Sociocultural Theory

The importance of considering the influence of social elements in the development
of fan loyalty is highlighted by Schafer (1989) who has pointed out that children are in
social groups most of the time from ages two to five. Young children are in various social
settings such as playgroups, nurseries, and mother-and-toddler groups. In a home
environment, many children are in the company of siblings, and even an only child is in
school much of the time beginning around age five. Research in sports socialization also
suggests that socializing agents, such as parents, peers, and the media may play an
important role in the development of fan loyalty (McPherson, 1976; Smith et al., 1981).
An understanding of the role these agents play may best be understood from the
Vygotskian approach to understanding children's learning.
Piaget emphasized the importance of biological influence in cognitive development, and believed that development was a matter of maturation through the process of adaptation (Piaget & Inhelder, 1969; Sutherland, 1992). Piaget emphasized the importance of an individual’s interaction with the environment in order for cognitive development to occur. Vygotsky also supported the idea that children play an active role in developing their own understanding, and that children do not passively reproduce information that they are presented with (the behaviorists perspective). A key difference between the two approaches, however, is that Vygotsky believed that cognitive development is also socially mediated, meaning development is influenced by present and past social interactions (Bodrova, & Leong, 1996).

Vygotsky’s theory of cognitive development emphasizes that both physical interaction and social interaction are necessary. As a child touches, compares, arranges, and rearranges objects (an active role, which is similar to Piaget’s position), schemata are developed. The role of social interaction is to provide knowledge about which characteristics are most important, what to notice, what to act upon (Bodrova & Leong, 1996). In other words, Vygotsky argued that cognitive development cannot be considered in a social vacuum; a child’s family, peers, and classmates must be taken into account to better understand the elements which influence the overall process of cognitive development (Sutherland, 1992), and specifically the elements which may influence the development of fan loyalty.
Piaget emphasized that activity forms the basis for internalization, the idea that a child acts on their environment and subsequently one’s external actions form the basis for mental operations. Vygotsky also proposed a process of internalizing from external actions, and included the importance of internalizing social activities. In terms of development, Vygotsky also suggested that an individual advances through phases of development (Sutherland, 1992):

1. Assistance is provided by more capable others (teacher, more able peer).
2. Assistance is provided by the child himself by talking aloud in order to solve problems.
3. Internalization of the concept.

While Vygotsky was interested in the span of cognitive development, his energies were focused on the overall process of education (Sutherland, 1992). Where Piaget focused on the child, Vygotsky focused on the teacher. Emphasizing the role of social interaction, Vygotsky proposed that through assistance a child could develop beyond where they might otherwise have been without assistance (Sutherland, 1992). Vygotsky saw social elements, particularly teachers, as providing the scaffold through which a child achieves greater development. Where Piaget would consider an individual’s level of development, based on their performance of various tasks, Vygotsky would consider where an individual’s development was at, and further how a child might be challenged to extend beyond the current level (an emphasis on how social elements influence
development). Bodrova and Leong (1996) suggest that Vygotsky’s perspective is really a framework for understanding learning and teaching, not just examining level of cognitive development.

**Zone of Proximal Development**

An important element of Vygotsky’s perspective, considering what and how social elements may influence development is the idea of a *zone of proximal development* (ZPD). Vygotsky defined the ZPD as the distance between the actual level of development as determined by independent problem solving, and the level of potential development which may be determined through problem solving under guidance or in collaboration with more capable peers (Berk & Winsler, 1995). As indicated earlier, Piaget’s focus was on identifying the phases of cognitive development, and the items which characterize the different phases. Vygotsky suggested that it is important to measure not only what children can do individually, or to measure what they already know, it is also important to understand what a child can do with assistance from another person and the potential they have to learn (Berk & Winsler, 1995).

Vygotsky proposed that the ZPD is a dynamic zone of sensitivity in which cognitive development and learning occur. Tasks that children are unable to do by themselves, but that they can do with help from others, activates mental functions which are being developed, rather than functions which are already developed (Berk & Winsler, 1995). Considering that the ZPD is dynamic and may vary in depth from child to child may help in understanding why children at younger ages may demonstrate characteristics of operational thought earlier than Piaget initially proposed. A child with a larger “zone”
may have a greater capacity to be helped by others than a child with a narrow zone
(Sutherland, 1992). In other words, a child younger than initially suggested by Piaget with
a larger ZPD may demonstrate characteristics of operational thought when language that
is understandable to the child is used, when tasks are structured in a natural (or
meaningful) setting, and when cues are provided which help a child understand a task.

The importance of Vygotsky’s perspective for understanding what elements may
influence the development of fan loyalty is also demonstrated in the emphasis placed on
the social context. For Vygotsky, development is always socially mediated, which
suggests that the social context influences not only attitudes and beliefs, but also how and
what an individual thinks (Bodrova & Leong, 1996). Vygotsky suggests that the social
context may be viewed from several levels (Bodrova & Leong, 1996):

1. **The immediate interactive level**, which is the individual(s) a child is
   interacting with at the moment.

2. **The structural level**, which includes the social structures that influence the
   child, such as school and community programs.

3. **The general cultural or social level**, which includes features of society at
   large, such as language, numerical systems, and the use of technology.

In terms of understanding the elements which may influence fan loyalty, the levels
proposed by Vygotsky may be associated with particular socializing agents:

1. **Immediate level**, parents, siblings, friends, personal participation (those
   elements with which a child has primary interaction).
(2) **Structural level**, influence from school and/or community programs.

(3) **General cultural or social level**, influence from media sources.

To better understand the development of fan loyalty, when considering an individual's level of cognitive development, it may be possible to identify the agents which influence fan loyalty by considering the social context in which an individual primarily operates (or the context through which an individual is most influenced).

In general, it is proposed that a minimum level of cognitive development is necessary in order to demonstrate fan loyalty. The attitudinal component of loyalty, specifically the notion of psychological commitment - characterized by cognitive complexity, volition, and resistance to change - suggests that an individual has considered different alternatives and has made a conscious choice to form an attachment with a particular sport, team, and/or a player. This process requires that an individual be able to categorize or make distinctions between sports, between teams, and between players.

Piaget's theory of cognitive development provides one means by which to identify level of cognitive development according to whether or not an individual demonstrates operational thought (which includes classification or categorization). Additionally, research in socialization suggests that various socializing agents may influence what an individual thinks, believes, and accepts. It is thought that these agents may influence the development of loyalty. Vygotsky's perspective on cognitive development emphasizes the importance of the social context in development, and provides a framework through which the social context may be considered. By identifying whether or not an individual
demonstrates fan loyalty, and by examining the elements which may influence loyalty, a better understanding of when fan loyalty may develop, and the items which influence that loyalty may be achieved.

**Interest In Sports**

To help understand when fan loyalty may first develop and what elements influence the development of loyalty, it may be instructive to consider why people are interested in sport (or why sports are given a high value in society). The most comprehensive evaluation of numerous theories proposed to explain sports pervasive appeal was provided by Sloan (1989). According to Sloan, five primary theories can be used to explain why people are interested in sport. The theories are categorized as follows: (1) salubrious effects, (2) stress and stimulation seeking, (3) catharsis and aggression, (4) entertainment, and (5) achievement seeking.

According to Sloan (1989), *salubrious effects theory* suggests that sports provide pleasure through an increased physical and mental well-being. Specifically, sports are thought to provide *recreation* or a *diversion*. As a means of recreation, sports are thought to provide a relief of fatigue or boredom. As a diversion, sports are thought to provide an escape for an individual from their normal routine or from the tedium of life.

*Stress and stimulation seeking theory* suggests that interest in sport is due to an individual’s desire to seek arousal from crowd involvement. A person may desire to experience vicarious stress by watching an event, cheering with a crowd, and by investing their emotions in an event. A limitation of this explanation is that it does not account for the large number of fans that watch sports on television in the absence of a crowd.
Catharsis and aggression theory suggests that an individual is interested in sports in order to release tension and aggression vicariously, by watching the aggressive acts of others (Storr, 1970). It was initially thought that by watching others engage in aggressive acts, one’s own aggression could be released. Social learning theory (Bandura, 1983) suggests, however, that watching aggressive acts may actually promote aggression rather than provide a release.

Entertainment theory proposes that people are interested in sport because of the aesthetic value (the beauty of sports) and the moral representation of sports (sports are thought to teach values and to build character). The beauty of sports is considered to engage one’s attention and to pleasurally occupy one’s time. Enjoyment of sport is thought to begin early in life. Young children are introduced to sports through toys and clothing. It is also suggested that children learn the “rules of the game” from adults, along with the value placed on sport as a means of building character and preparing one for dealing with life’s obstacles. Included under entertainment theory is Zajonc’s (1968) exposure theory, which indicates that the mere exposure to sports and its trappings leads to an interest in sport.

Achievement seeking theory proposes that people are interested in sport in order to develop a sense of identity and uniqueness. Fromm (1955) suggested that individuals need a sufficient sense of identity and uniqueness, and that if they could not obtain it individually through their own creative efforts, they might seek and obtain some aspect of distinction by associating with a positive other or group of others. Cialdini et al. (1976) demonstrated such an association through the BIRGing phenomenon. Individuals
experience achievement through sports by “basking in reflected glory.” Based on Heider’s (1958) balance theory, Cialdini et al. (1976) proposed that by associating with a positive other, a team or an athlete, people believe that they appear more positive as well. Through vicarious affiliation, a person identifies with achieving others and by sharing in their successes, satisfy their own needs for achievement.

To better understand attraction to sports, the various theories should be considered with regards to their viability for helping to explain the development of fan loyalty. The premise of salubrious effects theory is that sports provide pleasure through an increased physical and mental well-being. In other words, participation in sports may provide recreation or diversion which helps an individual feel better both physically and mentally. Considering that the theory is based on participation, it is unlikely to enhance an understanding of the development of fan loyalty, which does not necessarily involve participation in sports. The notion of involvement also limits the viability of the stress and stimulation seeking theory.

As indicated, an important component of the stress and stimulation seeking theory is that a person seeks arousal from crowd involvement. The theory does not help explain the large number of fans who watch sports in the absence of a crowd, and likely may not contribute to an understanding of a fan developing loyalty to a sport, team, or player, which does not necessarily require involvement with a crowd. Research on catharsis and aggression theory suggests that this theory also lacks viability with regards to better understanding the development of fan loyalty. Instead of releasing tension and aggression, research indicates that watching aggressive acts may actually promote rather aggression
than provide a release (Berkowitz, 1970, 1975, 1986). In terms of better understanding the development of fan loyalty, entertainment theory and achievement-seeking theory may be the most viable.

Considering the process of development, particularly the influence of various socializing agents, an interest in sport in terms of the aesthetic value and the representation of sport may help explain the initial introduction children have to sports. As indicated, children are introduced to sports through toys and clothing at a very early age. Socializing agents, particularly parents, may provide the introduction to sports which forms the basis for the development of fan loyalty. Achievement seeking theory may also help in better understanding the development of fan loyalty. If children learn early in life to value sports, they may also learn to look to sports in order to develop a sense of identity by associating with a positive other or group of others, like a team or a player. Identifying with a sport, team, or player may satisfy an individual’s need for achievement, contributing to the development of fan loyalty.

Research investigating the various theories provides further indicators of the viability of each theory with respect to how well a particular idea explains spectator interest in sport. Sloan (1989) has discussed the results of various research projects which have examined the different theories. Findings suggested that support is most favorable for the entertainment and achievement-seeking theories. Research, as well as evidence from the popular press, has established that there is a high level of interest in sports. Examining the interest in sports through entertainment and achievement-seeking theories, one may begin to understand why there is an attraction or attachment to sports. These
ideas also help provide a beginning for understanding when attraction or attachment to sports may develop, as well as what elements may influence such attraction or attachment.

According to entertainment theory children are “taught” not only the mechanics of sports by adults but also the value associated with sport through a socialization process. Achievement-seeking theory suggests that attraction or attachment to sports forms as an individual begins to develop a sense of personal and collective identity. These ideas indicate that loyalty may develop as a child “learns” the value of sport and as a child begins to develop a personal and collective identity. It is also likely that different elements may influence the development of loyalty as an individual forms an interest in sports.

**Sport Enthusiast vs. Sport Fan**

Developing an interest in sport, or having an interest in sport, does not necessarily distinguish an individual as a loyal sports fan. Pooley (1978) first suggested that a sports fan may be distinguished from a sport enthusiast (or spectator) according to an individual’s level of involvement. Pooley (1978) suggested that individuals qualifying as spectators observe a particular event and when it is over they forget about the event. An involved fan, however, is different in that they “continue their interest until the intensity of feeling toward the team becomes so great that parts of every day are devoted to either the team or in some instances, the broad realm of sports in general” (p. 14). Level of involvement suggests that a loyal fan has a psychological commitment (volition, resistance to change, cognitive complexity) toward a sport, team, and/or a player, and that their behavioral dispositions demonstrate such a commitment. In other words, a fan invests themselves in sports.
A fan may make a personal investment in sports by participating in a sport, spending time watching live events or televised games, listening to sports on the radio, reading about sports in newspapers, magazines, and sport-related books, using sports as a topic of conversation, and by spending money on sport-related products or paraphernalia. To better understand fan loyalty one may consider what influences an individual to make a personal investment in sports, and when such influences occur. One process which may influence an individual as they grow and develop, as they “learn” to value sports (or become a loyal fan), is the process of socialization.

Socialization

Socialization is defined as the assimilation and development of skills, knowledge, values, dispositions, and self-perceptions necessary to perform present or anticipated roles in society (Kenyon & McPherson, 1971). This definition suggests that socialization is a process of social interaction through which a person learns the cultural attitudes, values, and roles of his/her group, and as a result acquires a unique personality and becomes a member of society.

There are two implications of the socialization process. First, a psychological implication suggests that an individual develops and is molded within society and it’s subgroups. Second, there is a sociological implication which suggests that an individual is taught to behave in a manner consistent with social expectations (Snyder & Spreitzer, 1976). These implications suggest that when examining the development of loyalty, it is possible to consider the process involved in an individual’s psychological development, as
well as the elements which influence an individual’s sociological development. These ideas are also consistent with Vygotsky’s sociocultural perspective of cognitive development (Bodrova & Leong, 1996).

Socialization with regards to sports is generally considered from one of two perspectives (Sage, 1974). Socialization into sports examines the agents and agencies which attract or draw an individual into sports; that is, the way in which a person becomes involved in sports. Socialization via sports focuses on the consequences or outcomes of sport involvement. Spreitzer and Snyder (1976) examined the perspective of socialization into sport by surveying adults about their involvement in sport. Those participating responded to a survey indicating the influence that an individual’s mother, father, and spouse had on their involvement in sport. The study also examined the influence from an individual’s personal participation. Items such as parental encouragement, father’s interest in sports, and participation as a youth were found to influence how an individual became involved in sports. Socialization via sports, as discussed by Spreitzer and Snyder (1989), suggests how individuals learn to participate in society through involvement in sports. Sports are purported to provide lessons on teamwork, winning and losing (or competition), fairness, etc. Given the objective of this study which focuses on how and when children develop fan loyalty, this review concentrates on the first perspective, those factors which attract individuals to sport.
The Socialization Process

Socializing experiences are thought to begin at birth and to continue throughout one’s life, but the critical years in which the primary and lasting socialization occurs is in childhood and adolescence (Sage, 1974). The socialization process is thought to produce attitudes, values, knowledge, and behaviors which are related to cultural norms and the roles which an individual will play in society. In terms of being a sports fan, through socialization an individual may develop a positive attitude toward sports, consider sports important, and learn about different sports (learn about different teams, players, and the rules of different sports). As a result, an individual may develop loyalty to a sport, team, and/or a player early in life and may begin demonstrating behavior indicative of a loyal fan - wearing sport clothing, reading about a sport, team, and/or a player, watching televised events, attending “live” events, discussing sports, etc.

Socialization is thought to occur through formal and informal channels (Snyder, 1974; Sage, 1974). Formal channels, include schools, church groups, and community-based programs. The family, peer groups, and mass media are the primary informal channels of socialization. For each person a set of socializing agents act upon that individual and draw them into certain activities and away from others. The social experiences into which an individual is introduced produce social consequences in the form of attitudes, values, and behaviors (Sage, 1974).

Socialization involves past, present, and anticipated future interaction between an individual and significant others, such as parents, siblings, peers, coaches, teachers, etc. These significant others, parents, siblings, peers, coaches, teachers, etc., represent the
audiences, reference groups, or socializing agents which provide the cues and the
"feedback" for defining appropriate behavior. The influence of these individuals and
groups may vary at different points in one's life, and in different situations, according to
their importance and their control over rewards and punishments.

Snyder and Spreitser (1989) described this process when they explained that in the
life of every person there are a number of people directly involved in socialization who
have great influence because of their frequency of contact, their primacy, and their control
over rewards and punishments. Significant others, such as parents, siblings, peers, etc.,
are thought to influence one's behavior, values, and dispositions throughout the life cycle.
The importance of specific persons is thought to change as new significant others are
added and older ones are displaced.

In addition to socializing agents, the socialization process includes the context or
environment within which socialization takes place (Snyder & Spreitzer, 1989). Childhood socialization occurs within a variety of social systems that include not only
family, peers, schools, etc., but also different social systems like community-based
programs (little league, pee wee football), social clubs (4-H programs), and service
organizations (boy scouts/girl scouts). The structure and influence of these social systems
will vary according to degree of involvement with any single system. These social systems
are also thought to provide an individual with values and norms to be followed in different
roles.

The introduction of sports most likely occurs in the family, particularly if an
individual has parents or siblings who are interested or involved in sports. Peer influence
is also thought to provide early socialization experience into sports. The mass media may play a role in sport socialization by providing opportunities for an individual to become acquainted with sports, and by promoting sport heroes which may serve as role models. The process of socialization into sport is further influenced by demographic and social variables that are associated with an opportunity to be exposed to sports through items like proximity to sporting events and the opportunity to attend or participate in different sporting events based on socioeconomic status.

Research examining socialization into sport has focused primarily on how an individual becomes a sport participant. While there are obvious differences between sport participants and sport fans, like physical involvement, there also many similarities (Zillman, Bryan, & Sapolsky 1989). Sports fans experience many of the benefits of active participation in sports. It has been suggested that sports serves as a beneficial leisure activity for both participants and fans (Dumazedier, 1967). Participants and fans may both experience a relief from boredom, a relaxing of tensions, and personal development. As participants experience the “thrill of victory and the agony of defeat,” fans also share in the emotions of victory and suffer the disappoint from defeat. In other words, fans may also share vicariously in the emotions of their favorite team and/or player. Additionally, fans, like participants, learn fairness from sports. Sports fans learn the rules of the games just as participants do and they also learn the concepts of fairness and justice which are promoted through sports (Bandura, 1971).

Recognizing the similarities between participants and fans, it is reasonable to consider that explanations of how and when individuals become sport participants may
provide insight for understanding when loyalty may develop and what elements may influence such development. Support for this premise is found in the work of Kenyon and McPherson (1973). Describing the process of sport socialization, Kenyon and McPherson (1973) have suggested that socialization into sport provides for the development of a variety of sport roles, including those of participants and fans. Though the elements of each role may differ, the development of the roles is thought to evolve through a similar process. Similar forces and situations are thought to effect the development of the sports role for participants and for fans.

Research examining socialization into sport has looked mainly at how one becomes a sport participant (Kenyon, 1971; Sage, 1974; Snyder & Spreitzer, 1974). Studies have examined the different socializing agents involved in the process, along with the different social systems which may influence an individual. Considering the similarities between participants and fans, it is reasonable to consider that similar processes and elements which influence sport participation will influence when fan loyalty may develop. Further, the socialization process is consistent with Vygotsky’s sociocultural theory of development (Bodrova & Leong, 1996). In addition to the similarity between sport participants and loyal fans, one may also consider the similarities in the behaviors and attitudes of loyal fans with the behaviors and attitudes of consumers in general.

Consumer Behavior

Many of the behaviors of sports fans are typical consumer behaviors - investing time, money, and self in sports by watching sports on television and attending live events, purchasing sport products and clothing with sport emblems, purchasing sport publications,
etc. Such similarities suggest that an examination of research in consumer behavior may also help in understanding when loyalty may develop and what elements may influence such development.

In the field of consumer behavior, research has attempted to examine the process by which individuals become consumers - consumer socialization. Consumer socialization incorporates many of the same processes and many of the same elements found in socialization into sport, providing additional support for the ideas proposed to examine when fan loyalty may develop, and which items may influence such development.

**Consumer Socialization**

Consumer socialization is described as the process by which an individual develops consumer-related skills, knowledge, and attitudes (Moschis & Churchill, 1978). Similar to sport socialization, consumer socialization may provide a framework for understanding the formation of behaviors, values, and attitudes. Research on consumer socialization may provide direction for understanding fan loyalty because it includes both behavioral and cognitive components - psychological and sociological perspectives.

Research on the cognitive and behavioral patterns that constitute consumer behavior has been based primarily on two models of human learning: the cognitive development model and the social learning model (Moschis & Churchill, 1978). The social learning approach is similar to that described for socialization into sport. The social learning approach, developed from social learning theory (Bandura 1971), suggests that sources of influence - socialization agents - transmit norms, attitudes, motivations, and behaviors to the learner. Socialization is thought to take place as an individual interacts
with various socialization agents in different social settings (McLeod & O’Keefe, 1972). An individual is thought to acquire cognitions and behaviors from socialization agents through modeling, reinforcement, and social interaction. According to McLeod and O’Keefe (1972) modeling involves imitating another’s behavior; reinforcement involves either reward or punishment for behavior, and the interaction mechanism may include a combination of modeling and reinforcement. The setting within which learning takes place is specified with regards to social structure variables (like social class, gender, family size, etc.). Piaget and Vygotsky’s theories of development provide a fuller understanding of the importance of social context by suggesting that beyond modeling or imitating another, social interaction provides an individual with opportunities for active interpretation, considering not only what to think, but how to think (Bodrova & Leong, 1996).

The second model, cognitive development, draws largely on the work of Piaget (1969). Piaget considered learning to be a cognitive-psychological process of adjustment to the environment, with an emphasis on the interaction of personal and environmental factors. Cognitive theories essentially suggest that socialization is a function of qualitative changes in cognitive organization that takes place between infancy and adulthood. These changes (or phases) are defined in terms of the cognitive structures a child may use in perceiving and interacting with the environment at different phases (Kohlberg, 1969). As a child’s cognitive development progresses, the complexity of cognitive structures increases. An individual incorporates a greater number of ideas about an object, idea, attitude, etc., and at the same time the ideas have more richness or greater depth. As an example, a child may first learn to distinguish between different sports. As cognitive
development progresses, the differentiation becomes more sophisticated in terms of
differentiating by rules, tactics in different sports, attitudes regarding different sports etc.
An individual would also make greater distinctions between different teams and between
players as cognitive development progresses.

The process of consumer socialization suggests that an individual develops
consumer-related skills, knowledge, and attitudes throughout their life. The process is
based on both cognitive development and social interaction. The social system in which
an individual grows (the environment) and the socializing agents (family, peers, media,
etc.), influence the skills, knowledge, and attitudes that one develops. The skills,
knowledge, and attitudes develop as an individual’s cognitive abilities progress, as the
cognitive structures which enable one to perceive and interact with the environment
become more complex.

An understanding of sport and consumer socialization may provide the framework
for understanding when loyalty may develop and which elements influence such
development. By identifying different phases of cognitive development, along with the
various agents which may influence an individual’s development, it is possible to better
understand fan loyalty. A specific examination of previous research on sport and
consumer socialization may provide direction for research on understanding the
development of fan loyalty.
Research on Sport Socialization

Early research on sport socialization focused on elements which influence an individual’s participation in sports later in life (during college and after). Kenyon (1968) surveyed college athletes and Olympic aspirants to identify elements which influence sport participation. Results suggested that involvement in sport early in life (during elementary school years) contributed to later participation. Kenyon (1968) proposed that a sport aptitude was evident early in life. Results also demonstrated that interest in an activity was aroused by peers, family, teachers, and coaches. Kenyon (1968) proposed that peers, family, teachers, and coaches contribute to generating an interest in sport and also provide reinforcement for developing the sport role.

Looking at Canadian college ice hockey and tennis players, McPherson (1968) reported that interest in a sport came initially from within the family, primarily through the father’s influence. During the high school years, McPherson (1968) reported that familial influence decreased and the influence from peers and coaches increased. These findings suggest that there is a temporal factor whereby influence is differential over time. The initial stimulus to become interested in sport may develop within a home environment that considers sport to be important (values sport), and from peers who value sports. McPherson (1968) also found that subjects reported an interest in sport by age ten, and that sixty-three percent of those responding were involved as consumers prior to their participation in sport. These results suggest that attachment to sport forms early in life.
and they also emphasize the importance of looking at the development of loyalty early in an individual's life. Considering an individual's level of cognitive development, the ability to form evaluative and affective judgments, an individual may develop loyalty by age ten.

Kenyon and Grogg (1969) conducted interviews to determine which factors influence socialization into the role of an elite college athlete. Results indicated that family and peers had the greatest amount of influence for a variety of sports: baseball, football, and basketball. School and community programs were found to contribute to developing an interest in tennis, swimming, and track and field. These findings provide further support for the premise that family and peers play an important role in an individual's socialization into sport, and they likely play a significant role in the development of fan loyalty.

Malumphy (1970) interviewed female college athletes and reported that family influence was a major factor influencing college women's participation in sport. There was also some influence due to peers, but the level of influence reported was much lower than that of the family influence. Examining minority groups, McPherson (1971) found that before high school individuals were encouraged primarily by family members to participate in sport, followed by peer influence. In high school, individuals received greater reinforcement from coaches and peers than from family members. In college, the greatest amount of reinforcement came from peers. These findings reinforce the idea that different socializing agents exert more or less influence on an individual at different times.
in one's life. Considering the development of fan loyalty, it is likely that the process may be viewed along a continuum, with different socializing agents exerting more or less influence at different phases within an individual's life.

Based on the early work investigating sport socialization, Kenyon and McPherson (1973) proposed a framework to describe sport socialization - how individuals become sport participants. A social role-social systems approach, first developed by Sewell (1963), was proposed to better understand the process of sport socialization. Role learning is accounted for by exposure of an individual, who is already characterized by a set of physical and psychological traits, to a variety of stimuli and reinforcements provided by significant others who act within one or more norm-encumbered systems. This approach suggests that when examining an interest in sport, it is important to consider the influence that the social context has on an individual.

Having a social or sport role suggests that an individual learning the "role" possesses knowledge, skills, and dispositions characterizing the role. To examine fan loyalty it is important to have a clear definition of the dimensions required for the role, such as the speech, mannerism, and behaviors of a sports fan. Social systems or institutions like the family, school, peers, and mass media contribute to role learning. An examination of when an individual may develop a sport role (like loyal fan) and what elements may influence such development should consider each relevant social system and it's potential for role learning (Kenyon & McPherson, 1973).
The social role-social systems approach suggests that an individual’s personal attributes, significant others, and social settings contribute both independently and in combination to role learning. Kenyon and McPherson (1973) suggest that

“given a degree of role aptitude the role aspirant is variously influenced within each of the social situations in which he inevitably finds himself, with the net effect being the acquisition of a propensity for learning the role in question. This motivates him to rehearse the role, which in turn leads to the learning of the role” (p. 307).

Understanding the development of fan loyalty involves examining when an individual has the ability, based on their phase of cognitive development, to learn a sport role (when one has the knowledge, skills, and disposition to acquire a propensity for loyalty), and what socialization agents may influence such development at different phases of one’s cognitive development. In other words, it is important to consider an individual’s phase of cognitive development and to consider the social context (family, peers, etc.) which is likely to be important in promoting a propensity for fan loyalty. Each social system has the potential to contribute or to detract from the development of a propensity for sport involvement. Potentially, the degree to which individuals are socialized into sport roles (become loyal fans) is dependent upon the propensity for sport involvement which has been generated by each system (Kenyon & McPherson, 1973).

A social situation which values a pattern of behavior and which provides opportunities for the learning of that behavior determines which roles will be learned. Significant others reinforce the enactment of a sport role and as a result facilitate the
learning of appropriate role behaviors. An individual in an environment that values sport and which provides opportunities for learning the role of loyal fan are likely to develop the propensity at an early age for becoming a loyal fan. There also appears to be a temporal element involved in the development of fan loyalty.

An individual must first develop the cognitive ability to acquire a propensity for sport involvement, and subsequently is influenced by different socialization agents over time. The initial stimulus to become interested in sport may originate within a home environment and from peers interested in sports. It should be noted that Kenyon and McPherson (1973) examined the process of socialization by having adults and college students recall the socialization agents which influenced their participation in sport. The social role-social systems model examines interest in sports after a formal operational level of cognitive development has been reached, after an individual has developed a set of physical and psychological traits. Previous research has not examined individuals at earlier phases of cognitive development and tried to ascertain which agents may influence an interest in sport (or the development of loyalty) as it occurs.

Building from the framework presented by Kenyon and McPherson (1973), additional research has examined how individuals become sport participants. Later studies have primarily considered the different socializing agents and their role in promoting participation. Snyder and Spreitzer (1976) examined the participation of female athletes in high school sports. Comparing athletes to nonathletes they found that the parents of athletes were more interested in sports (slightly), and that the athletes started participation early in life. The athletes received encouragement from their family primarily, though they
did report receiving support from peers and coaches. Nicholson (1978) also surveyed female athletes participating in sports in junior high school. Athletes, as compared to nonathletes, were more likely to have parents, siblings, and friends participating in sports.

Early research on sport socialization focused on college students and adults, asking them to recall who or what influenced their sport participation. The research by Snyder and Spreitzer (1976) and Nicholson (1978) included surveys of junior high school athletes and nonathletes. Such work is a step closer to understanding when loyalty may develop, however, such work also examines interest in sport at a later phase of cognitive development, after particular knowledge, skills, and dispositions have been acquired. Additional work is still needed in order to understand when fan loyalty may develop based on cognitive development and the influence of particular socialization agents.

Involvement in sport as a consumer may start early for many individuals. McPherson (1968) reported that an interest or attachment to sport prior to participation formed for subjects by age ten. Considering the significance of early socialization influences, it is important to examine cognitive development and socializing agents which may influence the development of fan loyalty early in an individual’s life.

Recognizing that the social processes which may influence children's participation in sport activities had been previously ignored, Lewko and Greendorfer (1977) examined the topic from the perspective of gender-based roles. They found that different sets of play behavior begin to evolve for males and females at very early ages, and that these behaviors are influenced primarily by parents and caretakers. In other words, it was found that boys and girls received differential treatment from parents according to activity type.
Lewko and Greendorfer (1977) reported that boys learn at an early age which activities are inappropriate and are to be avoided. Girls, however, are permitted a wide range of play activities and choice throughout childhood. The authors have suggested that the differences in types of games, the nature of games, and the value emphasized in play activities may be a result of parents incorporating gender-stereotypes into a child’s environment. The authors also reported that by the time children reach the age of six, they are able to distinguish between male and female roles, and are able to identify themselves accordingly. One of the key factors in childrens’ participation in a sport activity appears to be their perceptions of the gender appropriateness of the activity as defined by the parents. The implication for the development of fan loyalty is that males more than females may be encouraged at an early age to become loyal fans.

Parents are identified as the major socialization agents, particularly during the preschool years (Lewko & Greendorfer, 1977). Parents are thought to be the primary shapers of a child’s perceptions and preferences for different types of games and activities. The results of the research by Lewko and Greendorfer (1977) also indicated that the father may play a crucial role in directing and channeling the gender-typing, directing a child toward appropriate male/female activities. A family environment in which parents participate in sports, or are interested in sports, appears to be a significant factor influencing sport involvement. These ideas suggest that parents may play a significant role in the early development of fan loyalty. Parents which are involved or interested in sports may provide an environment in which a child learns to value sports and are more likely to develop loyalty toward a sport, team, and/or a player. Further, if gender stereotypes are
promoted, males may develop loyalty toward a sport, team, and/or a player before females. This suggests that along with level of cognitive development, it is important to consider the environment (or social context) in which an individual learns to value (or not value) sports.

While the family, particularly parents, may exert primary influence during early stages of life, as a child grows other agents may exert an influence in the socialization process. Lewko and Greendorfer (1977) suggested that peer groups serve as a filter for parental norms. The standards of one’s parents are compared to the standards of other group members and based on a comparative appraisal, the child forms a reaction to parental standards. In other words, an individual’s peer group serves as a frame of reference for making decisions.

In a later review, Lewko and Greendorfer (1988) revisited the topic of family influence in sport socialization. They reported the continued prevalence of gender labeling or sex-typing, and continuity of choice of children’s toys. They also reported differential parental treatment and play interactions with sons and daughters.

After examining existing research on sport socialization, Lewko and Greendorfer (1988) concluded that family members and peers have the most influence on sport socialization for children, and that the balance of influence shifts between parents and peers between childhood and adolescence. Regarding the development of fan loyalty, it is important to consider the influence of family members and peers on an individual’s attachment to a sport, team, and/or a player.
When considering the role of the family in developing fan loyalty, it may be best to consider the *relative influence* of the family. Lewko and Greendorfer (1988) have suggested that the father may exert considerable influence during a child’s early development (ages 0-5). Once a child has made the initial transition to school and becomes part of a wider social network, the influence of the family may decline as the influence of peers increases. This suggests that during an early phase of cognitive development, the family (particularly the father) may have a strong influence on the development of loyalty (teaching the value or importance of sport). As a child progresses to subsequent phases of cognitive development, as cognitive complexity increases, and as they become involved in a larger social network, the influence of peers on fan loyalty may increase while the familial influence decreases.

While research in sport socialization has not focused on the early childhood years, or the development of loyalty to a sport, team, and/or a player, some research in consumer socialization has examined the early childhood years and the socialization process. Research on the early childhood years has considered the cognitive development of a child, and the influence of such development on consumer behavior.

**Research on Consumer Socialization**

Research on consumer socialization has considered both elements of the socialization process - social learning and cognitive development. Moschis and Churchill (1978) proposed a model of consumer socialization which identifies three elements: antecedent variables, socialization processes, and outcomes. The two antecedent variables are *social structural variables* and *life cycle position*. The structural variables and life
cycle position are suggested to influence learning processes indirectly and directly. The significance of the structural variables and life cycle position is thought to vary according to the interaction with the socialization processes. The socialization processes include the socialization agents and the type of learning that is operative. The primary socialization agents identified through previous research are parents, peers, mass media, and schools (Ward 1974). The type of learning is either modeling, reinforcement, or a combination of the two. While several studies have identified the different agents which influence the development of skills, knowledge, and attitudes, little work has examined the specific type of learning that occurs most frequently, or which may be more effective (Moschis & Churchill, 1978). The outcomes of consumer socialization are thought to be the acquisition of cognitions and behaviors referred to as “consumer skills” (Moschis and Stephens 1975). In a sport context the outcome would be fan loyalty.

A review of the research which has looked at the elements of the model of consumer socialization provides some interesting ideas for understanding when fan loyalty may develop. Consistent with sport socialization research, several studies have examined the agents of socialization. The family is thought to have a significant influence on a child’s acquisition of consumer skills. Reinsman and Roseborough (1955) first speculated that young people learn basic “rational” aspects of consumption from their parents. Ward and Wackman (1973) found that consumer goals of parents included teaching their children about price-quality relationships. In a direct examination of the model, Moschis and Churchill (1978) found that the family is an important agent in teaching adolescents rational aspects of consumption. They also found that different consumer skills seem to be
learned at different ages from parents and through different learning processes. These findings lend support to the premise from research on sport socialization of viewing the development of fan loyalty from a temporal perspective, including phases of cognitive development and the influence of different socialization agents at various points in the life cycle.

Peers have also been found to be an important agent of socialization. Parsons, Bales, and Shils (1955) first speculated that children learn from their peers the expressive elements of consumption, or affective consumption. In other words, peers promote social motivations for consumption and materialistic attitudes. Moschis and Churchill (1978) reported that interaction with peers about consumption matters may make adolescents aware of goods and services in the marketplace and of the buying processes. Greater awareness of the consumer environment may contribute to active interaction about consumption matters with other socialization agents, which may result in additional learning. This suggests that during one’s lifetime peers may play an important role in introducing the individual to different products (different sport, teams, and/or players). Peers may function to increase awareness; once familiar with a sport, team, and/or a player, an individual may then develop commitment to the attitude object. Peers may also play a role in affective development, they may serve to reinforce the expressive elements of loyalty or the affective components which may be important in forming a psychological commitment. Considering the role of position involvement and cognitive consistency in
commitment, peers may exert an influence in the development of loyalty by reinforcing particular values or self-image associated with commitment to a sport, team, and/or a player.

The influence of mass media in the socialization process seems to be linked mainly to peer interaction. Bandura (1971) argued that television commercials are dispensers of product information and that by observing and imitating television advertising, people attach social meaning to material goods. In other words, an individual learns conspicuous consumption from the mass media. Moschis and Churchill (1978) reported, however, that communication with peers seemed to condition the adolescent's perception and interest in goods and services, which in turn may have caused them to pay more attention to television programs and commercials to learn about products or services. These findings suggest that while television may provide information about a sport, team, and/or players, for adolescents the importance with regards to socialization is based on communication with peers regarding the social meaning attached to a sport, team, and/or a player. At an earlier phase of cognitive development the mass media may provide information and role models for an individual to learn from. At an early age loyalty may be influenced by the information and or the images presented through the mass media. As cognitive development progresses, the interaction with peers and the meanings associated with commitment to a sport, team, and/or a player may take on greater influence - different socializing agents exerting differential influence over time.

There are several implications from consumer socialization for understanding when fan loyalty may develop and what elements may influence that development. Cognitive
development may identify the point(s) at which one has the knowledge and ability to function as a consumer (as a fan), or when one is able to make cognitive distinctions among sports, teams, and/or players. Consistent with Vygotsky’s sociocultural perspective, the social learning model may provide a framework for identifying different agents which influence socialization and the development of attitudes and values. At different points on the life cycle, it is expected that various socialization agents will exert a differential influence on the development of fan loyalty.

Early in life one’s family members may exert the greatest influence on developing a positive attitude toward a sport, team, and/or a player, and as an individual progresses cognitively, they are able to form their own values and make decisions regarding a sport, team, and/or a player. As the individual’s social interaction network increases, as they interact more with peers, the influence of peers and the social judgments regarding a sport, team, and/or a player may influence an individual’s loyalty. Depending upon the level of cognitive complexity an individual may be more or less resistance to changing their loyalty. At earlier phases of cognitive development, it is expected that there would be less resistance to changing one’s commitment to a sport, team, and/or a player. As complexity increases, an individual will have a greater number of ideas or more complex ideas that may result in greater resistance to changing one’s commitment to a sport, team, and/or a player.

Similar to sport socialization research, investigations of consumer behavior originally focused on adult consumer behavior. Later work has looked at young people as a specialized segment of the market for a variety of products and services (Moschis &
Moore, 1978). Studies have examined the consumer behavior of adolescents during the information seeking stage of consumer behavior (Moore & Stephens, 1975), and the behavior of adolescents at the purchase stage (Moschis, Moore, and Stephens 1977). Moschis and Moore (1979) have also investigated the implications of the decision making of adolescents and younger children on adult consumer behavior.

Moschis and Moore (1979) have suggested that various aspects of consumer behavior, such as the development of brand preferences, are formed through social processes and through cognitive developmental processes involving adjustment to one’s environment. After examining the decision making of adolescents, Moschis and Moore (1979) concluded that young people have acquired fairly sophisticated decision-making cognitions and skills by the time they reach early adolescence. This suggests that research on the development of decision making cognitions and skills related to fan loyalty should focus on early phases in an individual’s life. Results also indicated that adolescents rely on personal sources (family, peers) for information on certain products (high performance risk products) and that they rely on the mass media for information on other products (viewed to be low performance risk products). Different socialization agents may have varying degrees of influence depending on the type of product being considered. The influence of family and peers would likely be greater when developing loyalty toward a sport, team, and/or player if sports are highly valued. If family and peers value sports, an individual is likely to be influenced to a greater extent as they form a psychological
commitment to a sport, team, and/or a player. This suggests that different socialization agents may have varying degrees of influence depending upon the attitude object being considered and the value given to the object.

Moschis and Moore (1979) suggested that different socialization agents will be important at different positions on the life cycle, and according to object of interest. While not specifically assessed in the study, Moschis and Moore (1979) also emphasized that one’s level of cognitive development will also influence the development of brand preference (loyalty).

Discussing maturation Moschis and Moore (1979) indicated that cognitions and skills in decision making change with age. Maturation is associated with increasing skill in using a wide variety of information sources, a larger number of attributes in product evaluations, and stronger brand preferences. These ideas are consistent with the attitudinal dimension of fan loyalty - cognitive complexity, volition, and resistance to change. As cognitive development progresses, the influence of socialization agents changes, as well as the amount of type of information that may have an influence on the development of fan loyalty. Some research has focused specifically on the cognitive development of children in terms of consumer socialization.

Cognitive Development and Consumer Socialization

Roedder-John and Whitney (1986) have examined the general patterns of quantitative changes that are expected as a child’s cognitive development progresses. They have suggested that as children acquire more information about consumer activities and develop cognitive abilities which enable the processing of information, the manner in
which knowledge is represented in memory should also progress. Rather than storing information in a random fashion, Roedder-John and Whitney (1986) proposed that children begin to represent their knowledge in a more structured manner.

Two memory structures have been identified from memory research which children may use to organize past experiences and information: categorical structures and schematic structures (Mandler, 1979). Categorical structures specify relationships among objects with respect to membership in a particular class; children develop memory structures for toys, soft drinks, video games, sport teams, etc. Schematic structures are composed of expectations about objects, scenes, or events with regards to what they look like and/or the order in which they occur. For example, children may develop structures for places like grocery stores and events such as purchasing groceries. As cognitive development progresses categorical structures become more complex, multidimensional, and more stable (Ornstein & Corsale, 1979). Schematic structures also become more complex, complete, and abstract (Nelson, 1978).

Roedder-John and Whitney (1986) proposed that consumer socialization should incorporate the development of memory structure and the means through which a child organizes information about consumer subjects. This perspective reinforces the idea of examining the phase of cognitive development to identify when fan loyalty may develop. The development of memory structures in children may be characterized by a number of dimensions, such as complexity, stability, and abstractness. These ideas were tested by examining the development of one schematic structure, scripts, in children.
Roedder-John and Whitney (1986) assembled children from three age groups and read them stories which described consumer experiences unfamiliar to the children. The amount of information varied for the different groups. After listening to the stories the children were asked to describe the general procedure involved in returning or exchanging a product. Three age groups were used in the study: 4-5, 6-7, and 9-10. As expected, the findings indicated that scripts develop at different rates depending upon age and the amount of information available about returning or exchanging a product. Older children organized increasing amounts of information into well-developed scripts that represented the sequence of events in an abstract and complex form. The findings suggested that it may be possible to understand not only when and how fan loyalty develops and what elements influence that development, but also to promote fan loyalty by targeting information to different groups in varying amounts and by varying the level of complexity according to a group’s phase of cognitive development.

Brand Preferences

One study has looked specifically at the formation of brand perceptions and brand preferences from a cognitive developmental perspective. As an introduction to preference formation, Bahn (1986) explained that consumers of all ages differentiate and choose among products and brands. These two processes are thought to form the basis for the majority of consumer buying decisions. To differentiate products, consumers are likely to categorize goods into groups. The next categorization takes place at the brand level, for which consumers form brand categories within specific product classes. Bahn (1986) has suggested that discrimination among brands within a product class is based on perceived
differences among brands on valued attributes. As consumers differentiate between brands they are thought to form brand preferences, which are related to valued brand attributes.

Examining brand preference formation, Bahn (1986) indicated that the cognitive structure children use to categorize information has been considered, but little attention has been given to how discrimination skills and preferences develop. In order to better understand preference formation Bahn (1986) looked at when children develop the cognitive abilities to make brand discrimination and to form brand preferences. To better understand when fan loyalty develops and what elements may influence such development, it would be helpful to understand the point at which preferences are distinguished.

Bahn (1986) indicated that preferences for an object are determined by how much liking is given to the presence or absence of particular stimulus attributes. This suggests that an individual must first be able to distinguish among stimulus attributes. Formation of preferences involves the development of affect, and affective development is considered to be intertwined with perceptual development. Preference is likely to occur when a stimulus is perceived as having positive affect.

The significance of cognitive ability is based on how many stimuli an individual is able to perceive. Children in the preoperational phase of cognitive development are thought to perceive stimuli unidimensionally, they have the ability to center on one stimulus attribute. Concrete operational children, having greater cognitive ability, are able to perceive multiple stimuli and to categorize stimuli along several dimensions. The transition from perceptual categorization and perceptual inference to cognitive
categorization and cognitive inference is thought to take place between the ages of five and nine (Kagan, Howard, & Siegel, 1962; Piaget, 1970).

To examine brand preference formation Bahn (1986) exposed preoperational children and concrete operational children to the same number of dimensions for cereal and beverage categories. Brand preferences were measured and contrasted to determine if there were differences between the two groups. A key finding from the study was that there was no overlap between the dimensions used by the two groups of children making brand preference judgments. The children within the two cognitive phases differed greatly with respect to the basis for preferences. Concrete operational children appeared to be more cognitively developed than preoperational children in their preferences because they used more dimensions (attributes) in making preference judgments.

Bahn (1986) concluded that preoperational children appeared to perceive fewer attributes than did concrete operational children when making brand discriminations and preference judgments. Children in the preoperational phase were able to discriminate among brands but their bases for discrimination were more rudimentary than were those of children in the concrete operational phase. These results suggest that younger children may develop a liking for a sport, a team, and/or a player on a rudimentary level, and as cognitive development progresses the liking becomes more complex and potentially enduring (becomes loyalty). As cognitive development progresses, an individual not only draws on a larger number of ideas regarding a sport, team, and/or a player, the ideas
become more complex and sophisticated. As a result, ideas or attitudes should be more persistent and less likely to change when confronted with contrasting or different information.

The research from sport and consumer socialization provide a promising framework for understanding when fan loyalty may develop and what elements may influence such development. Both areas emphasize the importance of social context. Consumer socialization also emphasizes the importance of understanding the phase of cognitive development and the influence that may be expected at different phases of development. Considering both cognitive development and the socialization process it may be possible to better understand the development of fan loyalty.

**Development of Fan Loyalty**

Understanding when an individual may develop loyalty to a sport, team, and/or a player, and which elements may influence the development of such loyalty, has received little attention in previous literature. A study by McPherson (1976) based on the social role-social systems approach (Kenyon & McPherson, 1973) examined the contribution of different socializing agents associated with the learning of a sport consumer role. Recognizing that sport consumption was, and is, a pervasive element in society, McPherson examined the elements thought to influence an individual’s socialization into the role of a sport consumer.

McPherson (1976) proposed six characteristics to identify a sport consumer:

1. Invests varying amounts of time and money in various forms of direct and indirect secondary sport involvement.
2. Has varying degrees of knowledge concerning sport performers, sport statistics, and sport strategies.

3. Has an affective (emotive) involvement with one or more individuals or groups in the sport system.

4. Experiences, and either internalizes or verbalizes, feelings and mood states while consuming a sport event.

5. Employs sport as a major topic of conversation with peers and family members.

6. Arranges leisure time life-style around professional and amateur sport events.

McPherson (1976) proposed that the family, peers, school, and community would each contribute to an individual’s socialization into the role of a sport consumer. Specifically, the greater the induced propensity from each agent, the greater an individual’s consumer sport role socialization. McPherson (1976) surveyed high school students to ascertain how much influence the various agents had on their becoming sport consumers. The level of socialization was examined in four areas: (1) degree of behavioral socialization, (2) degree of affective socialization, (3) degree of cognitive socialization, and (4) overall sport consumer socialization (a combination of the first three areas).

Results of the study suggested that for males, peers, family, and school contributed the most to an individual’s socialization into a sport consumer role. For females, family, peers, and then community contributed the most to an individual’s socialization into a sport consumer role. The findings indicate that there are gender differences with regards to interest in sports. Consistent with research by Lewko and Greendorfer (1977; 1988), interest in sports is expected for males. Considering the agents exerting the most
influence, peers were most influential for males and family was most influential for females. McPherson (1976) also indicated that both peers and family influenced subjects independently as well as through an interaction of peer and school influence.

The findings reported by McPherson (1976) support the position that different socializing agents may influence attachment to sport at different points in time, and that at different phases in the life cycle particular socializing agents may increase or decrease with respect to their level of influence. The findings also suggest that for females attachment to sports is influenced primarily by family, then peers, and also by community. Both the opportunity to consume, and having role models providing encouragement were found to contribute to females’ socialization into a sport consumer role.

A second study which provides some information on becoming a loyal fan was conducted by Smith, Patterson, Williams, and Hogg (1981). The purpose of the study was to examine the profile of a deeply committed male sports fan. Using adult subjects, one element of the study asked subjects to identify who was most influential in getting them involved in sports. Results indicated that subjects were most influenced by fathers, followed by friends, coaches, and the mass media. Consistent with other work in sport socialization, the findings indicated which agents may influence an individual’s attachment to a sport, team, and/or a player, but the study did not examine when such an attachment may form, or the level of cognitive development during which attachments form.

A study by Wakefield and Sloan (1995) looked at factors influencing spectator attendance. The study focused on stadium factors along with the effect of team loyalty. The purpose of the research was to demonstrate that stadium surroundings may play an
important role in determining spectator attendance. While the results indicated that stadium factors do have some influence on a fan’s desire to stay at a stadium and their intention to return to the stadium, loyalty was found to play the largest role in determining a fan’s desire to be at the stadium. As indicated previously, a problem with the research was that loyalty was defined as a form of psychological commitment, then measured according to behavioral dimensions. Loyalty was not examined from a multidimensional perspective, nor was there any consideration for when loyalty may develop or what may influence the development of loyalty.

The results reported by McPherson (1976) and Smith et al. (1981) are consistent with the results from sport socialization in general. The findings from Wakefield and Sloan (1995) demonstrate the importance of loyalty in general. Previous research does not, however, consider when fan loyalty may develop or if there is a progression in terms of the object of one’s loyalty. Previous findings do suggest which socializing agents may influence the development of loyalty, but research has not looked at the different phases of cognitive development and how this may influence the development of loyalty.

**Synthesis**

Drawing from the research on loyalty, cognitive development, sport socialization and consumer socialization, several implications for understanding when fan loyalty may develop and which elements may influence that development may be considered. First, research has suggested that loyalty is characterized by a behavioral dimension and an attitudinal dimension (Day, 1969; Jacoby, 1971; Pritchard, 1991). Through particular behaviors, such as repeat purchasing, an individual demonstrates one component of
loyalty. In a sport context, such behavior would include attending games or events, watching games or events on television, reading and talking about a favorite sport, team, and/or player, owning sport-related products, particularly products for a favorite sport, team, and/or player. The attitudinal dimension, characterized by psychological commitment, demonstrates the attachment an individual may have to a sport, team, and/or player, based upon cognitive complexity, volition, and resistance to change (Pritchard, 1991).

Identifying a favorite sport, team, and/or player (volition), suggests that an individual must be able to distinguish between different sports, teams, and players, and be able to make an affective judgment regarding a particular sport, team, and/or player. To demonstrate resistance to change, maintaining an allegiance to a particular sport, team, and/or player, an individual must have specific reasons for having chosen a favorite, and be able to weigh those reasons against contrary or challenging information (cognitive complexity). In order to demonstrate both dimensions of loyalty, to make affective and evaluative judgments, an individual will need to have reached a minimum level of cognitive development.

For an individual to develop fan loyalty, they will need to be able to distinguish between different sports, between different levels of a sport, between different teams, and between different players. Being able to categorize or classify items is one indicator of development an individual will need to demonstrate loyalty. These ideas indicate that a minimum level of cognitive development is necessary in order to develop fan loyalty (to demonstrate the behavioral and attitudinal dimensions of loyalty). According to
Vygostky's perspective, to understand cognitive development, it is important to consider the social context in which development occurs (Bodrova & Leong, 1996). Regarding the development of fan loyalty, a fuller understanding of the process should consider the influence socialization agents may have on the development of fan loyalty.

Research on sport and consumer socialization suggest that there are a variety of socializing agents which may influence the development of loyalty by promoting an attachment to sports (placing a value on sports). These agents include family, peers, school, mass media, and community-based programs (Kenyon & McPherson, 1973; McPherson, 1976). Research in sport socialization has indicated that initial involvement in sports is influenced primarily by one's family and peers. This suggests that fan loyalty may also be influenced by family and peers. In other words, the initial attachment to a sport, a team, and/or a player may be heavily influenced by one's family and peers.

Different socializing agents may influence attachment to sports across time. As research in sport socialization has indicated, there is a temporal element involved. Over time different socializing agents exert more or less influence depending upon the social situation and the importance of the various agents. For example, early in one's life the family, particularly the father, may have the most influence on developing an attachment to sports. As an individual develops friendships outside the home and participates in school, peers may become more important and provide a frame of reference for evaluating one's beliefs and standards. Involvement in school and community programs, as well as exposure to newspapers, television, and attendance at "live" events may also influence the development of loyalty.
It is important to recognize that the social context (the environment) in which an individual is located may influence the development of loyalty. Elements such as socioeconomic status, gender, race, family size, etc., may contribute to the importance placed upon sports by other socializing agents, and may also influence the accessibility to sports through attendance, access through television and other media forms, etc. These elements may exert an influence independently and through an interaction with other socializing agents to influence the development of fan loyalty.

Consumer socialization provides support for the ideas suggested by sport socialization. From consumer socialization, the influence of different socializing agents has been demonstrated on the formation of skills, knowledge, and values regarding consumer behavior. Work in consumer socialization supports the influence of family, peers, and mass media on an individual’s subsequent behaviors and attitudes. Beyond the importance of the socializing agents and the social structural variables which may influence one’s attachment to sports, consumer socialization also demonstrates the role that cognitive development may play in the development of fan loyalty.

Research in consumer socialization indicates that with the development of cognitive structure it may be possible to identify the development of knowledge and ability to function as a consumer, or more specifically, when one is able to make cognitive distinctions among sports, team, and players. Attachment to sport may develop very early, when an individual is able to make simple categorical distinctions between different sports and different teams. As an individual’s cognitive development progresses, more complex schematic structures should form, which incorporate not only distinctions
between different sports and different teams, but also incorporate evaluations and judgments about the different sports and teams. By understanding the phases of cognitive development it may be possible to promote fan loyalty, to build commitment to a team which will be enduring over time. Taken together, research on loyalty, cognitive development, and sport and consumer socialization demonstrate the importance of examining the social context in which development occurs, and the phase of cognitive development for understanding when fan loyalty may develop and which elements may influence the development of loyalty.
CHAPTER 3

METHODOLOGY

The purpose of this chapter is to describe the methodology used to achieve the proposed research objectives of the study. The purposes of this study were to: (1) examine the point at which an individual may first develop loyalty toward a sport, team, and/or a player, based on an individual’s level of cognitive development, (2) identify the socialization agents which may influence the development of fan loyalty; and (3) determine if there is a progression in the development of loyalty (from a sport to a team to a player, or loyalty to a player, then a team, then a sport, etc.).

Overview

To achieve the research objectives of this study, an interview protocol was developed for administration to children determined to be at different phases of cognitive development. In order to be considered a loyal fan, a child would have to demonstrate both the attitudinal and behavioral components of loyalty, the two dimensions that have been shown to characterize loyalty (Day, 1969; Jacoby, 1971; Pritchard, 1991). The attitudinal component of loyalty, or more specifically an individual’s psychological commitment, provides the means by which to assess whether or not an individual
demonstrates fan loyalty. A review of the cognitive development literature indicated that a child would have to reach a certain level of cognitive development in order to demonstrate psychological commitment, characterized by the three facets of cognitive complexity, volition, and resistance to change (Pritchard, 1991), in order to make decisions about different sports, teams, and/or players that are persistent and enduring. Piaget’s theory of cognitive development provided the structure for determining a child’s level of cognitive development.

Piaget has proposed that cognitive development be thought of as a continuous process, with changes in development occurring gradually along a continuum (Piaget & Inhelder, 1969). To better understand the process of development, Piaget has proposed to divide the continuum into four broad stages or phases: the sensori-motor stage, the preoperational stage, the concrete operational stage, and the stage of formal operations. The sensori-motor phase focuses on motor behavior, like sucking, grasping, or crying. The preoperational stage is characterized by an inability to discriminate classes hierarchically, or categorically. At the concrete operational phase, a child is no longer bound by immediate perceptions, is able to represent objects internally (or mentally), and is able to perform mental operations. The phase of formal operations is characterized by a child’s ability to perform operations on operations, to reason logically, and to think abstractly. The intention of this study is to examine two of these phases, the preoperational phase and the phase of concrete operations.

The phases of preoperational thinking and concrete operational thinking are of primary interest for understanding the development of fan loyalty because it is during these
phases that a child may first be able to distinguish between sports, teams, and different players. In the phase of concrete operations, a child should be able to categorize or make distinctions among sports, teams, and players. An inability to categorize or classify hierarchically suggests that a child demonstrating preoperational characteristics would not be able to differentiate between sports, teams, or players. During the phase of preoperational thinking, a child may develop a preference for a particular sport, team, and/or player; as they continue their development and demonstrate concrete operational thinking, a child should express stable preferences and demonstrate commitment to a sport, team, and/or player.

Through assessment of cognitive development, children demonstrating characteristics of preoperational thought were characterized as preoperational and those demonstrating characteristics of operational thought were identified as concrete operational. As discussed, important distinctions between the two phases of cognitive development are the ability to categorize or classify objects, and the stability and consistency of affect (or feelings) (Piaget & Inhelder, 1969). Research suggests that children characterized by preoperational thought do not demonstrate the ability to hierarchically classify objects; in other words, preoperational thinkers would not demonstrate cognitive complexity, a characteristic of commitment. Also, the affect or feelings that preoperational thinkers have toward a sport, team, and/or a player would be inconsistent and lack resistance to change which also characterizes commitment. By identifying different levels of cognitive development, it was possible to distinguish between children who express a specific association with a sport, team, and/or a player.
and whose association is enduring, from children who express having a favorite a sport, team, and/or a player, but whose affiliation is not enduring.

In addition to considering when a child may first demonstrate fan loyalty, based on level of cognitive development, this study also examined the factors thought to influence the development of fan loyalty. Research in sport sociology suggests that socializing agents, such as family, friends, mass media, and schools, influence the values, beliefs, and ideas that an individual forms (Kenyon & McPherson, 1973; Sage, 1974). Research also suggests that family, friends, and mass media contribute to an individual becoming a sport consumer (McPherson, 1976). Consistent with the perspective of Vygotsky, which emphasizes the importance of the social context in an individual’s development (Bodrova & Leong, 1996), the interview protocol developed for this study included a sequence of questions used to identify which elements may influence the decisions a child makes in terms of forming an enduring association with a sport, team, and/or a player.

A final element of this study examined the object toward which loyalty first develops. It is uncertain whether loyalty progresses from commitment to a sport, to a team, and to a player, or from a team, to a player, to a sport, or through some other sequence. With the interview protocol, attention was given to the object first identified by a child without prompting, and a sequence of questions were asked to clarify with which object a child initially formed an association.

To further examine the influence of parents on the development of fan loyalty, a seven-item questionnaire was administered to the parents of the children interviewed. Parents were asked to provide responses based on the premise that during the formative
years, parents (particularly fathers) may influence a child’s preference toward sports (Lewko & Greendorfer, 1988). Responses from children about their parents’ favorite sport were compared to responses from the parents to provide an indication of parental influence. Children that express loyalty toward the same sport, team, and/or player that parents identify as their favorite suggests that the parents influenced the child’s loyalty. Children that identify a favorite sport, team, and/or player which is different than their parents’ favorite, are likely to be influenced by other socializing agents. The questionnaire also included an item asking parents to identify how much influence they thought they had on their child participating in a favorite sport.

The interview protocol and the parental questionnaire were developed and administered in order to achieve the research objectives of this study. The remainder of this chapter describes in more depth the assessment of a child’s level of cognitive development, the formulation of the interview protocol and parental questionnaire, the administration of the interviews and the questionnaires, and the process used to interpret the data.

**Level of Cognitive Development**

Piaget’s theory of cognitive development was utilized to identify an individual’s level of cognitive development. As indicated in the review of literature in chapter two, Piaget has identified four levels of cognitive development: (1) sensori-motor, (2) preoperational, (3) concrete operational, and (4) formal operations. Regarding the development of fan loyalty, the two phases of particular interest are the preoperational and the concrete operational phases. Preoperational thought is characterized by a child’s
inability to discriminate classes hierarchically, or categorically. For example, a child characterized by preoperational thought may not understand that oranges and apples are both fruit (Sutherland, 1992). In terms of sport, a preoperational child may not distinguish between different units on a football team (defense and offense). In terms of hierarchial arrangement, it is possible that a child demonstrating preoperational characteristics may not understand the levels within a sport, such as the distinction between college and professional sports. All teams may be thought of as football teams, regardless of their classification.

Concrete operational thought is characterized by the ability to mentally represent objects, and the ability to classify items or to arrange items hierarchically (Siegler, 1991). In terms of sports, a child demonstrating concrete operational thinking would likely distinguish between levels of a sport (like college and professional football), and would be able to distinguish between different positions on a team. For example, a child characterized by concrete operational thought would be able to think of athletes as more than football players; they would likely be able to differentiate between a defensive guard and an offensive center on a football team. Piaget and associates have devised several tests for distinguishing between preoperational and concrete operational phases of development. One of the most commonly used measures is a conservation task (Piaget & Inhelder, 1969; for a synopsis see Siegler, 1991). One example of this type of task is conservation of mass.

To assess conservation of mass, a child is shown two balls of clay (equal in size), and asked if they believed the two balls are equal in size (do the balls have the same
amount of clay); upon agreement that the clay balls are equal, children are asked to explain why they think the two balls are equal. Responses such as, “because they look the same,” indicate a reliance on visual perception (a characteristic of preoperational thinking, Piaget & Inhelder, 1969). In front of a child, one of the clay balls is flattened out so a wider, thinner piece of clay and a smaller, thicker clay ball remain. Children are then asked which item has more clay. If a child indicates that one of the balls has more clay, they are asked to explain why. Responses such as, “it’s wider,” or “it’s bigger,” demonstrate a focus on the static state, not the transformation of the item. These types of responses are thought to characterize preoperational thinking.

As discussed in chapter two, one concern with early conservation tasks was attempts to “trick” or “catch” a child (Sutherland, 1992). Subsequent research has demonstrated that children may achieve conservation skills at earlier ages than those predicted by Piaget (Gelman, 1972). Based on subsequent research (Bryant & Trabasso, 1971; McGarrigle & Donaldson, 1974), Sutherland (1992) has suggested a modification of Piaget’s ideas, with respect to the manner in which conservation tasks are administered. Rather than trying to “trick” or “catch” a child, conservation tasks may be administered using a one-question condition. In a series of studies, Siegler, Waters, and Dinwiddy (1988) demonstrated that characteristics of concrete operational thinking may be identified by performing a conservation task (using number, volume, or mass), and then asking children whether items are the same or different. Changes from traditional conservation analysis include: (1) asking only one question, (2) asking the question after a transformation has been conducted in front of a child, and (3) including the correct
response among the answers a child may select. The important point to consider is that the phenomenon of operational thinking is still viable; what has been modified is the recognition that such thinking may be achieved at an earlier age than Piaget initially proposed (Sutherland, 1992).

To assess whether a child demonstrates characteristics of preoperational or concrete operational thinking, three conservation tasks were utilized in the research project. Based on descriptions provided by Wadsworth (1984) and Siegler (1991), of tasks that have been utilized in previous research, conservation of number, mass, and volume were assessed. Conservation of number was examined by lining up two rows of coins (seven coins in each row); initially the rows were equally spaced. The second row was transformed in front of a child (the coins were spaced farther apart). A child was then asked whether the first or second row had more coins, or if the rows had the same number of coins. If one row was selected as having more coins, a child was asked to explain why they thought a particular row had more coins. A response like, “this row is longer,” suggested an emphasis on perceptual input, a characteristic of preoperational thinking.

To measure conservation of mass a child was shown two clay balls equal in size. One of the clay balls was flattened out in front of a child, and then the child was asked which item had more clay, or if they both had the same amount of clay. If a child indicated that one item had more clay, they were asked why they thought there was more clay in a particular ball. Conservation of volume was assessed by showing a child two clear containers with equal amounts of liquid. The liquid from one of the containers was emptied into a taller, narrower container. A child was then asked which container had
more liquid, or if they both had the same amount of liquid. If a child indicated that one of
the containers had more liquid, they were asked why they thought that one container had
more liquid. Consistent with previous research (Bahn, 1986), if a child did not provide
“correct” responses on two of the three conservation tasks, they were classified as
demonstrating characteristics of preoperational thought. Children that gave “correct”
responses for two of the three conservation tasks, and whose reasoning indicated that they
understood the conservation concepts, were considered to have achieved characteristics of
concrete operational thinking. The next step in examining the development of fan loyalty
involved administration of the interview protocol.

Interview Protocol

The technique proposed to achieve the objectives of this research project involved
administration of an interview protocol based on the clinical-observation techniques
developed by Piaget (Piaget & Inhelder, 1969), and subsequently utilized by child
development specialists (see Siegler, 1991 for a synopsis). Piagetian techniques may be
used for determining a child’s level of reasoning about a particular concept, or to assess a
child’s general level of reasoning with respect to other children (Wadsworth, 1978). The
interview protocol proposed is not a formalized test or series of questions, it is essentially
an assessment. An important aspect of this process, as indicated by Wadsworth (1978), is
that the particular questions an interviewer asks are determined by a child’s answers to
previous questions and the child’s reasoning. The interviewer has established question
areas or topics which are consistent across interviews, but the interview is not a set of
fixed questions asked in a prescribed order. Instead, the interview is a dynamic exchange
between the interviewer and the child. A more dynamic process provides information about a child’s thinking, reasoning, and understanding (Wadsworth, 1978). Recognizing the importance of identifying when loyalty may develop, and what items may influence that development, an interview protocol helps protect against leading or cuing a child’s response. Through a dynamic interchange, it is likely that a child may demonstrate loyalty or identify socializing influences in a manner not previously considered. An interview protocol also provides the opportunity to clarify responses so that interpretation of results is reasonably clear. Findings should then provide the beginning premise for a standard of comparison regarding when fan loyalty may develop, and what items may influence such development.

Previous research in the area of sport socialization has been based on retrospective analysis (Kenyon, 1968; McPherson, 1968; Malumphy, 1971; Snyder & Spreitzer, 1976; Nicholson, 1978; Lewko & Greendorfer, 1988). Through retrospective analysis, adult or adolescent subjects are first asked to identify a favorite sport that they have or do participate in, and then to indicate the extent to which specific socializing agents may have influenced their decision to participate. Instead of using an interview protocol based on Piaget’s clinical-observation method, retrospective analysis could be used to assess the origin of fan loyalty.

One approach for examining the development of fan loyalty would be to formulate a questionnaire and to administer the questionnaire to subjects either in writing or through personal contact. Subjects could be asked to identify their favorite sport, team, and/or player, and to select a reason which best represents why a particular object is their
favorite. Similarly, subjects could be asked to identify from a series of choices who may have influenced their loyalty to a particular sport, team, and/or player. Although a retrospective approach has provided some understanding of which socializing agents may influence an individual, it presents several limitations with respect to examining the development of fan loyalty.

Previous research has asked respondents to think back to their involvement in sport, and to identify who and/or what influenced their participation. One limitation of this approach is faulty recall; it is uncertain how accurate an individual’s recall may be, particularly the longer the time span considered. Working with young children eliminates the need for retrospective analysis. A process which includes interviewing young children provides an opportunity to examine loyalty as it develops; currently, no research has examined the development of loyalty as it occurs. Examining individuals at a young age, rather than relying upon adolescent or adult recall, may provide a clearer understanding of when loyalty may be demonstrated. Additionally, by working with children, it may be possible to better isolate those socializing agents which exert a primary influence at particular levels of cognitive development, within particular social contexts.

Another problem associated with trying to administer a questionnaire format based on a retrospective approach is that younger children might have difficulty understanding questions asked, and may not be able to complete a questionnaire if they are unable to read or write. Trying to identify all the potential items that may represent objects toward which an individual is loyal, and further trying to enumerate all the potential socializing influences would result in an instrument to unwieldy to be administered. It is also
important to consider that in order to effectively utilize a standardized format such as a questionnaire, a standard of comparison should be available. Since previous research has not examined the development of fan loyalty in children, there is no standard upon which to base a questionnaire. This research represents a first attempt to try and identify when fan loyalty may develop, and what elements may influence that development. Without previous standards for comparison, a traditional questionnaire format or formalized experiment is not viable at this point. It is also important to utilize a technique that represents an effective means with which to work with children, especially young children. The elements which comprise the interview protocol, and which are thought to provide insight into the development of fan loyalty, include demonstration of loyalty, identification of socializing agents, and the progression through which loyalty develops.

Demonstration of Loyalty

Research on loyalty suggests that the construct is multidimensional, including a behavioral dimension and an attitudinal dimension (Day, 1969; Jacoby & Kyner, 1973; Pritchard, 1991). Recognizing the importance of examining both the behavioral and the attitudinal components of loyalty (Day, 1969; Jacoby & Kyner, 1978; Pritchard, 1991), the interview protocol has been designed to incorporate topic areas to assess both dimensions of loyalty. The behavioral dimension of loyalty has been described in consumer behavior research as the actual purchase behavior of an individual, or the repeat purchase behavior demonstrated by an individual (Jacoby & Chestnut, 1978). In a sport context, the behavior of highly committed sports fans has been described as repeat purchase of tickets to a game or event (for children, repeat attendance at a game or event), repeat
viewing of televised games or events, talking about a particular sport, team, and/or a
player, purchase of sport-related products, and reading about a sport, team, and/or a
player (McPherson, 1976; Smith et al., 1981). In the proposed interview protocol, topic
areas used to examine the behavioral dimension of fan loyalty included whether or not a
child has a favorite sport, team, and/or a player, whether or not a child attends games or
events, how often they might attend, whether or not they watch games on television,
whether or not they read about a favorite sport, team, and/or player, whether or not they
talk with others about a favorite sport, team, and/or player, and whether or not they own
any sport-related products. The topic areas have been selected based on items proposed
to characterize loyal fans (McPherson, 1976; Smith et al., 1981).

While the attitudinal dimension of loyalty has been recognized previously (Day,
1969; Jacoby, 1971), research has just recently been conducted to develop a valid and
reliable measure of the attitudinal component of loyalty (Pritchard, 1991). Through the
development of the psychological commitment instrument (PCI), Pritchard (1991) has
provided a measure with which to accurately assess the attitudinal dimension of loyalty.
The component which is thought to capture the attitudinal dimension is psychological
commitment (Pritchard, 1991; Jacoby, 1971). The elements which comprise psychological
commitment - cognitive complexity, volition, and resistance to change - provide the means
to examine the attitudinal component of loyalty.

Through the interview protocol, topic areas used to examine commitment to a
sport, team, and/or a player included discussing reasons why a child likes a favorite object
(is a child able to provide reasons for having a favorite sport, team, and/or player - other
than “because they like them”), discussing whether a child’s choice of a favorite sport, team, and/or player has been influenced by others, discussing whether a child would continue to like a favorite object if family or friends did not like that object, and assessing whether a child would continue to like a favorite object (for example, if a favorite team lost all of their games, would the team still be the child’s favorite). Topic areas were selected and questions framed based on the elements of cognitive complexity identified by Pritchard (1991). Along with assessment of whether a child demonstrates fan loyalty, this study also examined what items may influence the development of fan loyalty.

**Identifying Socializing Influences**

Vygotsky’s theory of sociocultural development indicates that a more complete understanding of development must consider the *social context* within which development occurs (Bodrova & Leong, 1996). In addition to considering a child’s level of cognitive development, the proposed interview protocol provided an assessment of the socializing agents thought to influence the development of fan loyalty. Research in sport socialization (Kenyon & McPherson, 1973; Sage, 1974; Lewko & Greendorfer, 1978) and consumer socialization (Ward, 1974; Moschis & Churchill, 1978; Moschis & Moore, 1979) have identified agents thought to exert influence on a child’s development. Socializing agents identified in both sport and consumer socialization include parents, siblings, peers, school, teachers, mass media, and community programs. Considering the age of children interviewed, topic areas important for assessment of socializing influences included parents, siblings, mass media, and school. Through the interview process, children were asked whether or not they knew their parent’s, sibling’s, or friend’s favorite sport, team,
and/or player, whether or not they attended games or events with others (parents, siblings, or friends), whether or not they watched games or events on television with others (parents, siblings, friends), and whether or not they talked with others about their favorite sport, game, and/or player. These topic areas provided an assessment of the primary socialization agents identified through sport and consumer socialization research, and are consistent with the levels of social interaction proposed by Vygotsky (Bodrova & Leong, 1996).

**Parental Questionnaire**

The emphasis Vygotsky placed on the social context suggests that the social context may influence not only attitudes and beliefs, but also how and what an individual thinks (Bodrova & Leong, 1996). With respect to the development of fan loyalty, this perspective indicates that the social context a child is in may influence the object a child develops loyalty toward, and the social context also identifies the elements which may influence the development of loyalty. Vygotsky proposed that the social context may be examined at several levels (Bodrova & Leong, 1996), the intermediate interactive level, the structural level, and the general cultural or social level. As discussed in chapter two, interaction with parents, siblings, peers, mass media, school, and personal participation, are thought to represent these levels of interaction. One level thought to be of particular importance with respect to the development of fan loyalty is the structural level.

One element of the structural level identified by Vygotsky as an influence on development is the family. A closer examination of the influence that a family, particularly parents, may exert on the development of fan loyalty was assessed through the
administration of the parental questionnaire. A parental questionnaire was developed to identify whether or not a parent has a favorite sport, team, and/or player, and if so to what extent parents thought that their loyalty had influenced their child. Influence may occur through talking about a favorite sport, team, or player, by attending games or events with a child, by watching games or events on television with a child, or through demonstrating loyalty by wearing sport-related clothing or purchasing sport-related products. In terms of understanding the origin of fan loyalty, if parents are able to identify what they believe to be their level of influence on a child, it may be possible to clarify the primary source (or sources depending upon how much influence parents may exert) from which fan loyalty originates. Based on research from sport and consumer socialization (Kenyon & McPherson, 1973; Bahn, 1986; Lewko & Greendorfer, 1988), it is thought that parents, particularly fathers, will exert the primary influence on the development of fan loyalty. Taken together, the responses from the interviews along with the information provided by parents, provides the material with which to develop a clearer picture of what elements may influence the development of fan loyalty. A final element of the interview protocol included assessment of the progression (if any) in the development of loyalty.

**Progression in the Development of Loyalty**

Considering what object an individual may first form an attachment with, and whether or not there is a progression from a sport, to a team, to a player, or some other sequence is an “uncharted” area. Intuitively one might argue that loyalty would first develop toward a sport, then progress to either a team or player. With the advance of technology, however, it may also be argued that through marketing and promotion an
individual may first develop loyalty to a player and then progress to either a sport or team. With the interview protocol, an important consideration is not leading or cuing a child regarding the object to which they are loyal (sport, team, and/or player). The initial phase of the interview allowed a child to identify some of their favorite items, such as their favorite food, television show, game, or activity. It is expected that if loyalty to a sport, team, or player exists, the object may be identified by the child without any prompting. Once identified, the interviewer examined whether or not there was loyalty to the other objects. For example, if a sport is identified (a child’s favorite activity is baseball), the interviewer asked whether or not the child had a favorite team or a favorite player, and if the child liked a particular player or team before they liked the sport. The dynamic nature of the interview process provided the means with which to examine whether or not there is a progression in the development of fan loyalty, whether attachment forms to a sport, then to a team, and then to a player, or if another sequence is followed, or if there is no recognizable pattern. An important element of the interview protocol is the ability to clarify responses so that interpretation of the results will be as reasonable as possible.

**Interpretation of the Interview**

After conducting interviews of children and collecting questionnaires completed by parents, the next step in achieving the stated research objects was interpreting the information. The first part of the interpretation involved identifying the levels of cognitive development according to the characteristics shown by the children. As mentioned earlier in this chapter, children that were able to accurately complete two of the three conservation tasks and to indicate understanding of the conservation concepts through
their explanations, were identified as concrete operational. Those children who did not accurately complete two of the three conservation tasks, or who did not demonstrating understanding of the conservation concepts through their reasoning were identified as preoperational. Accurate completion of the conservation tasks include: (1) recognizing that two rows of coins have the same number of coins, regardless of how far apart the coins are spaced (conservation of number); (2) recognizing that two clay objects have the same amount of clay, regardless of shape (conservation of mass); (3) recognizing that two containers of different sizes and shapes have the same amount of liquid (conservation of volume). Comparisons of the responses provided by the children were made according to whether or not characteristics of preoperational or concrete operational thought were shown.

A review of the children's responses focused on identifying particular patterns of responses. The initial pattern to consider was whether children at different levels of cognitive development demonstrated fan loyalty. As discussed earlier in this chapter, both the behavioral and the attitudinal components of loyalty were assessed. From the discussions, attention was given to the object children identified as their favorite, whether the favorite object was a sport, a team, or a player. One comparison was whether or not children at different phases of cognitive development identified a sport, team, or player as a favorite object (are any of these items considered important by the children at different levels of development). Responses from children who identified a sport, team, or player as a favorite object were next examined to determine if a child demonstrated fan loyalty toward that sport, team, or player.
Regarding the attitudinal dimension of loyalty, cognitive complexity was shown by children who were able to identify (or enumerate) reasons for having a favorite sport, team, or player (specific reasons, other than “Because,” or “I like them,” or “I like it”). Volition was demonstrated by children who, when given a choice between favorite objects, selected the object they first identified; volition was also demonstrated when a child indicated that even if others do not like their choice, the sport, team, or player would still be their favorite. Resistance to change was shown through continued attachment to a sport, team, or player, even when the proposition is made that a sport is not fun, and/or a team or player performed poorly (for example, a team or player had a losing season).

The behavioral dimension of loyalty was assessed through responses given to questions asking whether or not a child watched a favorite object on television, attended a favorite sport or team event, whether or not the child participated in a favorite sport, talked with others about a favorite object, read about a favorite object, and whether or not a child owns sport-related products (specifically related to the favorite object). For a child to be identified as a loyal fan, both the attitudinal and behavioral components must be present. A comparison of preoperational and concrete operational children was made to determine if loyalty was demonstrated at one or both levels.

After assessment of a child’s favorite objects, the interview focused on identifying what items may influence the development of loyalty. The influence of socializing agents was surmised based on the responses from children with respect to: (1) who they talked to about their favorite object, who is first identified (parent, sibling, friend); (2) who they watched or attended games/events with (parent, sibling, friend); (3) whether or not a child
had or was participating in a sport they indicated was their favorite (or the same sport of a
favorite team or of a favorite player); (4) how much a child watched, attended, listened to
games or events related to the favorite object; and (5) how much a child read, if they were
able to read, about the favorite object.

Influence of fan loyalty was also considered in terms of whether or not a child was
able to identify the favorite sport, team, or player of their parents, siblings, and friends. If
the favorite object of parents, siblings, and friends was identified, an important
consideration was whether or not it was the same favorite object identified by the child.
Comparisons between preoperational and concrete operational levels of development were
made to determine if different agents exerted more or less influence for one level or the
other, to determine if the agents exerted influence at both levels, and to determine if one
or more agents exerted a primary influence on the development of fan loyalty. For
example, considering research from sport socialization (Smith et al, 1981; Lewko &
Greendorfer, 1988), it was thought that at the preoperational level of development, the
family, particularly the father, would exert the most influence on the development of fan
loyalty.

Beyond considering what elements influence the development of fan loyalty, an
attempt was also made to determine at what level an item may exert influence. For
example, if a child identified the same favorite object as a parent or friend, it is possible
that the parent or friend contributed to the origin of fan loyalty. If a child identified a
favorite object that was different from those within their social context, it is possible that
the origin of influence lies in personal participation or through the influence of mass
media. Beyond suggesting where the origin of fan loyalty may lie, it may also be possible
to further clarify the role of other socializing agents. For example, if personal
participation influences the origin of fan loyalty, watching a favorite sport, team, or player
may facilitate or enhance the development of fan loyalty. Reading or talking with others
about a favorite sport, team, or player may strengthen an individual’s loyalty. From this
perspective, the results obtained from the interview protocol provided the means with
which to suggest a framework for identifying items which may contribute to the origin of
fan loyalty, and items which may facilitate (or enhance) the development of fan loyalty.
Comparisons between children demonstrating preoperational and concrete operational
characteristics were made to determine what, if any, differences existed with respect to
items which may influence the development of fan loyalty and items which may enhance or
strengthen fan loyalty.

Responses from the parental questionnaires were used to compare a child’s
perception of their parents’ influence (does a child indicate that they talk with their parents
about a favorite object, watch or attend games/events with parents, and does a child know
their parents’ favorite sport, team, or player) with the parents’ perception of their own
influence on a child’s loyalty. Consistency between the interview responses and the
parental responses would indicate a high level of influence from a child’s parents.
Comparisons between children showing characteristics of preoperational and concrete
operational thought were made to determine what, if any, differences existed with respect
to parental influence.
The final item considered was the progression of loyalty, from a sport, to a team, to a player, or some other sequence. A child who identified a favorite object (favorite sport, team, or player), without prompting, provided the opportunity to examine the progression of loyalty. For example, if a sport was identified as a favorite object, responses from follow-up questions asked about particular teams and players to determine if there was a pattern in the progression of loyalty. In other words, if a child identified a favorite sport, they were asked if they also had a favorite team and/or a favorite player, or if they liked a sport because they had a favorite player. Preoperational versus concrete operational responses were compared to determine if there was a consensus regarding the progression of loyalty, from a sport, to a team, to a player, or through some other sequence. Through analysis of the responses provided by children through the interview process, and from the information provided by parents via the questionnaire, a clearer picture of when fan loyalty may develop, and what items may influence such development emerged. Responses from the children interviewed also suggested a possible progression in the development of fan loyalty.
CHAPTER 4

RESULTS

The three research objectives examined in this study were to: (a) identify, based on an individual’s level of cognitive development, when loyalty to a sport, team, and/or a player may first develop, (b) identify those socializing agents which have a primary influence on a child as they initially develop loyalty to a sport, team, and/or a player, and (c) identify the object (e.g. sport, team, player) toward which loyalty may first develop. A clinical observation technique was implemented using a protocol to interview children at different levels of cognitive development. A parental questionnaire was used to examine more closely the relative influence parents may have on a child as fan loyalty develops.

A private school was contacted by the researcher in order to request participation in the research project. After explaining the design of the project and the interview process, school officials gave permission to contact the parents of the children in kindergarten and third grade. Though age-grouping provides only a cursory indication of an individual’s level of cognitive development, previous research suggested that children under age seven are likely to be characterized by preoperational thinking, and children over age seven are likely to be characterized by concrete operational thinking. Letters
were sent to parents asking for permission to interview a child, and to ask parents to respond to a questionnaire after the interview had been completed. This chapter provides a brief description of the interview process, results from analysis of the children’s responses and the findings from the parental questionnaire.

Interview Process

The first element of the interview protocol assessed a child’s level of cognitive development using three conservation tasks, conservation of number, mass, and volume, modeled from conservation tasks used in previous research (Siegal et al., 1988). As explained in chapter two, Piaget’s original conservation tasks involved several steps. For example, to test conservation of mass a child would be shown two balls of clay (equal in size) and asked if they thought the two balls were equal. After agreeing that the two balls were equal, children were asked to explain why they thought the two balls were equal. Responses such as “because they look the same,” were thought to indicate an emphasis on the static state of the clay balls (a perceptual focus).

In front of a child, one of the clay balls would be flattened out so that it would be thinner, but much wider, than the remaining ball of clay. A child would then be asked a second time which item had more clay. If a child responded that one of the balls had more clay than the other, they were asked to explain why. Responses which indicated that the flattened object had more clay because it was “bigger” or “wider,” demonstrated a focus on the current or static state of the object, without recognizing the transformation. Children responding that the two objects were different based on the “appearance” of an object demonstrated characteristics of preoperational thinking (Piaget & Inhelder, 1969).
As explained in chapter three, similar tasks were used to assess conservation of number and conservation of volume.

As discussed in chapter two, one concern with previous conservation tasks has been attempts to “trick” or to “catch” a child by not including a correct response in the answers children had to choose from (Sutherland, 1992). Use of a two-question condition has also been criticized for creating a situation in which children respond in order to please a grownup interviewer (social desirability) (Perner, Leekam, & Wimmer, 1986). In this study, steps were taken in the administration of the conservation tasks to avoid criticisms of Piaget’s original protocol. The procedures used in conducting the conservation tasks were designed based on Sutherland’s (1992) suggestions for modifying Piaget’s original protocol using a single-question condition.

A single-question conservation task included (1) asking a single question, (2) asking the question after a transformation had been performed, and (3) including the correct response among the answers a child might select. For example, in the conservation of number task two rows of coins were placed in front of a child, each row equally spaced with the same number of coins. In front of the child one of the rows was spread out so that the row “locked” longer. After the transformation, a child was asked if one row was longer than the other, or if both rows had the same number of coins. If a child responded that one row was longer than they other, they were asked to explain why they thought that row was longer. Siegal et al. (1988) demonstrated that characteristics of concrete operational thinking may be identified by performing a conservation task (number, volume, or mass), and then asking children whether items are the same or
different. Using a single-question condition, the three conservation tasks (number, mass, and volume), were administered to assess the cognitive development of the children participating in the interviews.

The second element of the interview protocol examined whether or not a child has a favorite sport, team, and/or player, and if they are loyal to that favorite sport, team, and/or player. During the interview, questions were asked to identify whether or not a child demonstrated both dimensions of loyalty with respect to their favorite sport, team, and/or player. Drawing from the characteristics of fans identified in research on sport socialization (McPherson, 1976; Smith et al., 1981), the behavioral elements included items such as attending games, watching televised events, reading and talking about a favorite sport, team, and/or player, and ownership of sport-related products. The attitudinal component of loyalty was examined by assessing a child’s psychological commitment to a particular sport, team, and/or player. Psychological commitment was characterized by three elements: cognitive complexity, volition, and resistance to change - drawn from research by Pritchard (1991).

The third part of the interview protocol assessed the factors thought to influence the development of fan loyalty. Vygotsky’s sociocultural theory of development emphasizes the importance of considering the social context, and research from sport and consumer socialization has identified the elements thought to have primary influence: family, friends, media, and school. Questions were incorporated to determine if a child had been influenced by the various socializing agents, and if possible, to identify to what extent the various socializing agents may have influenced a child. The influence of parents
was examined more closely through a parental questionnaire, which asked parents to identify their favorite sport, team, and/or player, to indicate whether or not they talk with their child about sports, and whether or not they watch and/or attend games with their child. Parents were also asked to indicate how much influence they believe they have had on their child selecting a favorite sport, team, and/or player.

A final element of the interview protocol assessed the progression of loyalty. If a child identified a specific sport, team, and/or player, without prompting, a sequence of questions were asked to try and clarify the progression through which loyalty may have developed.

Subjects

Two groups of children were interviewed, 25 children aged 5-6, and 25 children aged 8-9 (see Table 4.1 for details on group make-up). After receiving parental consent, interviews were conducted with children who were willing to participate. Time was spent assisting in class activities so that the children would be comfortable talking with the interviewer. Interviews were conducted in a classroom at the participating school, an environment familiar to the children. From a child’s perspective, the interview involved talking about some of their favorite objects, and why they liked particular objects. Questionnaires were sent to the parents for completion, and returned to the interviewer by mail.
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<td>7</td>
</tr>
<tr>
<td>Dual-Parent Household</td>
<td>24</td>
<td>19</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 4.1 Interview Groups

Analysis

After transcribing the interviews and entering the data into the computer, the *Q.S.R. Nudist* (Qualitative and Research Pty. Ltd., 1996) software was used to identify patterns of responses and to make comparisons between groups based on level of cognitive development. Additionally, perceptions children have regarding parental influence were contrasted with responses given by parents.

Cognitive Development

Analysis of the data collected from the interviews began with a classification of subjects according to whether they demonstrated characteristics of preoperational or concrete operational thinking. An individual’s level of cognitive development was assessed using three cognitive tasks. A variety of tasks have been used to characterize an individual’s level of cognitive development, including tasks to measure conservation of number, conservation of mass, and conservation of liquid. Piaget has suggested that an individual’s ability to conserve various objects improves from one phase of cognitive development to the next (Piaget & Inhelder, 1969). At the preoperational phase of
cognitive development, Piaget has suggested that a child tends to view objects with a perceptual focus, considering the physical aspects of an object, which results in focusing on a static state rather than on transformations to objects. Previous research provided the basis for classifying a subject’s response patterns as preoperational or concrete operational (Bahn, 1986; Siegal et al., 1988).

Assessment of a child’s level of cognitive development was based on the two criteria: (1) correct responses to two of the three cognitive development tasks, and (2) demonstration by the subject (through their explanation) that they understood the conservation concept represented through a given task. For each task, a correct response was that the objects were the same (same number of pennies in each row, same amount of play-doh in each object, and same amount of water in each container). Reasoning for each task included recognizing that the space between the pennies did not change the amount in a row, that changing the shape of an object did not change the amount of play-doh in an object, and that different shaped containers would hold the same amount when one is taller and thinner, while the second is shorter and wider.

One concern with previous cognitive tasks identified in chapter three has been the potential to mislead subjects, using multiple-question conditions (Siegal et al., 1988). Research has demonstrated that children are able to conserve using a single-question task, in which a transformation is performed in view of a child, followed by a question asking if two objects are the same (Siegal, et al., 1988; Perner, Leekam, & Wimmer, 1986). The three cognitive tasks used were conservation of number, conservation of mass, and conservation of volume. In each task, the child observed two identical conditions; a
transformation was performed in front of the child and they were then asked a question about the objects. After responding to each question a child was asked to explain why they offered a particular response. No indication was given to a child that a response was incorrect, rather a child was asked to explain why they made a particular choice. Simply responding correctly to a question does not necessarily indicate that a child understands a conservation concept. By telling why they gave a particular response, a child demonstrates whether or not they have a good understanding of a conservation concept.

For conservation of number, a child was shown two identical rows of six pennies; while observing the rows of pennies, one row was spread out so that it appeared longer than the second row. After one row had been spread out, a child was asked if they thought there were more pennies in the first row, more pennies in the second row, or the same number of pennies in both rows. For conservation of mass, a child was shown to identical balls formed from play-doh; while observing the two balls of play-doh, one ball was flattened out. The child was then asked if they thought there was more play-doh in the ball, more in the flat object, or about the same amount of play-doh in each object. For conservation of volume, a child was shown to identical containers of colored water. In front of the child, the water from one of the containers was poured into a taller, thinner container. The child was then asked if they thought there was more water in the shorter container, more water in the taller container, or about the same amount of water in each container. As indicated in Table 4.2 and Table 4.3, results from the conservation tasks allowed for classification of subjects based on their level of cognitive development.
Conservation of Number

Responding to the conservation of number task, subjects in the 8-9 year-old age group gave one of two responses: that there was a different number of pennies in each row, or that there was the same number of pennies in each row. A correct response was that there were the same number of pennies in each row; to ascertain whether or not a child understood the concept of conservation of number, they were asked to explain why they thought the number of pennies in each row was the same or different. In the 8-9 year-old age group, one child indicated that there were more pennies in one row or the other, while twenty-four children indicated that the two rows had the same number of pennies (n=25). One of four explanations was given by the children explaining why they gave a particular answer. The child who indicated that there were a different number of pennies in each row based their reasoning on what the rows looked like, indicating a focus on the length of the rows, or a focus on the perceptual dimension (see Dialogue Box 4.1).

Subjects indicating that there were the same number of pennies in each row gave one of three explanations. One group indicated that the rows looked the same, but did not provide any further explanation (see Dialogue Box 4.2), suggesting they may not understand the conservation of number concept. A second group indicated that the rows were the same because they counted the number of pennies in each row (see Dialogue Box 4.3). The third group indicated that the two rows had the same number of pennies, and explained that the position of the pennies (the space between the pennies) did not
Dialogue Box 4.1  Conservation of Number - Perceptual Focus

JJ:  Would you say there are more pennies in this row (close together), more in this row (spread apart), or does each row have the same number of pennies?
SB:  That's more bigger (pointing to longer row).
JJ:  You thought this row (longer row) has more pennies?
SB:  It's like more bigger.
JJ:  It's longer?
SB:  Yeah, and that one's shorter (pointing to row with pennies close together).

Dialogue Box 4.2  Conservation of Number - Perceptual Focus

JJ:  Would you say there's more pennies in the first row (close together), more in the second row (spread apart), or the same number in each row?
AT:  Um...probably...same number.
JJ:  Okay, would you tell me why there's the same number in each row?
AT:  'Cause it, I, it just looks like it.
JJ:  It just looks like it, okay.

change the number in each row (see Dialogue Box 4.4). The third group provided a correct response and demonstrated their understanding of the conservation of number concept.
JJ: Would you say I have more pennies in the first row (close together), more in
the second row (spread apart), or the same number in each row?
KL: Same
JJ: Okay, and would you tell me why?
KL: Because there are (in second row) three here, two here, (in first row) three
there, and two there.
JJ: So you counted them?
KL: Yeah

Dialogue Box 4.3   Conservation of Number - Counting

JJ: Do you think I have more pennies in the first row (close together), more in the
second row (spread apart), or do I have the same amount in each row?
CB: Same amount.
JJ: Okay, would you tell me why?
CB: Um...even though this row (second) is spread out, and the other one's together,
they are still the same.

Dialogue Box 4.4   Conservation of Number

JJ: Do you think there's more pennies in this row (close together), more pennies in
this row (spread apart), or do they have the same number?
JD: Mm...I think, I think this one has the most (pointing to row with pennies spread
apart).
JJ: Okay, would you tell me why you think that row has more?
JD: Because it looks like it.

Dialogue Box 4.5   Conservation of Number - Difference Based on Appearance

135
<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Conservation of Number</th>
<th>Conservation of Mass</th>
<th>Conservation of Volume</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>A8</td>
<td>8</td>
<td>Same⁺</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>SB</td>
<td>8</td>
<td>Different</td>
<td>Different</td>
<td>Same⁺</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>CB</td>
<td>9</td>
<td>Same⁻</td>
<td>Same</td>
<td>Same⁺</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>AE</td>
<td>8</td>
<td>Same⁺</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>AG</td>
<td>9</td>
<td>Same⁺</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
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<tr>
<td>NH</td>
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<td>Same⁻</td>
<td>Same⁻</td>
<td>Same⁻</td>
<td>Concrete Operational I⁷</td>
</tr>
<tr>
<td>AH</td>
<td>8</td>
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</tr>
<tr>
<td>KL</td>
<td>8</td>
<td>Same⁺</td>
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<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>JM</td>
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<td>Same⁺</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
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<td>Same⁺</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>HM</td>
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<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>MN</td>
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<td>Same</td>
<td>Different</td>
<td>Concrete Operational I⁷</td>
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<tr>
<td>WO</td>
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<td>Same</td>
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<td>Concrete Operational</td>
</tr>
<tr>
<td>CP</td>
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<td>Concrete Operational</td>
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<td>Concrete Operational I⁷</td>
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<tr>
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<td>Same</td>
<td>Same</td>
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</table>

n = 25

L Look Same⁺ C Counting I Transformation

Table 4.2 Cognitive Development 8-9 Years

136
<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Conservation of Number</th>
<th>Conservation of Mass</th>
<th>Conservation of Volume</th>
<th>Characteristic</th>
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<tbody>
<tr>
<td>M6</td>
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<td>Different</td>
<td>Different</td>
<td>Same</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>JB</td>
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<td>Same(^T)</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>LB</td>
<td>6</td>
<td>Same(^C)</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>JD</td>
<td>6</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>NE</td>
<td>6</td>
<td>Same(^C)</td>
<td>Same</td>
<td>Same(^L)</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>KE</td>
<td>6</td>
<td>Different</td>
<td>Same</td>
<td>Same(^L)</td>
<td>Concrete Operational(^T)</td>
</tr>
<tr>
<td>CG</td>
<td>5</td>
<td>Same(^C)</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>LH</td>
<td>5</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>AbH</td>
<td>5</td>
<td>Different</td>
<td>Different</td>
<td>Same</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>AmH</td>
<td>6</td>
<td>Same(^T)</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>GJ</td>
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<td>Same(^T)</td>
<td>Same(^L)</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>TJ</td>
<td>5</td>
<td>Same(^C)</td>
<td>Same</td>
<td>Different</td>
<td>Concrete Operational(^T)</td>
</tr>
<tr>
<td>DL</td>
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<td>Same(^C)</td>
<td>Same</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>BMc</td>
<td>6</td>
<td>Same(^C)</td>
<td>Different</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>CMc</td>
<td>5</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>AM</td>
<td>5</td>
<td>Same(^T)</td>
<td>Same</td>
<td>Same</td>
<td>Concrete Operational</td>
</tr>
<tr>
<td>CM</td>
<td>5</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>SM</td>
<td>6</td>
<td>Same(^C)</td>
<td>Same</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>CN</td>
<td>5</td>
<td>Same(^C)</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>RP</td>
<td>6</td>
<td>Same(^C)</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>BS</td>
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<td>Same(^C)</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>AS</td>
<td>5</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>KT</td>
<td>5</td>
<td>Same(^C)</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>MY</td>
<td>5</td>
<td>Different</td>
<td>Same</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
<tr>
<td>EU</td>
<td>6</td>
<td>Different</td>
<td>Different</td>
<td>Different</td>
<td>Pre-Operational</td>
</tr>
</tbody>
</table>

\(^L\) Look Same \(^C\) Counting \(^T\) Transformation

Table 4.3 Cognitive Development 5-6 Years
Subjects in the 5-6 year-old age group also gave one of two responses to the conservation of number task; the number of pennies in each row was identified as being either the same or different. In the 5-6 year-old age group, ten children indicated that one row had more pennies than the other, while fifteen children indicated that the two rows had the same number of pennies (n=25). Subjects indicating that there were a different number of pennies in each row explained their response based on their perception of row length. Subjects indicated that the difference was based on the point that one row looked longer, or that it “looked like there were more” in the row with the pennies spread apart (see Dialogue Box 4.5). Subjects in the 5-6 year-old age group who responded that there were different numbers of pennies in each row demonstrated strong perceptual focus. No recognition of the transformation was evident in the explanations given.

Subjects indicating that the two rows had the same number of pennies offered one of three explanations. One group could not explain why they thought the rows had the same number of pennies, other than that the rows “looked” the same. This type of reasoning suggests that a child may not understand the conservation of number concept (see Dialogue Box 4.6). A second group recognized that the rows had the same number of pennies, because they counted the number in each row (see Dialogue Box 4.7). The

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think I have more pennies in this row (close together), more in this row (spread apart), or the same number in each row?</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL:</td>
<td>Same in each.</td>
</tr>
<tr>
<td>JJ:</td>
<td>And would you tell me why?</td>
</tr>
<tr>
<td>DL:</td>
<td>Mm...uh, I don’t know.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Okay</td>
</tr>
</tbody>
</table>

Dialogue Box 4.6    Conservation of Number - Uncertain
JJ: Do you think I have more pennies in this row (close together), more pennies in this row (spread apart), or does each row have the same number of pennies?
CG: They each have the same.
JJ: All right, and could you tell me why?
CG: Because there's one, two, three, four, five, six, and one, two, three, four, five, six. They all have six.

Dialogue Box 4.7 Conservation of Number - Counting

The third group of responses demonstrated an understanding of the conservation of number concept, based on the explanations given in a child's response (see Dialogue Box 4.8). It is interesting to note that children in both age groups demonstrated varying points of cognitive development, between preoperational and concrete operational thinking.

JJ: Do you think I have more pennies in this row (close together), more pennies in this row (spread apart), or is there the same number in each row?
AM: Same number
JJ: Okay, and would you tell me why that is?
AM: Because you spread the same row out.

Dialogue Box 4.8 Conservation of Number - Understanding

Previous studies have primarily characterized children as preoperational or concrete operational, based on their responses to the conservation tasks (Piaget & Inhelder, 1969; Bahn, 1986; Siegal, et al., 1988). Beyond demonstrating characteristics of one level of thinking, the reasoning demonstrated through the children's responses provides a better
understanding of the *transition* between levels of cognitive development (from preoperational to concrete operational thinking). In other words, through the responses given it is possible to “see” a progression in cognitive development, from children focusing on a perceptual dimension, to children incorporating a cognitive dimension in thinking, an idea which will be further considered in chapter five.

**Conservation of Mass**

After viewing two identical balls of play-doh, and having one of the balls flattened out while they watched, subjects in the 8-9 year-old group were asked whether they thought there was more play-doh in the ball, more play-doh in the flat object, or about the same amount of play-doh in each object. Subjects responded that the objects had either about the same amount of play-doh or different amounts. After giving a response, subjects were asked to tell why they gave a particular answer. As Table 4.2 indicates four children indicated that one object had more play-doh than the other, and twenty-one children indicated that both objects had about the same amount of play-doh (*n*=25). Those responding that the objects had different amounts of play-doh explained that the flat object was wider or looked bigger (see Dialogue Box 4.9). Responses indicated that a

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think there’s more play-doh in the flat object, more in the ball, or about the same amount in each?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT:</td>
<td>Probably the flat.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Okay, would you tell me why there’s more in the flat object?</td>
</tr>
<tr>
<td>AT:</td>
<td>It looks flatter, I mean it looks like it has more.</td>
</tr>
</tbody>
</table>

**Dialogue Box 4.9**  Conservation of Mass - Perceptual Focus

140
child focused on the perceptual dimension, the shape of the object, and did not recognize the transformation from a ball to a flat object, and that no play-doh was taken out or added. One child indicated that the two balls had been the same size, but that the flat object had more play-doh (see Dialogue Box 4.10). This may suggest a transition in cognitive development in that the child recognizes the balls as being the same, but does not yet recognize that the change in shape does not change the *amount* of play-doh in an object.

Subjects responding that the objects had about the same amount of play-doh provided one of two explanations for their answer. One group correctly identified the transformation, and recognized that changing the shape of an object did not change the amount of play-doh in the object (see Dialogue Box 4.11), if the two objects were the same to begin with, changing the shape would not change the amount of play-doh in either

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Would you say I’ve got more play-doh in this first one (ball), more in this second one (flat), or do they have the same amount?</th>
</tr>
</thead>
<tbody>
<tr>
<td>DP:</td>
<td>Hm...you’ve got more play-doh in this one (flat object).</td>
</tr>
<tr>
<td>JJ:</td>
<td>Okay, and would you explain why to me?</td>
</tr>
<tr>
<td>DP:</td>
<td>Well, if it was just the balls, they’d be the same amount, but it has to be exactly the same size as the ball; but now that you’ve smooshed it, it’s gotten wider and it’s bigger, kind of big. So I say that’s bigger than the ball.</td>
</tr>
<tr>
<td>JJ:</td>
<td>You’d say this (flat object) is bigger than the ball</td>
</tr>
<tr>
<td>DP:</td>
<td>Uh-huh</td>
</tr>
<tr>
<td>JJ:</td>
<td>Does this (flat object) have more play-doh than the ball?</td>
</tr>
<tr>
<td>DP:</td>
<td>Yeah, there’s more play-doh in it.</td>
</tr>
</tbody>
</table>

Dialogue Box 4.10  Conservation of Mass - Transition in Development

141
object. A second group emphasized that the objects were the same, but had difficulty explaining why. Subjects responded that the two objects **looked** the same (see Dialogue Box 4.12), which suggested that a child may be transitioning from a focus on the perceptual dimension, to incorporating more of the cognitive dimension in their thinking. Subjects in the second group did not indicate any recognition of the transformation, that there was no change in the amount of play-doh in either object.

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think I've got more play-doh in this one (ball), more in that one (flat), or do they have the same amount of play-doh?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HM:</td>
<td>Same</td>
</tr>
<tr>
<td>JJ:</td>
<td>And would you explain why to me?</td>
</tr>
<tr>
<td>HM:</td>
<td>Because both balls were the same size, and you just smashed that one (flat).</td>
</tr>
</tbody>
</table>

Dialogue Box 4.11  Conservation of Mass - Transformation Understood

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think there's more play-doh in this object (ball), more in this object (flat), or do they have the same amount of play-doh?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH:</td>
<td>Same amount</td>
</tr>
<tr>
<td>JJ:</td>
<td>Why do you say that?</td>
</tr>
<tr>
<td>NH:</td>
<td>It just looks like it.</td>
</tr>
</tbody>
</table>

Dialogue Box 4.12  Conservation of Mass - Transitioning
After viewing two identical balls of play-doh, and having one of the balls flattened out while they watched, subjects in the 5-6 year-old group were also asked whether they thought there was more play-doh in the ball, more play-doh in the flat object, or about the same amount of play-doh in each object. Subjects responded that the objects had either about the same amount of play-doh, or different amounts. After giving a response, subjects were asked to tell why they gave a particular answer. As Table 4.3 indicates, fourteen children indicated that one object had more play-doh than the other, while eleven children indicated that both objects had about the same amount of play-doh (n=25).

| JJ:  | Do you think I have more play-doh here in this ball, or do I have more play-doh in this flat object, or about the same amount in each? |
| RP:  | Hm...the flat. |
| JJ:  | The flat, okay. Would you tell me why you picked that one? |
| RP:  | Because it looks more wider than the ball. |

Dialogue Box 4.13  Conservation of Mass - Perceptual Focus

Those responding that the objects had different amounts of play-doh explained that the flat object was wider or looked bigger (see Dialogue Box 4.13). Responses indicated that a child focused on the perceptual dimension, the shape of the object, and did not recognize the transformation from a ball to a flat object, and that no play-doh was taken out or added. Subjects responding that the objects had about the same amount of play-doh provided one of two explanations for their answer. One group correctly identified the transformation, and recognized that changing the shape of an object did not
change the amount of play-doh in the object (see Dialogue Box 4.14); if the two objects were the same to begin with, changing the shape would not change the amount of play-doh in either object. A second group recognized that the objects were the same, but had difficulty explaining why. Subjects responded that the two objects looked the same (see Dialogue Box 4.15), suggesting that the children may be transitioning from a focus on the perceptual dimension, to incorporating more of the cognitive dimension in their thinking. Subjects in the second group did not indicate any recognition of the transformation, and that there was no change in the amount of play-doh in either object.

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think there’s more play-doh in this one (ball), is there more in this one (flat), or do they have about the same amount?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG:</td>
<td>Same amount.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Okay, and why do you say that?</td>
</tr>
<tr>
<td>CG:</td>
<td>Because this one (flat) was rolled up like this one (ball).</td>
</tr>
</tbody>
</table>

Dialogue Box 4.14 Conservation of Mass - Transformation Recognized

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you think I’ve got more play-doh in the ball, more in the flat object, or about the same amount in each?</th>
</tr>
</thead>
<tbody>
<tr>
<td>GJ:</td>
<td>Same amount in each.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Okay, would you explain why to me?</td>
</tr>
<tr>
<td>GJ:</td>
<td>Because it looks like it has the same amount.</td>
</tr>
</tbody>
</table>

Dialogue Box 4.15 Conservation of Mass - Transitioning
Conservation of Volume

To assess conservation of volume, subjects were shown two identical containers filled with the same amount of colored water. The water from one of the containers was poured into a third container which was taller and thinner; subjects in the 8-9 year-old group were then asked if either container had more colored water than the other, or if the containers had about the same amount of colored water. Subjects provided one of two responses, that the containers either had about the same amount or different amounts of water. Two children indicated that one container had more water in it, while twenty-three children indicated that the containers had about the same amount of water ($n=25$; see Table 4.2).

Subjects indicating that the containers had different amounts of water explained that their answer was based on the size of the containers. Responses suggested that a taller or bigger container held more colored water than a smaller or shorter container (see Dialogue Box 4.16). The children who indicated that the two containers had different amounts of water did not mention the difference in width, they focused on the height of each container, concluding that the taller container was bigger, and subsequently held

| JJ: Would you say there’s more water in this container (short), more in this container (tall), or do they have the same amount? |
| AR: I’d say that this one (taller) has more than that one (shorter). |
| JJ: Okay, would you explain why to me? |
| AR: Because that container is bigger, and that one is lower, so they couldn’t have the same amount. |

Dialogue Box 4.16 Conservation of Volume - Difference Based on Container Size
more water. There was also no reference to the liquid in the tall container being poured from a container identical to the shorter container.

Subjects responding that the two containers had about the same amount of water based their responses on one of three ideas. One group suggested the containers had about the same amount of water because each container looked full (see Dialogue Box 4.17). No mention was made of the difference in shapes, one container being tall and thin.

| JJ: Would you say there’s more red water in this container (short), more in that container (tall), or do they have the same amount? |
| SB: Mm... it looks like the same amount. |
| JJ: Okay, would you explain why to me? |
| SB: Because this is all the way to the top, and that’s all the way to the top. |

Dialogue Box 4.17 Conservation of Volume - Focus on Water Level

and the other being short and wide. The children in this group indicated that their responses were based on the level of water in each container, and since both were full, the containers should have about the same amount of water.

A second group of subjects responded that the containers had about the same amount of colored water, and there reasoning included the idea that originally the colored water was in two containers equal in size and filled to the same level (see Dialogue Box 4.18). This group recognized that pouring the water from one container to another did not change the amount of water. There was not, however, any indication that the subjects
JJ: Do you think there's more water in this container (short), more in this container (tall), or do they have the same amount?
JY: Have the same amount.
JJ: And would you explain why to me?
JY: Because it (water) was in this one (short container), and they're the same size (comparing two short containers), and you poured it (water) in that (tall container), so they have the same.

Dialogue Box 4.18  Conservation of Volume - Focus on Similar Containers

recognized that a short and wide container would hold the same amount as a tall and thin container. Reasoning was based on having seen the two short containers together (no mention of the taller container).

Subjects in a third group indicated that the containers held about the same amount of water, and they explained that the tall and thin container could hold the same amount as the short and wide container (see Dialogue Box 4.19). This group recognized both the transformation and the point that a change in shape does not necessarily change the amount of liquid.

Subjects in the 5-6 year-old group were also shown two identical containers filled with the same amount of colored water. The water from one of the containers was poured into a third container which was taller and thinner; the children were then asked if either container had more colored water than the other, or if the containers had about the same amount of colored water. Subjects provided one of two responses, that the containers had
JJ: Do you think I’ve got more water in this container (short), more in this container (tall), or about the same amount in each?
RM: Hm... probably about the same.
JJ: Would you tell me why they’ve got the same?
RM: Well, this one’s shorter and wider, and that one’s taller and skinnier.

Dialogue Box 4.19  Conservation of Volume - Concept Understood

either the same amount or different amounts of water. Fifteen children indicated that one container had more water than the other, while ten children indicated that the containers had about the same amount of water (n=25; see Table 4.3).

Subjects indicating that the containers had different amounts of water explained that their answer was based on the size of the containers. One group responded that a taller or bigger container held more colored water than a smaller or shorter container (see Dialogue Box 4.20). A second group responded that the container which was wider was thought to have more water, because it was bigger or fatter (see Dialogue Box 4.21). Both types of responses demonstrated that the children focused on perceptual dimension,

JJ: Would you say there is more water in this container (short), more in this container (tall), or do they have the same amount?
TJ: More water in this one (tall).
JJ: And why would you say this one (tall)?
TJ: Because it’s got the big size, and this one (small) is a little size.

Dialogue Box 4.20  Conservation of Volume - Tall is Bigger
JJ: Do you think there is more water in this one (short), more in this one (tall), or do they have the same amount of water?
JD: Mm... I think that one (short), 'cause it's fatter.

Dialogue Box 4.21 Conservation of Volume - Wider is Bigger

the shape or size of the container, either taller was bigger or wider was bigger. None of the children suggesting that the containers had different amounts of colored water referred to the water from an identical short container being poured into the taller container. The focus was on the perceptual dimension, the static appearance, not the transformation or pouring.

Subjects responding that the two containers had about the same amount of water based their responses on one of three ideas. One group suggested the containers had about the same amount of water because each container looked full (see Dialogue Box 4.22). No mention was made of the difference in shapes, one container being tall and thin, and the other being short and wide. Responses were based on the level of water in each container, and since both were full, they should have about the same amount of water. This suggests a dependence on the perceptual dimension, static appearance, and not on cognitive or abstract thought.
Dialogue Box 4.22  Conservation of Volume - Fill Level

A second group of subjects responded that the containers had about the same amount of colored water, and there reasoning included the idea that originally the colored water was in two containers equal in size and filled to the same level (see Dialogue Box 4.23). This group recognized that pouring the water from one container to another did not change the amount of water. There was not, however, any indication that the subjects recognized that a short and wide container would hold the same amount of colored water as a tall and thin container. Reasoning was based on having seen the two short containers

Dialogue Box 4.23  Conservation of Volume - Similar Containers
together (no mention of the taller container) Subjects in a third group indicated that the containers held about the same amount of water, and they explained that the tall and thin container could hold the same amount as the short and wide container (see Dialogue Box 4.24), which demonstrated an understanding of the conservation of volume concept.

| JJ:  | Do you think I’ve got more blue water in this container (short), more in this container (tall), or about the same in each? |
| JB:  | Same in each. |
| JJ:  | And would you tell me why? |
| JB:  | Because the bottom on one (short), is just more rounder, but that one’s (tall) just taller. But they’re both the same amount. |

Dialogue Box 4.24  Conservation of Volume - Concept Developed

Based on analysis of the responses given on the conservation tasks, 18 subjects were classified as preoperational thinkers and 32 subjects were classified as concrete operational thinkers (N=50). Consistent with previous research it was possible to distinguish between those demonstrating characteristics of preoperational thinking and those demonstrating characteristics of concrete operational thinking. To better understand the development of loyalty and what influences the development of loyalty, comparisons between those demonstrating characteristics of preoperational thinking and those demonstrating characteristics of concrete operational thinking were made. Determining whether or not a child demonstrates fan loyalty begins with identifying whether or not a child has a preference for a specific sport, team, and/or player.
Identification of Favorite Sport, Team, and/or Player

Examining the development of fan loyalty, the first item to consider for children at both levels of cognitive development was whether or not they identified a favorite sport, team, and/or player. While preference for a particular sport, team, or player does not demonstrate fan loyalty, there must first be an object toward which an individual may develop loyalty. As indicated by the definition of fan loyalty, an individual should demonstrate support for a particular object, based on both attitudinal and behavioral components.

As shown in Figure 4.1, children characterized by concrete operational thinking all identified a favorite sport (100%). In the same group, 56% of those interviewed indicated that they had a favorite team, and 44% indicated having a favorite player (or athlete). Among children characterized as preoperational, 83% identified a favorite sport, 56% identified a favorite team, and 28% indicated having a favorite player (see Figure 4.2). Figure 4.3 shows that the majority of children in both groups identified a favorite sport (94%). For both groups, the percentage of children identifying a favorite team was substantially less (56%) than those identifying a favorite sport, and the number of children indicating that they had a favorite player was even smaller (38%).

A closer examination across groups demonstrated that there was a significant difference between children identifying a favorite sport and a favorite team (t < 0.001), between children identifying a favorite sport and a favorite player (t < 0.001), and between
Figure 4.1  Favorite Object - Concrete Operational

Figure 4.2  Favorite Object - Preoperational
Figure 4.3  Favorite Objects - Across Groups

Paired Differences

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>SE of Mean</th>
<th>t-value</th>
<th>df</th>
<th>2-tail Sig.</th>
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<td>.490</td>
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<td>-5.48</td>
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<td>.000</td>
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<tr>
<td>Favorite Team</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Favorite Sport</td>
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<td>.501</td>
<td>.071</td>
<td>7.90</td>
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<td>.000</td>
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<td>Favorite Player</td>
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<td>Favorite Team</td>
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<td>.074</td>
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<tr>
<td>Favorite Player</td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4  Differences Across Groups
children identifying a favorite team and a favorite player (t < 0.001) (see Table 4.4). The only significant difference found between groups based on phase of cognitive development was identification of a favorite sport (see Table 4.5).

Considering level of cognitive development, the high percentage of children across groups identifying a favorite sport demonstrated that children characterized by preoperational and concrete operational thinking were able to distinguish between types of sports, and were able to express a preference for a particular sport. The pattern of responses given suggested that a possible progression in the development of fan loyalty is initial attachment to a sport, followed by attachment to a team and a player respectively. The potential progression in the development of loyalty, if any, will be discussed further in chapter five.

<table>
<thead>
<tr>
<th>Differences Between Groups</th>
<th>Identifying Favorite Sport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td>Preoperational</td>
<td>1.1667</td>
</tr>
<tr>
<td>Concrete Operational</td>
<td>1.0000</td>
</tr>
<tr>
<td>Within Group Totals</td>
<td>1.0600</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>d.f.</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
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<td>6.1440</td>
<td>.0168</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2.5000</td>
<td>48</td>
<td>.0521</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.5 Differences Between Groups
Psychological Commitment

Identifying a favorite object does not indicate that a child has developed *loyalty* toward that object. In order to determine whether or not a child had developed fan loyalty it was important to consider the two components which characterize loyalty. As explained in chapter two and chapter three, the attitudinal component of loyalty may be thought of as psychological commitment, characterized by cognitive complexity, volition, and resistance to change. Cognitive complexity was assessed by asking children to explain why they liked a particular sport, team, and/or player. Cognitive complexity was considered to be demonstrated if a child was able to identify one or more reasons explaining *why* they considered a particular sport, team, or player to be their favorite.

In addition to the quantity of ideas offered, the specificity or "richness" of ideas was an important consideration. A child that provided a specific reason for liking an object, beyond stating that they "liked" (or a similar response) a particular sport, team, or player, was thought to demonstrate cognitive complexity. Volition was assessed by asking a child whether or not they would continue to like an object even if others (family and friends) did not like the object. Resistance to change was examined by asking a child to choose between two objects, to find out if the child would select the object first identified as their favorite. Resistance was also assessed by asking a child whether or not they would continue to like an object if it had a negative image (for example, asking a child if they would like a particular team if the team were to lose all of their games).
Favorite Sport - Cognitive Complexity

The first component of psychological commitment, cognitive complexity, was thought to be demonstrated by a child based on the quantity of thoughts and ideas regarding a particular sport, team, and/or player, and based on the specificity of ideas offered to explain why a particular object was considered to be the favorite. Complexity involves more than responding that a sport is a favorite because “I like it.” Cognitive complexity involves forming specific reasons as to why a particular object (sport, team, and/or player) is considered to be one’s favorite.

As represented in Figure 4.1, all of the children characterized as concrete operational identified a favorite sport. A closer analysis of responses indicated that children in the concrete operational group explained that a particular sport was their favorite because they enjoyed a specific aspect of participating in the sport, or because they enjoyed watching specific elements in a sport (vicarious enjoyment). By giving multiple reasons, as well as specific reasons, children in the concrete operational group did demonstrate cognitive complexity (see Table 4.6).

As shown in Figure 4.4, 88% of the subjects in the concrete operational group demonstrated cognitive complexity, based on the number of reasons and/or the specificity of reasons given to explain why a particular sport was their favorite. Subjects gave multiple reasons to explain why a particular sport was their “favorite,” and the reasons given included enjoyment from participation and enjoyment from cognitive or abstract elements (see Dialogue Box 4.25).
In the group characterized by preoperational thinking, 67% of the children were able to identify at least one specific reason why a particular sport was their favorite (see Figure 4.5). It is important to note, however, that the majority of children characterized as preoperational only offered a single reason in their explanations (see Table 4.6), and as represented in Dialogue Box 4.26, the reason given emphasized the child’s involvement.
in a sport, not an abstract or cognitive element. Four children characterized as preoperational offered multiple reasons for liking a particular sport (2-3 reasons), however, all reasons given emphasized some level of participation (see Dialogue Box 4.27).

### Dialogue Box 26  Cognitive Complexity  
**Sport**

<table>
<thead>
<tr>
<th>JJ:</th>
<th>What do you like about football?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS:</td>
<td>You get to tackle everybody.</td>
</tr>
</tbody>
</table>

### Dialogue Box 4.27  Cognitive Complexity - Sport

<table>
<thead>
<tr>
<th>JJ:</th>
<th>What do you like about baseball?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB:</td>
<td>You get to <strong>throw</strong>, and <strong>hit</strong> the bat, and you have to <strong>run</strong> over to the bases.</td>
</tr>
</tbody>
</table>

Consistent with level of cognitive development, reasoning was based on playing or participating, not on cognitive elements (like identification or vicarious enjoyment). In other words, children characterized as preoperational offered a reason for liking a particular sport, but not necessarily a complex reason. Based on the type of reasons given, and considering that the majority of the children characterized as preoperational only gave one reason for liking a particular sport, those in the preoperational group were not thought to demonstrate cognitive complexity.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Sport</th>
<th>Complexity</th>
<th>Number of Reasons</th>
<th>Volition</th>
<th>Resistance To Change</th>
</tr>
</thead>
<tbody>
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\( ^A \) Asked \( ^E \) Emerged \( ^M \) Multiple \( ^Y \) Yes \( ^N \) No

Table 4.6 Psychological Commitment to Sport - Concrete Operational

160
**Favorite Sport - Cognition Complexity**  
Preoperational Group

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Figure 4.5  Favorite Sport - Cognition Complexity  
Preoperational

**Favorite Sport - Volition**

The second component characterizing psychological commitment is volition. Volition regarding a particular sport was examined by asking a child whether or not they would continue to like an object even if others (family and friends) did not like the object (like a favorite team). Examples of personal preference would include identifying a favorite sport, team, and/or player that is different from the favorite sport, team, and/or player of other socializing agents, and also by a decision to continue liking a particular object, even if other socializing agents did not.

Table 4.6 and Table 4.7 indicate that children in both groups demonstrated volition. Eighty-eight percent of those characterized as concrete operational demonstrated volition, or a personal preference, toward a particular sport, and 61% of those
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A: Asked  Y: Yes
E: Emerged  N: No
M: Multiple

Table 4.7  PREOPERATIONAL: Psychological Commitment to Sport
characterized as preoperational indicated a personal preference for a particular sport.

Considering that a child is able to differentiate between sports, it is stands to reason that
volition would be demonstrated by subjects in both groups. In other words, a child that is
able to differentiate between sports would be expected to express volition, or personal
preference, for a particular sport. Dialogue Box 4.28 shows examples of volition at both
levels of cognitive development, through responses indicating that children would
continue liking a particular sport even if others (like father, mother, siblings, and friends)
did not like the sport. Volition is also demonstrated by a child whose favorite sport is
different from other socializing agents (see Dialogue Box 4.29).

Concret Operational
JJ: So you think you’d like swimming, even if Whitney (friend) didn’t like
swimming?
LP: Yes
JJ: Even if your dad didn’t like swimming?
LP: Mm...yeah.
JJ: And if your mom didn’t like it, would you still like it?
LP: Yes

Pre-Operational
JJ: Do you think you’d like to play soccer, even if your friends didn’t like to play?
EU: Yeah.
JJ: Do you think you’d like soccer even if your dad didn’t?
EU: Yeah.
JJ: You would...how about if your mom didn’t like soccer, do you think you’d still
like it?
EU: Yeah

Dialogue Box 4.28  Volition (1) - Sport
Dialogue Box 4.29    Volition (2) - Sport

Favorite Sport - Resistance to Change

The third component which characterizes psychological commitment is resistance to change. Resistance to change was assessed according to whether or not a child would select their “favorite” sport when given a choice between watching or playing two sports. After a favorite sport was identified, a child was subsequently asked if they liked other sports. Through the interview process, a child was asked at different times which sport they would rather participate in and which sport they would rather watch, the favorite or another sport (which the child indicated they liked). Resistance to change was further examined by asking whether or not a child would still like a particular sport even if they were not involved in the sport.

Children characterized as concrete operational all identified a favorite sport, but when given the option to watch or participate in another sport, only 66% of the subjects were resistant to change. When asked at different times to choose between watching their “favorite” sport, or another sport the child liked, children who were not consistent in their
selection were characterized as not resistant to change. In relation to voition, children whose favorite sport was similar to a family members or friends favorite sport seemed to be less resistant to change than children whose favorite sport was different from the favorite sport of other socializing agents.

Eighty-three percent of the children characterized as preoperational identified a favorite sport. When given a choice to watch or participate in their favorite sport or another sport, only 44% of the children characterized as preoperational demonstrated resistance to change. These results were not surprising considering that fewer of those characterized as preoperational demonstrated volition, or a personal preference, for a particular sport. As Tables 4.6 and 4.7 indicate, children in both groups demonstrated resistance to change, but fewer of the children characterized as preoperational were actually resistant to change.

Taken together, the assessment of cognitive complexity, volition, and resistance to change, regarding a favorite sport, indicated that children characterized as concrete operational were capable of demonstrating psychological commitment to a sport which, when considered along with a behavioral commitment, may be identified as fan loyalty. Children characterized as preoperational are likely to demonstrate volition, based on their ability to distinguish between sports, with some of the children demonstrating resistance to change. Children characterized as preoperational, however, are unlikely to demonstrate cognitive complexity, suggesting that while they may indicate a preference for a sport, that does not necessarily equate to psychological commitment, and subsequently to fan loyalty regarding a particular sport.
Favorite Team - Cognitive Complexity

As represented in Figure 4.1 and 4.2, 56% of the children characterized as concrete operational and 56% of the children characterized as preoperational identified a favorite team. While a child may be able to differentiate between sports, they may not have achieved a higher level of cognitive processing, which would be required to differentiate between teams within a sport. Identifying a particular team would suggest a greater interest in a particular sport (a more stable preference), and greater breadth in a child's level of cognitive development (categorization of a specific subject). In order to determine whether or not a child demonstrated psychological commitment to a "favorite" team, a child's cognitive complexity, volition, and resistance to change were assessed.

Consistent with assessment of cognitive complexity in relation to a favorite sport, cognitive complexity relating to a favorite team was evaluated through assessment of the number of reasons given for liking a particular team, and through assessing the specificity of a child's reasoning. Table 4.8 indicates that among children characterized as concrete operational who identified a favorite team, 72% demonstrated cognitive complexity regarding their commitment to a favorite team; in other words, 13 of 18 children gave one or more specific reasons for liking a particular team. In the preoperational group, 40% (4 of 10) of the children who identified a favorite team demonstrated cognitive complexity regarding that team. Only four children characterized as preoperational gave a reason for liking a particular team (see Table 4.9). Children responding that they liked a particular team because the team was their "favorite" were not thought to demonstrate cognitive complexity.

166
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\( ^\text{A} \) Asked \( ^\text{E} \) Emerged \( ^\text{M} \) Multiple \( ^\text{Y} \) Yes \( ^\text{N} \) No

Table 4.8 CONCRETE OPERATIONAL: Psychological Commitment to Team

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A = Asked  Y = Yes
E = Emerged N = No
M = Multiple

Table 4.9  PRE-OPERATIONAL : Psychological Commitment to Team

168
Dialogue Box 4.30  Favorite Team - Cognitive Complexity

As indicated, multiple reasons and specificity in reasoning were important considerations for establishing cognitive complexity. Presented in Dialogue Box 4.30 are samples of the specific reasons children gave, used to assess cognitive complexity. Types of reasons given included items such as personal involvement, a winning team, and where a child lived.

Regarding cognitive development, the types of reasons given provided further indicators of transitioning in cognitive development. The types of reasons given may be thought of in terms of increasing complexity, as a child associates a favorite team with (1) personal involvement, (2) team performance, and (3) cognitive factors. This sequence is consistent with the characteristics used to identify different levels of cognitive development in that children characterized as preoperational emphasized liking a favorite team based on personal involvement or team performance (a greater perceptual focus),
while children characterized as concrete operational emphasized team performance and cognitive factors to a greater extent (moving from a perceptual to a cognitive focus). It is also interesting to note that liking a team because they win or because they are “good” is not complex in terms of cognitive development, but it does emphasize the importance or value placed on performance, which may have implications for the development of loyalty (e.g. as an individual focuses less on performance and more on other factors, they are likely to develop fan loyalty rather than a “fair-weather fan” mentality).

At the team level of attachment, the pattern of responses showed that the majority of children only offered one reason for liking a particular team - rather than multiple reasons. Reflected in Tables 4.8 and 4.9 is the point that fewer children identified a favorite team across groups, and even fewer children gave multiple reasons for liking a particular team. Of the four children characterized as preoperational who gave a reason for liking a particular team, no child gave more than one reason for liking a team. Further, the reasons given were based on involvement or team performance.

Consistent with the pattern found for a favorite sport, children characterized by concrete operational thought were able to demonstrate cognitive complexity. Children characterized as preoperational from the interviews, however, in general did not demonstrate cognitive complexity regarding a favorite team.

It is important to note that the percentage of children across groups that identified a favorite team was substantially less than the percentage of children across groups that identified a favorite sport (implications for progression). Beyond indicating a preference for a particular team, the percentage of children demonstrating psychological commitment
to a team was even less than the percentage of children demonstrating psychological commitment to a favorite sport.

The percentage of children characterized as concrete operational that identified a favorite team and that demonstrated cognitive complexity, suggested that children at that level of cognitive development may be capable of demonstrating psychological commitment but may not have formed such a commitment to a particular team. Only four children characterized as preoperational who identified a favorite team also gave a reason for liking a particular team. The reasons for liking a favorite team focused on personal involvement or team performance, emphasizing the influence of a perceptual focus. A preference for a team based on team performance and/or personal involvement, however, is likely to be transient (fair-weather fan), and not necessarily characteristic of fan loyalty.

**Favorite Team - Volition**

Differentiating between sports, then further differentiating between teams, it was expected that children would demonstrate volition for a particular team. Volition for a particular team was assessed by asking children whether or not they would like a team if others did not like the team, and also by determining whether or not a child knew the favorite team of family members and friends. Identifying a favorite team that is different from the favorite team of others was considered to be a demonstration of volition.

As seen in Table 4.8 and Table 4.9, children in both groups were able to demonstrate volition for a favorite team. Sixty-one percent of the children characterized as concrete operational who identified a favorite team, also demonstrated volition; thirty percent of the children characterized as preoperational who identified a favorite team, also
demonstrated volition. Analysis of responses indicated that (1) a child would not like a team if others did not like the team (lack of volition), or (2) a child would like a team even if others did not like the team (volition) (see Dialogue Box 4.31). A strong indicator of volition was seen in children who recognized that their favorite team was different from their family or friend’s favorite team (see Dialogue Box 4.32).

**Lack Volition**

**J.J.** What is it that you like about the Raiders?

**A.R.** Well, um, they make you feel good ‘cause they’re like, I got this thing, um, for my dad, where you stick it in the window and show that he likes the Raiders.

**J.J.** Do you think you’d like the Raiders if your did liked another football team?

**A.R.** I don’t know.

**Volition**

**J.J.** Who do you cheer for when Ohio State plays Notre Dame?

**A.T.** Notre Dame, my dad cheers for Notre Dame to.

**J.J.** Is that his favorite football team?

**A.T.** Uh-huh

**J.J.** Does your mom have a favorite football team?

**A.T.** Buckeyes

**J.J.** Do you think you’d still like Notre Dame, even if your dad didn’t?

**A.T.** Yeah

**Dialogue Box 4.31** Favorite Team - Volition

**D.P.** I used to only like them (the Lakers) because I knew my dad liked them. After I saw the Chicago Bulls and I grew older, I started liking them best.

**J.J.** Does your dad like the Chicago Bulls?

**D.P.** He likes the Lakers.

**Dialogue Box 4.32** Favorite Team - Volition (Strength)
Favorite Team - Resistance to Change

Having selected a favorite sport, and further identifying a favorite team, it was expected that consistent with the demonstration of volition, children would also demonstrate resistance to change (stronger attachment to their favorite team). Resistance to change was assessed by asking children if they would still like a particular team if that team lost all its games, if a particular player was traded, if the team moved, and by giving children a choice between watching a favorite team, and another team that a child indicated that they liked.

Children in both phases of cognitive development demonstrated resistance to change (see Tables 4.8 and 4.9). Among children characterized as concrete operational who identified a favorite team, 61% demonstrated resistance to change. Among children characterized as preoperational who identified a favorite team, 50% demonstrated resistance to change. Children in both groups who indicated that they would continue to like a team when “challenged,” and children who chose to watch their “favorite” team over another team they liked, were characterized as resistant to change (see Dialogue Box 4.33). Children who indicated they would not like a favorite team if the team performed poorly were characterized as not resistant to change.

Across groups there was a clear distinction regarding resistance to change. Children in the preoperational group characterized as not resistant to change all based their responses on team performance. In other words, if a team performed poorly (lost all its games), the children indicated that the team would no longer be their favorite (see Dialogue Box 4.34).
Dialogue Box 4.33 Favorite Team - Resistance to Change

JJ: Do you think if the Cubs lost all their games this year, you’d still like them?
A8: Yeah
JJ: Would you still like the Cubs, even if Ryne Sandberg didn’t play for them?
A8: Yeah
JJ: If you had to pick between watching the Cubs and the Reds, which team do you think you’d watch?
A8: Probably the Cubs.

Dialogue Box 4.34 Team Performance - Not Resistant To Change

JJ: Do you think you’d like the Cubs if they lost all of their games this year?
M6: I don’t, I don’t think so.
JJ: You don’t think so...
M6: I’d say, “I don’t like the Cubs anymore!”

Consistent with level of cognitive development, preoperational children focused on performance elements (higher degree of perceptual focus) rather than affective or cognitive elements. Children in the concrete operational group were more stable regarding their favorite team, regardless of team performance (less emphasis on performance). Children in the concrete operational group that were characterized as not resistant to change based their responses on attachment to a player, rather than on team performance. Even children in the concrete operational group characterized as not resistant, indicated that they would continue to follow a team regardless of performance,
as long as a particular player remained with the team, the component that influenced resistance to change was a stronger player attachment (see Dialogue Box 4.35).

Consistent with the pattern found for a favorite sport, children characterized as concrete operational were able to demonstrate psychological commitment to a team. While children characterized as preoperational demonstrated some of the components, the children did not demonstrate cognitive complexity, volition, and resistance to change, which would indicate psychological commitment to a team.

| JJ:  | Do you think have a favorite basketball team? |
| CoW: | Um, yeah, the Bulls.                        |
| JJ:  | What if the Bulls were to lose all their games, would they still be your favorite team? |
| CoW: | I’m sure.                                  |
| JJ:  | What if Michael Jordan was traded to another team, would the Bulls still be your favorite team? |
| CoW: | No                                         |
| JJ:  | Would you like the team he was on?         |
| CoW: | Yeah                                      |

Dialogue Box 4.35 Favorite Team - Attachment to Player (Not Resistant)

The pattern of responses suggested that as a child’s cognitive development progresses, a child would be expected to focus less on performance characteristics as a basis for liking a particular object, and to focus more on cognitive or affective characteristics (such as relationships with others, location, identification, etc.), as the basis for liking a particular object (sport, team, and/or player). The shift from focusing solely
on performance characteristics, to including cognitive or affective elements, as a basis for attachment, may mark the origin in the development of fan loyalty.

Children that identified a favorite sport and a favorite team demonstrated more stability in terms of psychological commitment than children that only identified a favorite sport. In other words, children that identified a favorite sport and a favorite team showed greater cognitive complexity, volition, and resistance to change with reference to a particular team, than children that only identified a favorite sport. Preference for a particular team may be more stable than preference for a particular sport. Regarding fan loyalty, attachment to a particular team may be an important plateau in the developmental process, incorporating more cognitive or affective links to a team. Another possibility, which seems more likely, is that as cognitive development progresses a child reaches the point at which they are capable of demonstrating fan loyalty. In this case, attachment to a team may serve as an indicator of cognitive development (transitioning to or through the concrete operational phase).

**Favorite Player - Cognitive Complexity**

As seen in Figures 4.1 and 4.2, 44% of the children characterized as concrete operational, and 28% of the children characterized as preoperational expressed that they had a favorite player. To determine whether or not children had a psychological commitment to a specific player, cognitive complexity, volition, and resistance to change were assessed. Assessment of cognitive complexity involved examining why a child
favored a particular player, based on multiplicity of reasons and specificity of reasons given. A clear distinction emerged between children demonstrating cognitive complexity and those not demonstrating cognitive complexity.

Children that identified a favorite player, but who did not demonstrate cognitive complexity explained their liking for a player because a player was “good” or because they “liked” the player (see Dialogue Box 4.36). None of the children in the preoperational group demonstrated cognitive complexity in relation to a favorite player. Considering the level of categorization required to distinguish between sports, teams, and then among players, it was not surprising that no children characterized as preoperational demonstrated cognitive complexity in relation to a “favorite” player. Fifty-seven percent of the children in the concrete operational group who identified a favorite player did not

\begin{verbatim}
JJ: Do you have a favorite baseball player?
A8: Mm...well, I like Ryne Sandberg.
JJ: What is it that you like about Ryne Sandberg?
A8: Um... I don’t know, I just like him.

JJ: Ryne Sandberg. Why would you say he is one of your favorite players?
M6: Because he’s so good.
\end{verbatim}

Dialogue Box 4.36 Favorite Player - No Cognitive Complexity

demonstrate cognitive complexity, suggesting that children were at different points of transition in their cognitive development, between preoperational and concrete operational thinking.
To identify a specific player, associated with a particular team, in a specific sport, requires that a child be able to differentiate between sports, between teams players, and among players. For each object (sport, team, player), the amount of categorization a child must process increases; to demonstrate cognitive complexity, at a minimum a child would have to operate in the concrete operational phase of cognitive development. Forty-three percent (6 of 14) of the children characterized as concrete operational who identified a favorite player did demonstrate cognitive complexity. Children gave one or two reasons explaining why they liked a particular player; the type of reasoning reflected either an appreciation for some specific element in an athlete’s performance or personal involvement (see Dialogue Box 4.37).

| JJ:  | The little Dominique, what do you like about her? |
| PS:  | ‘Cause she, when she does the **floor routine**, she does it real good; I like her **music** and stuff. |
| JJ:  | Do you have any favorite players? |
| JY:  | Stanley Jackson, because I saw him in real life. |

Dialogue Box 4.37 Favorite Player - Cognitive Complexity

**Favorite Player - Volition**

To identify a specific player as being a “favorite,” a child would likely have distinguished between sports, between teams, and between different players. Through that type of processing, it was expected that children across groups who identified a favorite
player would demonstrate volition. Identifying a favorite player in essence is expressing a personal preference. All the children characterized by preoperational thinking, who identified a favorite player, did demonstrate volition (personal preference). Among those characterized as concrete operational, only two children who identified a favorite player did not demonstrate volition. In both cases, it was evident that the identification of a particular player was due more to media influence than personal preference (see Dialogue Box 4.38).

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you have a favorite player?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaW:</td>
<td>Shaquille O’Neil, that they call Shaq.</td>
</tr>
<tr>
<td>JJ:</td>
<td>What team does he play for?</td>
</tr>
<tr>
<td>CaW:</td>
<td>Uh...I think the Bulls, but I’m not sure.</td>
</tr>
<tr>
<td>JJ:</td>
<td>I believe he plays for the Lakers. Do you remember seeing Shaquille in some commercials.</td>
</tr>
<tr>
<td>CaW:</td>
<td>Yeah, like Space Jam, when it shows Shaquille O’Neil. I’m not exactly sure if that’s Shaquille O’Neil or Michael Jordan, but I think it’s Shaquille O’Neil, because he’s been in a lot of TV shows.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Why do you like Michael Jordan?</td>
</tr>
<tr>
<td>CaW:</td>
<td>‘Cause he’s a really good player, um...he stars in that new movie Space Jam, and he’s very famous. He’s probably the most popular one.</td>
</tr>
</tbody>
</table>

**Dialogue Box 4.38**  Favorite Player - No Volition

**Favorite Player - Resistance to Change**

Consistent with earlier assessments, resistance to change in relation to a favorite player was examined by asking children whether or not they would continue to like a “favorite” player if that player was on a different team or if the player didn’t perform
well. In the concrete operational group, it was expected that having gone through the process of identifying a favorite player, some resistance to change would be demonstrated, consistent with the demonstration of volition. Sixty-four percent of the children characterized as concrete operational, who identified a favorite player did demonstrate resistance to change. As shown in Dialogue Box 4.39, children indicated that they would continue to like a particular player even if the player performed poorly or was on another team.

| JJ:       | Do you think if Michael Jordan played for another team, he’d still be your favorite player? |
| MN:       | Yeah                                                                                     |
| JJ:       | If Dominique Dawes didn’t win anything, would she still be your favorite?                 |
| WO:       | Yes                                                                                       |

Dialogue Box 4.39  Favorite Player - Resistance to Change

While children characterized as preoperational demonstrated volition, since they did not demonstrate cognitive complexity in relation to a favorite player it was expected that their preferences would be more transient. Consistent with the characteristics of preoperational thinking, only one child characterized as preoperational demonstrated resistance to change. One child explained that they would continue to like a particular player even if they were on another team; the other children who identified a favorite player were less resistant to change and seemed to focus on the attachment to a team (see Dialogue Box 4.40).
Summary of Psychological Commitment

With respect to identifying a favorite object, the largest number of children from both groups identified a favorite sport. In each group a smaller number of children identified a favorite team, and even fewer children in each group identified a favorite player. Consistent with level of cognitive development, a greater number of children characterized as concrete operational identified a favorite sport, a favorite team, and a favorite player. The difference between the concrete operational and the preoperational

| JJ | Do you have a favorite player on the Buckeye team? |
| BS | Um...Eddie George. |
| JJ | Do you know what position he plays? |
| BS | Um...tackle. |
| JJ | Does he still play for Ohio State? |
| BS | No |
| JJ | Who does he play for now? |
| BS | He plays for another team, but I don’t know what it is. |
| JJ | Would Ohio State still be your favorite team if Eddie George didn’t play for them? |
| BS | Yeah, because Eddie George didn’t play (1996-1997). |

Dialogue Box 4.40 Favorite Player - Not Resistant to Change

groups was especially apparent with respect to the number of children who identified a favorite player. Distinguishing between teams and players requires the ability to order objects or to classify objects in a hierarchy, which would be difficult for children at a preoperational level of cognitive development (and for children transitioning to the phase of concrete operational development).
The interview data provided support for the premise that children characterized by concrete operational thinking are capable of demonstrating psychological commitment, while children characterized as preoperational are not capable of demonstrating psychological commitment. The data further provided the means to identify points of transition, and to recognize indicators from children transitioning between phases of cognitive development. In other words, better understanding why a child may demonstrate characteristics from different phases of development.

A child transitioning from preoperational to concrete operational thinking is likely to demonstrate characteristics from both phases of cognitive development, and depending upon how far along a child has progressed, may demonstrate more characteristics from either one phase or the other, or a mix of characteristics from both phases. The importance of recognizing transition between phases of development lies in recognizing that while preferences may be established, it is likely that psychological commitment (and subsequently fan loyalty) has not yet developed. To determine whether or not a child demonstrated fan loyalty, it was also important to examine the second component of fan loyalty, the behavioral dimension.

Behavioral Dimension

As explained in Chapter Three, the behavioral component of fan loyalty was assessed based on the characteristics of “sport consumers” suggested originally by McPherson (1976) and adapted by Smith et al. (1980) to describe “highly committed sports fans.” Characteristics of a highly committed sports fan included repeat attendance
at games or sporting events, viewing of televised games and/or events, talking about a
sport, team, and/or player, purchasing sport-related products, and reading about a sport,
team, and/or player. Thinking of a fan that has an established loyalty, it is expected that
these types of behaviors would be demonstrated. In the context of the development of fan
loyalty, instead of finding these behaviors fully demonstrated, however, one would expect
to see these types of behaviors beginning to be demonstrated.

From a behavioral perspective, it is reasonable to consider that in the early
development of fan loyalty, children would begin to demonstrate various characteristics of
a loyal fan and not necessarily the full array of behaviors. For example, children operating
at a preoperational level who have not yet learned to read would be unable to read about
sports. Also, children would not be expected to have the financial resources of an adult,
and would not be purchasing season tickets or paying for a variety of sport-, team-, or
player-related products. In terms of the development of fan loyalty, it is reasonable to
consider that a child would begin to demonstrate characteristics such as talking about
sports, teams, and/or players, and watching sports, teams, and/or players on television.
Further, children beginning to develop fan loyalty may ask parents to purchase items for
them, and are likely to own some sport-related products; more importantly, a child
developing fan loyalty is likely to value sport-related products, and to readily discuss
them.

To better understand when fan loyalty may develop, in addition to identifying the
formation of psychological commitment, the investment made in sports by a child in
terms of their behavior may be an important indicator that a child is moving beyond
preference for a sport, team, and/or player, and developing fan loyalty. The idea of commitment may also be thought of in terms of behaviors, in the sense that a child who begins to invest their time, their money, and their emotions through participation, talking about, reading about (when able), watching, and attending games and/or events may be characterized as developing fan loyalty. Along with psychological commitment, the increasing behavioral commitment made to a sport, team, and/or a player through the investment of time, money, and emotions, may provide indicators for identifying the origin of fan loyalty.

To determine if the children interviewed demonstrated characteristics indicative of developing fan behavior, questions were included asking children whether or not they attended games or events, whether or not they watched games on television, whether or not they read about a favorite sport, team, and/or player, whether they talked with others about a favorite sport, team, and/or player, and whether or not they own sport-related products (primarily apparel). Assessment of the behavioral component of fan loyalty focused on comparing the behavioral characteristics between groups with respect to the general categories. Considering the low percentage of children in both cognitive development groups who identified a favorite sport, team, and player (all three objects), it seemed reasonable to examine behaviors related to a sport, team, and/or a player together. 

Talking About a Sport, Team, or Player

As seen in Figure 4.6 the majority of children interviewed did not generally talk about sports; sixty percent indicated that they did not usually talk about sports while 40% indicated that they did talk about sports. Of interest with regards to those who said that
they did talk about sports, was identifying who the children talked with. Two primary
groups were identified: parents (particularly the father) and friends. Implications dealing
with who children may talk with about sports will be further examined in relation to
socializing agents which may influence the development of fan loyalty.

Beyond looking at the people that children may have talked to about sports, it is
also important to consider the context in which children may have talked with others about
a sport, team, and/or a player. The pattern of responses suggested that talking with
friends about sports was primarily associated with playing or participating in a particular
friends about sports was primarily associated with playing or participating in a particular
sport (see Dialogue Box 4.41). In other words, the children interviewed suggested that
talking about sports with friends dealt with their involvement in a game or event; across
groups sport was not identified as a general topic of conversation.

| JJ: Do you ever talk to your friends about football? |
| AT: When I want to play, yeah, I go get them. |

Dialogue Box 4.41 Talking With Friends

Considering a child's level of cognitive development, this pattern makes sense.
Children operating at a preoperational phase of development would be expected to have a
strong perceptual focus - concentrate on what is immediately in front of them. Children in
transition between phases of cognitive development, and even children operating at a
concrete operational level, are also likely to be influenced at varying degrees by a
perceptual focus, and at the same time may begin to demonstrate a more cognitive focus, including sport as a general topic of conversation. Children transitioning from a concrete to a formal operational level of development would be expected to have an even greater cognitive focus.

The pattern of responses from the children interviewed, regarding their conversations with parents, also suggested a focus on a child's involvement in sports. As Dialogue Box 4.42 shows, conversations with parents centered on how well a child and/or their team had played. The idea that emerged was that children characterized as preoperational or concrete operational (including those transitioning between phases of cognitive development) did not use a sport, team, or player as a general topic of conversation. Responses suggested that children talked with others about sports they were playing or that they enjoyed, when asked by others.
Dialogue Box 4.42  Talking With Others

As a child progresses from conversations dealing with their own participation in a particular sport, to using sport as a general topic of conversation (demonstrating their attachment to a particular sport, team, and/or player), their conversations may provide an important indicator that a child is developing fan loyalty.

Reading About a Sport, Team, or Player

Figure 4.7 shows that across groups, only 20% of the children interviewed said that they read about sports (10 out of 50), while 80% said that they do not read about sports (40 out of 50). It is important to recognize first that all of the children characterized as preoperational said they do not read about sports, mainly because at five and six years of age, the children have not learned to read. Even in the group the group characterized as concrete operational, however, only ten children indicated that they read about sports.

Consistent with the phases of cognitive development, children that are operating with a dominant perceptual focus, and even children transitioning to the point of developing a more cognitive focus, would not be expected to spend much time, if any, reading about a sport, team, or player. Even children who said that they do read about sports did not demonstrate behaviors typically associated with a loyal fan. For example,
Smith et al. (1980) suggested that a “highly committed fan” would read about a sport, team, and/or player in newspapers, magazines and other publications. The focus of the fan is on following team and/or player performance, keeping up with the wins and losses and the statistics associated with sports. This type of behavior was not demonstrated by the children interviewed.

Dialogue Box 4.43 provides an example which shows the type of reading the children interviewed generally engage in regarding sports. Children explained that they generally read books about a sport, primarily a fiction account. Only one child suggested that they look at the newspaper to see who wins. One indicator identifying the development of loyalty may be reading about a sport, team, or player, with the intent of keeping track of performance and game-related statistics. Among the children interviewed, reading about sports was not a prominent behavior.
Attending Sporting Events

Forty-two percent of the children interviewed indicated that they attended sporting events, while 58% said that they did not attend sporting events. Attendance at different events may indicate development of fan loyalty, going to watch a favorite sport, team, and/or player. Closer analysis of the responses given, however, revealed that the types of events children attended would not necessarily demonstrate fan loyalty. Children talked about attending either their own games (participating in some type of youth league), games of their friends or siblings, and professional events. Of interest for fan loyalty would be attendance at professional events, particularly attending games of favorite teams and/or players. Among the children who said that they attended games or events, only seven explained that they went to see their favorite team and/or player.

Dialogue Box 4.44 provides examples indicating that attendance at sporting events was primarily through a child’s participation in a youth league or going to see a friend’s or sibling’s games. In terms of level of cognitive development, children still influenced by a perceptual focus would be expected to think of attendance in terms of their own
Dialogue Box 4.44  Attending Sporting Events

participation. Regarding the development of fan loyalty, children’s attendance at sporting events they are involved in may provide reinforcement for the children with respect to a particular sport. Potentially, children that think more of going to see a game or event that they have no association with through personal involvement, family or friends, may be thought of beginning to develop fan loyalty.

Viewing Televised Events

Along with attending games or events, children were also asked if they watched sports on television. Across both groups, 60% said that they did watch sports while 40% said that they did not watch sports. Regarding development of loyalty, watching sports on television may provide an introduction to sports, teams, and players; television may also function to reinforce a child’s preference. To better understand the influence of television, an important consideration was identifying what type of programming children watched.

One point worth noting is that the interviews were conducted in the fall and winter following the 1996 Summer Olympics. As a result, it was expected that children who said that they did watch sports may have had in mind the Olympic games. During the
interviews, children were specifically asked if they had watched the Olympics. Children were also whether or not they watched other sports, and more specifically if they watched a favorite sport or team.

The pattern of responses suggested that while children were aware of the Olympics, they also recognized other sports programming. Considering the responses given, however, the viewing behavior of the children interviewed would not indicate fan loyalty. Watching sports for the majority of the children interviewed involved watching whatever games happened to be on, or the games that parents were watching (see Dialogue Box 4.45). Among the children interviewed who said that they did watch sports, only seven indicated that they watched a favorite sport or team. Of the children who said that they did watch their favorite sport or team on television, six were from the concrete operational group, and only one was from the preoperational group.

Consistent with level of cognitive development, children characterized as preoperational, or transitioning to a concrete operational phase, would be expected to place greater emphasis on their own participation, rather than vicarious enjoyment from watching a televised event. Vicarious enjoyment of a sport, team, or player, may indicate that a child is developing fan loyalty, an idea discussed further in chapter five. One interesting note from those that said they watched sports - the most common sport watched was basketball, and the team identified most often was the Chicago Bulls. The media, particularly television, will be further examined as an agent of influence in a later section.
JJ: Do you ever watch baseball on television?
M6: Yeah
JJ: When’s the last time you watched a baseball game?
M6: It was last year, because um...because they haven’t played this year yet.
JJ: Do you watch it very much?
M6: Yeah. Only when my dad turns it on, because sometimes we have to get cable, and we don’t have cable.

Dialogue Box 4.45 Watching Televised Sports

Ownership of Sport-Related Products

Having sport-related products, particularly some type of clothing may provide a good indicator that an individual is a loyal fan or that fan loyalty is developing. As suggested by Cialdini et al. (1976), wearing sport apparel provides an individual with the opportunity to broadcast their identification with a particular sport, team, or player. Clothes provide an expression of identity, and in the case of fan loyalty, telling others that a particular sport, team, or player is important to the individual wearing a particular item. Owning sport-related items, and perhaps more importantly being aware of certain clothing items like a team shirt or team hat, may serve as a good indicator that loyalty has or is developing. In other words, children desiring (or wanting) particular sport-related items, and children investing in products or asking parents to invest in apparel, may indicate the development of fan loyalty.

Among the children interviewed, 62% indicated that they did have some type of sport-related products or apparel. Thirty-eight percent said that they did not have any
sport-related products or apparel. To determine if ownership of particular products or apparel demonstrated one of the behavioral characteristics of fan loyalty, it was important to identify the *type* of product or apparel that children owned. Three categories emerged which represented the types of products or apparel that children owned: items associated with a favorite team or player, items associated with sports in general, and uniforms children used for participating in youth leagues.

From the children interviewed, only ten indicated that they had products or apparel for their favorite team or player. In other words, these children explained that they had some item associated with their favorite team or player (see Dialogue Box 4.46). A more common response from the children interviewed was that they had sport-related products, but not necessarily for a favorite team or player (see Dialogue Box 4.47). Ownership of products does not necessarily indicate loyalty; in addition to having a product, it is important for a child to have some level of attachment or identification with a team or player (the item must be *positively valued*).

| JJ: | Do you have any clothing items or a hat maybe, that has the Cowboys or Notre Dame on it? |
| AT: | Yeah, Notre Dame and Cowboys. |
| JJ: | What do you have? |
| AT: | Shirts, pants, everything. |

Dialogue Box 4.46  Products/Apparel - Favorite Team
JJ: Do you have any clothing at home that might have any kind of sports figures on them, or sports names, like team names?
SB: Um...Mighty Ducks
JJ: You've got a Mighty Ducks, what do you have?
SB: It's a jacket, like my brothers, so people will think we're twins.
JJ: Do you know what sport the Mighty Ducks are in?
SB: No
JJ: Do you know any of the team members of the Mighty Ducks?
SB: No

Dialogue Box 4.47       Sport-Related Products. No Identification

In addition to a general recognition of sport-related products, the second most common response given by children was that they had products or apparel for participating in a sport. Rather than having an attachment with a team or player, the children indicated through their responses that they thought of sport-related products or apparel in terms of uniforms or equipment used to play a sport (see Dialogue Box 4.48). This type of reasoning is consistent for children operating at a preoperational level, or transitioning to a concrete operational level of cognitive development. One identifying

JJ: Do you have any clothes or t-shirts at home with baseball logos or a baseball team name?
NH: Yes, the Cubs.
JJ: Would that be a t-shirt or a hat?
NH: My uniform.

Dialogue Box 4.48       Sport-Related Products: Uniform
factor for the development of fan loyalty may be when a child demonstrates an attachment to a sport, team, or player through products or apparel, rather than thinking of such items as the “equipment” to play a game.

**Participation in Sports**

One characteristic not generally considered with respect to sports fans is individual participation. One distinguishing component of sports fans is the *vicarious* relationship that is formed with a particular sport, team, and/or player. While this is reasonable for adult fans, since the majority of involvement that adults have with sports is through some form of spectator or fan association, it may not be the case for the *development* of fan loyalty. Considering level of cognitive development, it is important to remember that children characterized as concrete operational or preoperational are influenced by a perceptual focus, a child’s attention in large part centers on what they do. Consequently, in examining the *development* of fan loyalty it is important to look at the level of participation children have in sports. Participation may serve to introduce a child to sports, or perhaps to reinforce an attachment to sports (ideas which will be addressed more in chapter five).

Across both groups of children interviewed, 74% indicated that they participate at some level in sports, while 26% said that they do not participate in sports. Compared with the percentages of children who indicated that they do or do not read about sports, the level of participation is consistent with the level of cognitive development. As mentioned
previously, children characterized by preoperational or concrete operational characteristics are likely to place greater emphasis on a perceptual dimension (participating in sports) than a cognitive dimension (reading about sports).

![Pie chart showing participation in sports](image)

**Figure 4.8 Behavior - Participation**

Responses from the children suggested that participation was at one of two levels, through an organized activity (youth league or some type of lessons) or through playing with friends. As shown in Figure 4.8, 65% of the children who said they participated in sports were active in some type of youth league or structured program (like gymnastics lessons). Thirty-five percent of the children who said that they participate in sports do so primarily through playing with friends (at home or at school). As shown in Dialogue Box 4.49, this distinction is important in that children do recognize the difference between playing with friends and participating on a team.
Thinking about the development of fan loyalty, children’s participation in sports does merit consideration. Participation may provide an introduction to sports for children, and participation may also serve to reinforce or strengthen a child’s attachment to sport. Involvement in sports at different levels may also serve to transition or “scaffold” a child from the position of a participant to that of a fan. For example, a child may learn about different sports, teams, and players from talking with or listening to friends or family members, or from watching television. At the same time, playing with friends may contribute to a child’s introduction to sports and allow a child the opportunity to identify a favorite sport. Participating through some type of youth league, or taking lessons may strengthen a child’s attachment to a favorite sport (or conversely, turn a child away from a sport, depending upon the experience).

**Attitudinal & Behavioral Components - Developing Fan Loyalty**

Considering the responses given by the children interviewed, fan loyalty was not demonstrated by children characterized as preoperational. There was some demonstration of fan loyalty among the children characterized as concrete operational. Children in both
phases of cognitive development demonstrated some of the characteristics of loyal fans. The interview data suggested that as children transition from a preoperational to a concrete operational phase, as they begin to incorporate more cognitive and affective elements in their thought processes, a child may begin developing fan loyalty.

Being able to distinguish between sports suggests that a child may demonstrate volition, or identify a preference for a particular sport. Children at both phases of cognitive development were able to distinguish between sports. As a child is able to distinguish between teams within a sport, and further to distinguish between players, there should be further demonstration of volition, and some demonstration of resistance to change. Expressing a preference for a particular team or a specific player suggests that some type of evaluation and decision-making process has occurred. Children characterized as concrete operational were able to demonstrate volition and resistance to change, more so than children characterized as preoperational.

When examining volition, it is important to determine whether a child has made a personal choice based upon some criteria, or whether their preference for a sport, team, or player is based on the influence of another person. Children that like a certain sport, team, or player because someone else likes that particular sport, team, or player, have not demonstrated volition (they have not evaluated various objects and engaged in their own decision-making process, based on their own criteria). Without going through some type of evaluative decision-making process, a child is not likely to have developed schemas regarding a sport, team, or player that are resistant to change. Resistance to change may provide a good indicator of an individual’s psychological commitment.
Children who like a particular team or player because they are “good” or “popular,” are not likely to have developed schemas with reasons for liking a particular team or player. As a result, the child is not likely to be resistant to change. Understanding why children express attachment to a particular sport, team, and/or player is important for determining whether or not a child has developed fan loyalty, and also helps in a general understanding of how loyalty develops.

To develop schemas of sufficient complexity to resist change requires a minimum level of cognitive development. At the least, a child must be able to categorize items and to make evaluative decisions regarding a sport, team, and/or a player. Cognitive complexity indicates that a child is able to focus on more than their immediate surroundings, that they have begun to incorporate at some level a cognitive focus in their thought processes (multidimensional thinking vs. centration).

As a child transitions from preoperational to concrete operational development, they begin to move beyond a perceptual focus (a focus on the immediate surroundings), and include a cognitive dimension in their thinking. The cognitive dimension allows an individual to incorporate more complex thoughts. The result is that an individual is able to demonstrate cognitive complexity, volition, and resistance to change, enabling them to form a psychological commitment.

To better understand the development of fan loyalty, along with the formation of psychological commitment it is also important to understand which socializing agents
influence fan loyalty, and how they influence the development of fan loyalty. One item identified which may play an important role in the development of fan loyalty is participation.

Participation may provide the concrete examples children need to learn about different levels of a sport, to identify different positions, and to distinguish between different players. In other words, participation may serve as a mechanism for developing the hierarchy or classification systems which enable a child to think with a greater cognitive rather than perceptual focus. Along with participation, other socializing agents, such as family, friends, and mass media are thought to contribute to the development of fan loyalty and also merit consideration.

Socializing Agents

The final element examined with the interview protocol was the factors thought to influence the development of fan loyalty. Vygotsky’s sociocultural theory (Bodrova & Leong, 1996) highlights the importance of understanding the contribution of both physical interaction (an individual’s action on their surroundings) and social interaction in the process of cognitive development. Consistent with both Vygotsky’s sociocultural theory and research in sport and consumer socialization, the socializing agents thought to exert influence during the early phase of the development of fan loyalty were examined: parents, siblings, friends, and the mass media (specifically television). Through the interview process each child was asked to identify a favorite sport, team, and/or player. To better understand what elements may have influenced a child to develop a preference
for a particular sport, team, or player, questions were incorporated which asked children whether their family members and friends liked the same sport, team, and/or player, and to find out if a child watched a favorite sport, team, and/or player on television.

One question of interest was whether or not a child had the same favorite sport, team, and/or player as either a family member or friend. It was expected that individuals who had the same favorite sport, team, or player as that of the child interviewed, were likely to have had some influence on the child’s preference for a sport, team, and/or player. To better understand the influence of various socializing agents, a review of the children’s responses focused on the identification of a favorite sport, since the majority of the children interviewed identified a favorite sport. After examining whether or not a child had the same favorite sport as a family member or friend, the pattern of responses were examined to determine whether or not the level of influence exerted by different socializing agents could be identified.

Recognizing that parents likely had a high percentage of influence with children, particularly at a younger age, responses from the parental questionnaire were reviewed to find out if the children interviewed actually knew their parents favorite sport, and likewise to find out if parents knew their children’s favorite sport. A final item examined was the relative influence parents thought that they had on their child’s participation in a favorite sport.

**Identification of Favorite Sport**

Figure 4.9 indicates that across groups, the children interviewed were able to identify a favorite sport for parents, siblings, and friends. In both groups, the majority of
children identified what they thought was their father's favorite sport (75%), and 56% of the children interviewed identified what they thought was their siblings' favorite sport. Favorite sports were also identified for mothers and friends, but at a much lower percentage (30% and 28% respectively). As Figures 4.10 and 4.11 show, the identification of favorite sports for others was relatively consistent for children. Among those characterized as concrete operational, 75% identified what they thought was their fathers' favorite sport; 56% identified a favorite what was thought to be their siblings' favorite sport, 31% identified a favorite sport for their mother, and 38% identified a favorite sport for their friends. In the preoperational group, 78% identified a favorite sport for their father, 56% identified a favorite sport for their siblings, 28% identified a

Figure 4.9 Influencing Agents - Across Groups
Figure 4.10 Influencing Agents - Concrete Operational

Figure 4.11 Influencing Agents - Preoperational Group
favorite sport for their mother, and 11% identified a favorite sport for their friends. Taken together, the responses from children suggest how the different agents may influence the development of fan loyalty.

For both groups, a favorite sport for the father was most readily identified. Based on the information provided in the parental questionnaires, only 38% of the children in the concrete operational group who identified a father's favorite sport were correct; in the preoperational group only 28% of the children correctly identified their father's favorite sport. While the majority of children did not correctly identify their father's favorite sport, what the responses suggested is that sports were most readily associated with the father, which is consistent with findings from sport socialization (Lewko & Greendorfer, 1988). Responses suggested that fathers may serve an important function in the development of fan loyalty by introducing sports, or by encouraging a child's interest in sports (see Dialogue Box 4.50). Through a father's influence, a child may be introduced to sports early in the preoperational phase, and as a child transitions to concrete operational development, they may at least have identified a favorite sport (see Dialogue Box 4.32).

**Dialogue Box 4.50 Influencing Agents - Father**

| JJ: | Do you happen to have a favorite sport? |
| DW: | Uh...football. |
| JJ: | What do you like about football? |
| DW: | Well...my dad likes it, I know that...and I pretty much like it a lot. |
Across both groups the children interviewed were also able to identify a favorite sport for their sibling(s). An understanding of the influence a sibling or siblings may have on the development of loyalty may vary by the number of siblings, and whether a sibling is older or younger. From the responses given by the children interviewed, it seems that understanding the influence an older sibling may have will be important regarding the development of fan loyalty (see Dialogue Box 4.51). It is possible that siblings may influence the development of loyalty by contributing to the introduction of sports, and/or by reinforcing an interest in sports. Reinforcement may be likely from the perspective of an older siblings involvement in sports, which may influence a younger sibling to become involved in the same sport (see Dialogue Box 4.52).

**Dialogue Box 4.51  Influencing Agent - Introduction to Sport Through Sibling**

<table>
<thead>
<tr>
<th>JJ:</th>
<th>How did you get introduced to baseball, do you remember?</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM:</td>
<td>Uh, well first we were going, I was going out and my brother said here, let’s play catch. So we went home and played catch for a while, and my brother brought out all of his other baseball cards, boxes and boxes.</td>
</tr>
<tr>
<td>JJ:</td>
<td>Do you think you’d still like baseball if Ronnie (older brother) didn’t like baseball?</td>
</tr>
<tr>
<td>RM:</td>
<td>Yeah, I wouldn’t be introduced to it though.</td>
</tr>
</tbody>
</table>

As seen in Figure 4.9, across groups mothers and friends seemed to have much less of an influence than fathers and siblings. In the preoperational group only 11% of the children interviewed identified their friend’s favorite sport. The children characterized as preoperational were five or six years old, and all were in kindergarten. While the children
Dialogue Box 4.52  Influencing Agent - Sibling Introduction and Reinforcement

spend some time around friends (through playing at home and at school), the small influence from friends is consistent with findings from sport socialization, which have suggested that the family has the primary influence on a child up to age five (Lewko & Greendorfer, 1988).

Considering level of cognitive development, it is likely that the family will have primary influence on the initial development of fan loyalty, or at least the introduction to sports, through the preoperational phase of development. At the concrete operational phase, responses indicated that friends may play an increasingly greater part in the development of fan loyalty, based on the number of children who identified their friends favorite sport (38%), and also based on the point that among the children in the concrete operational group, the sport identified as a friend’s favorite was also identified as the child’s favorite sport. The responses from children in the preoperational and concrete operational phases suggested that as the affective attachment to friends increases, or as the opinions of friends become more important, the influence that friends have on the development of fan loyalty may increase (see Dialogue Box 4.53 and 4.54).
JJ: Would you like soccer if your friends didn’t?
LB: Yeah, they’re just my friends.
JJ: What was that?
LB: They’re just my friends, I don’t really need to do what they do.

Dialogue Box 4.53 Influencing Agents - Friends (Preoperational)

JJ: What do you like about basketball?
CoW: It’s fun to shoot with, I play with a lot of my good friends, and it’s very fun.

Dialogue Box 4.54 Influencing Agents - Friends (Concrete Operational)

At first appearances, the influence of mothers on the development of fan loyalty seems to be quite a bit smaller than the influence of other family members. Across both groups only 30% of the children interviewed identified their mother’s favorite sport (see Figure 4.9). In the preoperational group only two children correctly identified their mother’s favorite sport, and only four children in the concrete operational group correctly identified their mother’s favorite sport. The pattern of responses given suggested that even as a child transitions to a higher level of cognitive development, mothers were not thought to have much interest in sports. As shown in Dialogue Box 4.55, within each group there seemed to be a general impression that mothers were not interested in sports.
**Concrete Operational**

JJ: How about your mom, does she have a favorite sport?
RM: Hm...she doesn’t like sports.

**Preoperational**

JJ: How about your mom, does she have a favorite sport?
BS: She doesn’t like football because it doesn’t show the tunnels.
JJ: Does she like any others?
BS: No

Dialogue Box 4.55  Influencing Agents - Mother (Lack of Interest)

One possible explanation for children not having knowledge of their mother’s favorite sport is a continuation of gender stereotyping. Based on the responses from the children interviewed, sports still seem to be thought of as “male activity.” Additionally, the sports most commonly identified as the “favorite” by children interviewed were football, basketball, and baseball - sports which remain dominated by male athletes, particularly at the professional level. Identification of a favorite team and/or player occurred predominantly at the concrete operational phase of cognitive development. Further, the teams and/or players identified were from professional or collegiate football, professional basketball, or professional baseball. While it may not have been apparent to the children interviewed, the influence that mothers may have on the development of fan loyalty is likely to be important with regards to introduction to sports in terms of participation. This idea will be further discussed in chapter five, in terms of the relative influence mothers may have on children’s participation in youth sports.
Relative Influence

One item on the parental questionnaire asked parents to indicate how much influence they thought they had on their child participating in sports (participating in the child’s favorite sport). Analysis of parent responses showed that across groups, fathers generally thought they had more influence (M=59.05) on a child, while mothers generally indicated that they had less influence on a child (M=46.92). A comparison of responses between children and their parents showed that in the preoperational group, 50% of the parents responding to the questionnaire did not correctly identify their child’s favorite sport. In the concrete operational group, only 23% of the parents responding did not correctly identify their child’s favorite sport. 38% of the parents of children characterized as preoperational correctly identified a child’s favorite sport, while 69% of the parents of children characterized as concrete operational correctly identified a child’s favorite sport. Overall, the responses indicated that parents in general either did or did not know their child’s favorite sport. Parents of children characterized as preoperational seemed to be less aware of their children’s favorite sport than the parents of children characterized as concrete operational. Implications regarding the relative influence of parents will be further discussed in chapter five.

One short-coming with the questionnaire was that it asked parents to respond to how much influence they thought they had on their child participating in a favorite sport; comments from some parents of children characterized as preoperational indicated that children aged five to six do not necessarily participate in any sports (reflecting from the parent’s perspective that participation takes the form of organized youth sports, which
does not include recreation or playing with friends). A better question to ask parents may have been how much influence they believed they had on a child selecting a particular sport as their favorite.

**Media Influence**

Television may influence the development of fan loyalty by providing an introduction to sports, teams, and players, or by providing a child the opportunity to watch their favorite sport, team, or player, reinforcing the child’s preference. For children that do not have an opportunity to participate in a particular sport television may provide the means by which a child learns about a sport and develops an attachment to a sport, team, and/or player. Television may be especially important for children whose family or friends are not interested in sports, or for children not interested in the sports to which they have been previously introduced. There may also be a gender difference associated with the influence of television.

Among the children interviewed, none of the boys indicated that they first learned about a sport through television. Several girls, however, indicated that their favorite sport was gymnastics, and that they first found out about gymnastics by watching it on television (see Dialogue Box 4.56). As seen Dialogue Box 4.32, television may influence the development of loyalty by introducing children to different teams and different players. Potentially, television may also influence the development of fan loyalty in girls for specific sports, teams, or players that they may not generally be introduced to by other socializing agents, or that they may not have an opportunity to participate in (like gymnastics).
Consistent with the level of cognitive development, it is not surprising that the majority of children interviewed indicated that they didn’t watch sports that much on television, and, as explained earlier, if they did watch sports they generally watched whatever was on or whatever a parent was watching. Children at the preoperational level of cognitive development, and those transitioning to a concrete operational phase of development are likely to be more interested in playing a sport than watching it (greater emphasis on perceptual dimension than cognitive dimension). The pattern of responses suggested that a child’s interest in watching their favorite sport, team, and/or player on television, may be an indicator that fan loyalty is developing. In other words, a child interested in watching a favorite sport, team, and/or player on television is willing to invest their time in the favorite object. This perspective suggests that for children that have a favorite sport, team, and/or player, television may serve to strengthen the preference.

**Dialogue Box 4.56  Influencing Agents - Television (Introduction to Sport)**

| JJ: Do you remember when you first found out about gymnastics, or when you first started gymnastics? |
| JM: It was my idea first because...um, when we were watching the Olympics I thought it was really cool then, so I remember I asked my mom if I could participate in it. |

| JJ: Do you remember when you first started liking gymnastics? |
| HM: Yeah |

| JJ: When was that? |
| HM: About in kindergarten, I started watching it, and it was real neat, and I began watching it every time I could. |

| JJ: Do you still watch gymnastics every time you can? |
| HM: Yeah. |
An additional item to consider regarding the development of fan loyalty is the power of television to influence the popularity of a sport, team, or player. Part of the interview protocol included asking children if they remembered seeing commercials which had sports as their theme, or if they remembered seeing commercials with their favorite team or favorite player. Children that did not identify a favorite sport, team, or player were asked if they remembered seeing any commercials with sport figures in them. While only two children across groups remembered specific commercials, including the “script” and the product advertised, several children remembered seeing Michael Jordan in commercials, even children that did not like basketball or Michael Jordan.

As shown in Dialogue Box 4.32, a child may form a preference for a particular team or player based on media exposure (watching a team or player on television). It is important to question, however, whether loyalty is being influenced. As indicated previously, children that expressed an attachment to a team or player because they were “good” (or they win), or because they were “popular,” may have an unstable attachment. Children that are able to specify why they like a particular team or player, in more detail than because a team or player is “good,” are likely to have developed schemas of greater complexity and strength which would be resistant to change, and which would be characteristic of fan loyalty. As demonstrated in Dialogue Box 4.57, a child may not continue to “like” a team or player if that team or player began losing.

| JF: Do you think you’d like the Yankees if they lost all their games next year? |
| RM: I don’t know. |

Dialogue Box 4.57  Influencing Agent - Television (Effect of Losing Season)
With respect to the development of loyalty, it seems likely that for children characterized as preoperational, television may serve to introduce sports to a child. For children characterized as concrete operational, television may contribute to the development of fan loyalty by introducing a child to different teams and players (adding complexity), and by providing opportunities to reinforce an established preference (giving children a chance to watch their favorite, sport, team, and/or player). Television may be the “scaffold” by which a child learns to appreciate sports from a spectators viewpoint, rather than enjoying sports only as a participant.

Summary

Children characterized by preoperational thought did not exhibit psychological commitment to a sport, team, and/or player, and behavioral elements thought to characterize fan loyalty. Children characterized by concrete operational thought were able to demonstrate both psychological commitment and behavioral elements thought to characterize fan loyalty. It is likely a child may begin to demonstrate preferences for a particular sport, team, and/or player in a preoperational phase of development, but they would not be characterized as loyal fans.

Parents, particularly the father, are thought to have the primary influence on a child in terms of introduction to sports and different teams, primarily at the preoperational phase of development. Older siblings may reinforce particular sports through their participation, and encouraging their younger sibling to participate in a particular sport.
Individual participation may be important for distinguishing between sports and helping a child characterized by preoperational thought to develop a preference for a particular sport.

Television may reinforce particular sports, and for sports that family members are not interested in, and for "nontraditional" sports, television may serve as the source of introduction. As a child progresses in their cognitive development, and in the development of fan loyalty, television may reinforce an attachment to particular teams and/or players, and may provide the "scaffold" from which a child learns to enjoy watching sports and not just participating in sports.

Friends may provide the opportunities for children to play different sports, helping them form a preference for a particular sport, but based on the responses given, friends were not a primary influence on the development of fan loyalty. Only a small percentage of children characterized as preoperational were able to identify a favorite sport for their friends, and while a higher percentage of children characterized as concrete operational did identify a favorite sport for their friends, the influence from friends did not seem that important, at least not at the concrete operational phase of development.

The responses from children interviewed provided some indication of the process through which fan loyalty may develop in terms of a child's level of cognitive development. Presented in chapter five is a table which summarizes a possible progression in the development of fan loyalty, along with the socializing agents thought to exert primary influence at different phases of development.
CHAPTER 5

DISCUSSION AND IMPLICATIONS

As a topic of study, loyalty has been examined by researchers across various disciplines, including consumer behavior, sociology, and marketing (Assael, 1987). Early research on loyalty emphasized the behavioral component or repeat purchasing of a specific product or service over time (Jacoby & Chestnut, 1978). As our understanding of the loyalty construct has progressed, it has been recognized that loyalty is a multi-dimensional construct, composed of both a behavioral component and an attitudinal component (Day, 1969; Jacoby, 1971). An attitudinal component highlights the importance of cognitive, affective, and evaluative elements - the importance of distinguishing between products or services, forming some level of emotional attachment, and selecting a specific product or service based on cognitive and affective reasons. A behavioral component - the repeat purchasing of a product or service - provides a demonstration of an individual’s commitment to a specific object. With a multidimensional perspective it is possible to examine when loyalty may first develop and to identify what factors influence the development of loyalty.

Examining both the attitudinal and the behavioral components of fan loyalty provides the opportunity for understanding when a child is first capable of demonstrating
loyalty to a particular sport, team, or player, based on level of cognitive development (the ability to distinguish between sports, between levels within a sport, and to distinguish between teams and players), affective development (forming emotive attachments to a particular sport, team, or player), and evaluative elements (attaching to a particular sport, team, and/or player because of cognitive and affective reasons). Even though a multidimensional view of loyalty has been recognized, previous research has not adequately examined loyalty utilizing both components (Pritchard, 1991). The majority of early loyalty research focused on understanding the behavioral component (Jacoby & Chestnut, 1978); more recently, research has begun to examine the attitudinal component of loyalty (Pritchard, 1991). As discussed in Chapter Two, even though researchers have recognized both dimensions of loyalty, studies attempting to examine loyalty still emphasize a unidimensional perspective. One reason for this has been an inadequate understanding and measurement of the attitudinal component of loyalty. With the development of the Psychological Commitment Instrument (Pritchard, 1991), combined with an examination of a behavioral component, it is possible to examine the importance of loyal fans.

Research in a sports context has yet to examine fan loyalty from a multidimensional perspective at any level. Empirical studies of sports fans have looked primarily at the level of identification individuals may have with a particular team, and at the socio-demographic characteristics of sports fans. Two studies have identified characteristics of sport consumers (McPherson, 1976) and sports fans (Smith et al., 1981), which provide a basis for better understanding fan loyalty. Wakefield and Sloan (1995)
utilized a unidimensional measure of spectator behavior to conclude that loyalty is an important influence on attendance. Wann, Tucker, and Schrader (1996) conducted an exploratory study to examine factors thought to influence the origin, continuation, and cessation of identification with sports teams. Wann et al. (1996) concluded that several factors play a role in the origin, continuation, and cessation of identification with sports teams. The study relied on retroactive recall and provided very little in terms of meaningful results. As discussed in Chapter Two, research in a sport context has failed to provide even a basic understanding of fan loyalty with respect to when an individual may first demonstrate loyalty to a sport, team, and/or player, and what factors may influence the development of fan loyalty. A better understanding of fan loyalty should start by considering when an individual is first capable of demonstrating fan loyalty, based on level of cognitive development, and by examining what factors may influence the development of fan loyalty. Understanding the origin of fan loyalty, particularly what may influence the development of fan loyalty, provides the foundation for measuring and testing the strength of loyalty over time, and potentially for influencing the development of loyalty.

The remainder of this chapter provides a summary of key findings, a discussion of transitioning between levels of cognitive development, a description of the development of fan loyalty, implications of the study, and directions for future research.
SUMMARY OF RESULTS

Five key findings emerged from the analysis of the interviews. First, the conservation tasks were found to be an appropriate means of characterizing level of cognitive development. The conservation tasks were also shown to be a viable means for better understanding the transitioning between levels of cognitive development.

Previous research has demonstrated that conservation tasks may be used to characterize children as preoperational or concrete operational (Bahn, 1986; Wood, 1988; Siegler, 1991). One criticism of earlier research has been that children do not necessarily “fit” cleanly into a stage or phase of cognitive development (Sutherland, 1992). One view has regarded Piaget’s stages as static, criticizing the theory for suggesting that children progress from one point to another, with a clear demarcation between levels of cognitive development. Rather than recognizing the dynamic nature of the developmental process, some critics have proposed to reject Piaget’s ideas (Cohen, 1983). One response to criticisms has been the conclusion that children are likely to achieve concrete operational thought at an early age than Piaget first suggested (Sutherland, 1992).

Bahn (1986) explained that children below age seven demonstrated characteristics of concrete operational thinking, consistent with the view that children may achieve concrete operations at an earlier age than first believed. One concern with this approach is a failure to appreciate the transitioning between phases of cognitive development. A more fruitful approach would be to recognize that the developmental process is not static and work to better understand the transition that takes place between phases of cognitive development.
Analysis of the interview responses resulted in more than just “labeling” children as preoperational or concrete operational. Responses to the conservation tasks and the reasoning given by the children interviewed allowed for clarification of the cognitive development process. For each conservation task, characteristics for different points of transition between preoperational and concrete operational thinking were identified. Age classification provides only a cursory indicator of a child’s level of cognitive development. By taking into account both a child’s response to a conservation task and the child’s reasoning for giving a particular response, it may be possible to “see” more clearly the dynamic nature of cognitive development, including the transitioning that may take place as a child progresses in their cognitive development.

A second key finding from the analysis was that children characterized by preoperational thought did not have the cognitive capacity to demonstrate fan loyalty. The first research objective of this study was to identify, based on an individual’s level of cognitive development, when loyalty to a sport, team, and/or player may first develop. Support for the first objective emerged from the analysis of the interviews. Children at a preoperational level of cognitive development may have a specific preference for a sport or team, but the children interviewed did not demonstrate all three criteria characterizing psychological commitment - cognitive complexity, volition, and resistance to change. Finding that preoperational children did not demonstrate fan loyalty verifies the idea proposed in research objective 1a, that children at a preoperational level of cognitive
development would not be expected to exhibit loyalty to a sport, team, or player. Support was also found for the research objective 1 b, that children characterized as concrete operational would demonstrate loyalty to a sport, team, and/or a player.

A third key finding was that a child is capable of demonstrating fan loyalty, or what Backman and Crompton (1991) refer to as “high” loyalty, when they have achieved a concrete operational level of cognitive development. Analysis of the interview responses from children who had achieved concrete operational thought, those in the 8-9 year-old group, were capable of demonstrating psychological commitment and behavioral components indicative of fan loyalty.

For children at a preoperational level of cognitive development, a fourth key finding was that involvement or participation in sports, either playing with friends or involvement through organized youth programs, provided an opportunity for children to form preferences toward a sport, team, or player. In other words, participation was found to be an important factor in the development of fan loyalty by providing children an opportunity to form preferences (to demonstrate volition) and to distinguish between different levels of a sport, between different teams, and between different players, based on their “concrete” experiences (internalizing external actions). Both Piaget and Vygotsky emphasize the importance of an individual’s action in cognitive development, internalizing external actions (Sutherland, 1992; Bodrova & Leong, 1996). The findings which emerged from the interviews suggested that becoming a loyal fan may also be thought of as a developmental process. Vygotsky also emphasized the importance of the social context with regards to influencing cognitive development (Bodrova & Leong, 1996).
1996). In this study the last key finding to emerge from the analysis was the role of socializing agents and their influence on the development of fan loyalty.

The second research objective proposed that for children at a preoperational level of cognitive development, family members would exert a primary influence as a child began developing fan loyalty. Findings from the analysis indicated that family members, particularly the father, were found to be important in terms of introducing children to sports. Older siblings seem to be important for reinforcing an interest in a particular sport and for encouraging participation in a particular sport. For children at a preoperational phase of development the influence of participation was not originally identified, but results from the analysis indicated that participation may be a key component in the development of fan loyalty.

A child’s participation or involvement in sports influences preference formation and also seems to help children distinguish between teams and between players (contributes to developing greater cognitive complexity). Organized youth sports, through private lessons, community, or school programs may provide the opportunity for participation and may also serve as the “scaffold” for developing fan loyalty (understanding the structure and organization of sports). Findings from the interviews also provided some support for research objective 2 b, which proposed that children characterized by concrete operational thought would be influenced by family members, peers, and media sources.

Television was important to children as a reinforcing agent and also for introducing “nontraditional” sports (eg. gymnastics, horse back riding) among children.
characterized as preoperational. Children characterized as concrete operational indicated that they did watch some television in order to see a favorite team or player, providing some support for the second research objective. Television was found to contribute to the development of fan loyalty primarily through reinforcing or strengthening an attachment to a sport, team, or player. The influence of family members and friends on children characterized by concrete operational thought was less than expected.

While parents may provide reinforcement for a child’s interest in a sport, team, or player, a child’s participation and their internalization of external actions (cognitive development) seemed to have greater influence on the development of fan loyalty. Compared with the preoperational group, a higher percentage of children in the concrete operational group were able to identify their friends’ favorite sport, suggesting that friends may have increasing influence as a child progresses in their development of fan loyalty.

Lewko and Greendorfer (1988) concluded that family and peers had the highest level of influence on children regarding their socialization into sport. Lewko and Greendorfer (1988) also concluded that the influence of peers would increase as the influence of parents decreased. Their study, however, focused on adolescents; the current project did not find a high level of influence from peers, and parental influence was higher across both groups than peer influence. Considering the young age of the subjects interviewed, it is possible that as children transition from concrete to formal operations, as they move into adolescence, the influence from friends may become more prominent.

While no progression in the development of fan loyalty was proposed, analysis of the interview responses suggested that children may form an attachment to a sport
initially, followed by attachment to a team, then attachment to a player. Taken together the key findings provide the basis for understanding when a child may first demonstrate fan loyalty and what factors influence the development of fan loyalty. Following is a discussion of the findings regarding transitioning between levels of cognitive development, and a presentation of a potential progression in the development of fan loyalty.

**Level of Cognitive Development**

An important element to consider in the development of fan loyalty which has received no attention in a sport context, is level of cognitive development. Level of cognitive development is important with respect to distinguishing between sports, between levels of a sport, and between teams and players. Further, the ability to categorize and to order information in a hierarchy contributes to one’s ability to engage in an evaluative decision-making process (including affective attachment). Through the current research, a child’s level of cognitive development was first examined in order to better understand the development of fan loyalty.

Three conservation tasks (number, mass, volume) were used to distinguish between children characterized by preoperational and concrete operational thought. Previous research examining cognitive development primarily identified children as either preoperational or concrete operational (Piaget & Inhelder, 1969; Bahn, 1986; Siegal, et al., 1988). It is important to recognize that as children internalize their experiences and actions, as they begin to develop cognitively and as they are influenced by various socializing agents, specific “developmental level” labels may not “fit” children. Cognitive development is a dynamic process and research should recognize this point and attempt to
understand the process that takes place through cognitive development. Beyond categorizing children as preoperational or concrete operational (instead of just grouping children), it is possible to “see” the transition children may experience as they move between phases of cognitive development. The responses given by the children interviewed reflected different points along the progression from preoperational to concrete operational thinking.

In the conservation of number task, the reasoning for responses given by the children interviewed demonstrated a possible transition that may take place as a child develops an understanding of the conservation of number concept. Wadsworth (1984) discussed usage of the conservation of number task for identifying level of cognitive development, but only in terms of “labeling” children. No explanation of the transition process has yet been offered. A child may progress from thinking two rows of coins are different due to a perceptual focus (the length of the rows), to recognizing that the number of coins are equal, without being sure why there are the same number of coins in each row. At some level, a child “recognizes” the original positioning of the coins but, at the same time, there is still a strong perceptual focus, which is reflected through a child’s reasoning. Inclusion of a cognitive focus may begin as a child doesn’t just look at the rows, but begins to count the number of objects in each row. Even at this level of thinking, however, responses suggested that a child still did not recognize the positioning of the coins - they did not recognize that originally the two rows of coins were identical.

When a child is counting the number of coins in each row there is still a perceptual focus, but a child may recognize that something has happened. Instead of “thinking”
about the previous position of the coins, however, a child counts the coins, still focusing on the objects in front of them (the current position of the coins). Full understanding of the conservation of number task is demonstrated with the recognition that spacing the coins apart does not change the number of coins in each row. An indicator of transition to a higher level of cognitive development would be the realization that the coins were transformed, not thinking just about the static state (the last position the coins were seen in), but considering the previous positioning along with the current positioning of the coins. Figure 5.1 demonstrates a possible sequence of transition a child may progress through as they develop an understanding of the conservation of number concept.

<table>
<thead>
<tr>
<th>One Row Longer</th>
<th>Look the Same</th>
<th>Same Number (Count)</th>
<th>Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperational</td>
<td></td>
<td>Concrete Operational</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.1 Development in the Understanding of Conservation of Number

The idea of *transitioning* between phases of cognitive development was also “seen” through the responses given by children for the conservation of mass task. Based on the responses given, it is likely that an understanding of the conservation of mass concept is marked first by focusing on the shape of an object (perceptual focus). As a child transitions from a preoperational to a concrete operational phase of cognitive development, they may begin to recognize that a change may or may not have occurred, and they may begin to think about the transformation (change in an object’s shape). A
child in transition may recognize that the different shapes have about the same amount of play-doh, but they may not understand why. A child transitioning between phases of cognitive development may not contrast the previous and current shapes; they may still have primarily a perceptual focus instead of including a cognitive dimension in their thinking. As a child continues to develop cognitively, they begin to recognize that changing the shape of an object does not necessarily change the amount of mass in an object. Figure 5.2 demonstrates a possible sequence children may experience as they transition from preoperational to concrete operational thought.

<table>
<thead>
<tr>
<th>Objects Different (Wider / Bigger)</th>
<th>Look the Same</th>
<th>Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperational</td>
<td></td>
<td>Concrete Operational</td>
</tr>
</tbody>
</table>

Figure 5.2 Development in the Understanding of Conservation of Mass

The transition from preoperational to concrete operational thought was also demonstrated in the conservation of volume task. Wood (1988) used Piaget’s original conservation of volume task to identify level of cognitive development in children. Children were only grouped according to responses, however, and no consideration was given with respect to the transition between phases of cognitive development. The responses from children in the current study reflected different points along the progression from preoperational to concrete operational thinking.
Reasoning given by the children interviewed suggested that there were different amounts of water in each container or that the containers had the same amount of water. Children responding that the containers had the same amount of water based their response on one of three ideas. One group suggested that the containers had about the same amount of water because both containers looked full. The children looked at the water level in each container, but made no comparison of the container sizes - if both containers were full, the children reasoned that they must have the same amount of water. This type of reasoning suggested that a child’s reasoning was influenced by a perceptual focus.

A second group who responded that the two containers had the same amount of water recognized that the two shorter containers were identical, and indicated that pouring the water into another container would not change the volume or amount of water in a container. This group represents a progression in cognitive development, in that the children included the third container in their reasoning, they included a cognitive element in their thinking by remembering that the two short containers previously had the same amount of water. In other words, children in the second group were capable of moving past a perceptual focus, beyond only looking at just the containers or just the water level in the containers, to recognize that the third container was filled from a container identical to the shorter container. This group did not, however, demonstrate full understanding of
the conservation of number concept. The responses given focused on the two original containers and did not recognize that a tall and thin container would hold the same amount as a short and wide container.

Responses from a third group demonstrated that these children had progressed from preoperational to concrete operational thought through a complete understanding of conservation of volume. Children in the third group recognized that pouring the water from one container to another did not change the amount of volume of the water in a container, and further they explained that a tall and thin container would hold the same amount or volume of water as a short and wider container. The emphasis for this group was not on the water being poured from an identical container, these children focused on understanding that even though the containers were different shapes, they would still have the same volume or amount of water. Figure 5.3 shows a possible progression in the understanding of the conservation of volume concept.

<table>
<thead>
<tr>
<th>Different Amounts</th>
<th>Same Water Level</th>
<th>Same Container Size</th>
<th>Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperational</td>
<td>Concrete Operational</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.3 Development in the Understanding of Conservation of Volume
One reason it is important to understand the various responses is to better understand the developmental process. While a child may provide a correct response to a conservation task, they may not understand a conservation concept. The reasoning a child uses to answer a question or to complete a task, together with a child’s response, provide a better foundation for assessing level of cognitive development. Understanding the reasons children give for their responses helps in better identifying the transitional process children may go through as they progress in their cognitive development.

An understanding of the transitional process may help explain why children in the same age group demonstrate different characteristics of cognitive development - children may be at different points of transition. In terms of understanding the development of fan loyalty, recognizing the transitional process that takes place through cognitive development provides the basis for identifying different elements which characterize the development of fan loyalty, and contributes to a better understanding of how various socializing agents may influence the development of fan loyalty (considering a child’s level of cognitive development).

Progression in the Development of Fan Loyalty

The pattern of responses given by the children interviewed provided the basis for identifying a potential progression in the development of fan loyalty and an initial understanding of the factors which may influence the development of fan loyalty. Bahn (1986) found that children characterized as preoperational were able to identify preferences for particular cereals and beverages. When comparing preoperational and concrete operational groups Bahn (1986) reported that preoperational children used fewer
attributes as a basis for their preference, while concrete operational children based their preferences on a greater number of attributes and were able to distinguish between a larger number of variables. Preference formation was found in the current study for particular sports.

The data from the interviews suggested that children have the capacity to form preferences for a specific sport as early as the preoperational phase of cognitive development. The type of reasoning given by children for liking a particular sport provided greater distinction between level of cognitive development. Children characterized as preoperational generally gave a single reason for liking a team, which was not a complex reason. Children characterized by concrete operational thought offered multiple reasons which included some level of complexity. Responses from the children interviewed also indicated that through their behaviors children may begin to demonstrate characteristics of fan loyalty. As a child transitions toward concrete operational thought they are likely to begin demonstrating behaviors of a sports fan, and as they achieve concrete operational thought a child may first be capable of demonstrating fan loyalty.

The current study also identified the influence of different socializing agents in the development of fan loyalty. Different socialization agents were found to exert more or less influence at different phases of an individual’s life in research on socialization into sports (McPherson, 1968; Snyder & Spreitzer, 1989). Different socializing agents were also found to exert different levels of influence in the development of fan loyalty, with various agents having differing levels of influence throughout the developmental process. The information on the children’s behavioral and attitudinal components provided an
initial understanding of how fan loyalty may develop. Figure 5.4 illustrates the potential progression in the development of fan loyalty, including the socializing agents thought to exert more or less influence at various phases of development.

1. **Introduction - Preoperational**

Responses from the children interviewed indicated that children characterized by preoperational thought may not demonstrate fan loyalty, but it is likely that the progression of fan loyalty has its origin at the preoperational level of cognitive development. The process through which a child becomes a loyal fan may begin in the preoperational phase of cognitive development. The initial phase in the development of fan loyalty may be *introduction* to sports (see Figure 5.4). Figure 4.3 indicates that children across levels of cognitive development were able to identify a favorite sport, team, or player. Regarding the *development* of fan loyalty, it is important to recognize that even children characterized as preoperational were able to identify a favorite sport.

Bahn (1986) reported that children characterized by preoperational thought identified a particular preference. Among those characterized as preoperational, the majority of children interviewed (83%) were able to identify a favorite sport (see Figure 4.3), indicating that as early as the preoperational phase of cognitive development children are introduced to various sports and begin differentiating between sports. While children characterized as preoperational were able to identify a favorite sport, responses given during the interviews suggested that the children would not be considered loyal fans since they did not meet the criteria of a loyal fan based on attitudinal and behavioral components.
The reasoning given by children across groups for liking a particular sport was similar to the results found by Roedder-John and Whitney (1986) and Bahn (1986), in terms of multiplicity and specificity of explanations. In both studies children characterized as preoperational provided fewer and less complex responses than children characterized concrete operational. Reasoning given by children in the preoperational group in this study (primarily 5 and 6 year-olds) suggested that they had not developed cognitive complexity regarding a favorite sport. Children in the preoperational group who identified a favorite sport only gave a single reason for liking a sport, and their reasoning was based on participation - playing a sport - which indicated a lack of cognitive complexity.

The children interviewed that were characterized as preoperational were able to identify a favorite sport, which suggested that they had developed volition (or a preference) for a particular sport, but not necessarily fan loyalty. Preference for a particular sport is similar to the preference formation identified by Bahn (1986). Children characterized as preoperational and concrete operational were able to identify a favorite cereal and a favorite beverage (Bahn, 1986), but children in the preoperational group did not demonstrate cognitive complexity. Being able to identify a favorite sport indicated that children characterized as preoperational had been introduced to sports. The lack of cognitive complexity and resistance to change, however, indicated that they had not achieved the cognitive capacity to demonstrate fan loyalty.

Figure 5.4 suggests that among the children interviewed the initial influencing agents may have been a child’s family, and possibly mass media, specifically television. Research in sport socialization has indicated that family members may influence a child’s
initial interest in sport (McPherson, 1968). The primary influence on children is thought to come from fathers, particularly early in a child’s life (McPherson, 1968; Lewko & Greendorfer, 1988). Similar patterns of influence were found in the development of fan loyalty, along with additional understanding of the type of influence different socialization agents may have on a child through introduction to sports.

Responses from the children interviewed with respect to the behavioral component of fan loyalty provided insight into the type of influence socialization agents may have on the introduction to sport. Previous research has suggested that a father’s interest in a particular sport provides early socialization into sport for children (Lewko & Greendorfer, 1988). Seventy-eight percent of the children characterized as preoperational were able to identify what they thought was their father’s favorite sport, compared to 56% for siblings and 28% for mothers (see Figure 4.11). Across groups the majority of children interviewed (75%) were able to identify what they thought was their father’s favorite sport (see Figure 4.9). The responses suggested that children associate sports primarily with their father, indicating that fathers may serve an important function in the development of fan loyalty by introducing a child to sports, or by encouraging a child’s interest in sports (see Dialogue Box 4.50).

One point that was not clear was the means by which fathers may introduce sports to children. The majority of children (60%) across both groups indicated that they did not talk about sports in general (including a favorite sport, team, and/or player). This suggested that among the children interviewed, particularly those in the preoperational phase of cognitive development, talking about sports was not a primary influence on a
<table>
<thead>
<tr>
<th>Preoperational Introduction</th>
<th>Preference Formation</th>
<th>Preference Strengthened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognize Different Sports</td>
<td>Identify Favorite</td>
<td>Favorite</td>
</tr>
<tr>
<td>Recognize Different Teams</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recognize Different Players</td>
</tr>
</tbody>
</table>

Socialization Agent
- Father
- Mother
- Older Sibling
- Friends
- Television Participation
  - Organized Programs

Components of Loyalty
- Psychological Commitment
  - Cognitive Complexity
    - Single Reason
  - Volition
  - Resistance to Change

Behavioral Dimension
- Talking About
- Reading About
- Attending
- Viewing
  - What parents watch
  - What others watch
- Sport-Related Products
  - Own / Sibling / Friends (games self / others play in)
  - What others watch / What's on
  - Equipment / Uniform

Figure 5.4 Progression in the Development of Fan Loyalty (continued)
Figure 5.4 continued

Object of Attachment
Sport
Team
Player

Socialization Agent
Father
Mother
Older Sibling
Friends
Television
Participation
Organized Programs

→ Emerging Commitment
Favorite
Favorite
Favorite

Concrete Operational
Identification with Sport, Team, Player
Favorite
Favorite
Favorite

Associate with Sport
Recognize Favorite
Strengthen/Media Effect
Structure & Organization of Sport

Play on team (concrete) → identify with team
Play position (concrete) → identify with player

Components of Loyalty
Psychological Commitment
Cognitive Complexity
Multiple Reasons
Volition
Resistance to Change

Behavioral Component
Talking About
Reading About
Attending
Viewing
Sport-Related Products

Team/Player: "Good" - Participation
Favorite Sport/Team/Player
Not like team; it lost all of their games
Participation
Participation (not general topic)

Participation / Appreciate skill, ability to play
Favorite Sport/Team/Player
Like team / player various situations

Fiction / Sports Records (not statistics or analyses)
Collegiate / Professional
Favorite Team / Player Products

Own/Sibling/Friends (games self / others play in)
What others watch / What on / Favorite
Equipment / Uniform → General Products
child’s introduction to sports. A child may be introduced to sports by playing a particular sport with their father, but responses from the children in both groups indicated that children did not associate playing sports as something they did with their fathers. Another avenue by which fathers may introduce children to sports is through television.

Research in a sport socialization has suggested that a child’s initial interest in sport may come from the influence of parents or peers (Kenyon & Grogg, 1969; Lewko & Greendorfer, 1988). The influence of the media, specifically television, on the introduction to sports has not been adequately examined through sport socialization research. Some research in consumer socialization has proposed that media sources (like television), may function as dispensers of information (Bandura, 1971). Results from the interviews suggested that one means by which a father may introduce sports to a child is through television. Responses from the children indicated that they did not watch sports very much, and if they did watch sports on television their interest was more general (their interest was not necessarily in watching a favorite team or a favorite player - see Dialogue Box 4.45). Watching sports for most children, particularly children characterized by preoperational thought, meant watching whatever might be on television, or watching what parents were interested in watching. Recognizing sports that parents watch, particularly the father, may introduce children to different sports. One element which previous research has not considered is the influence television may have on the introduction of “nontraditional” sports.

Results from the current study suggested that television may function in the introduction to sport beyond the influence from a child’s father. Television may provide
an introduction to “nontraditional” sports, or sports that other family members are not interested in watching (gymnastics, horse back riding, roller hockey). Dialogue Box 4.56 demonstrates that some children were introduced to a sport (gymnastics) by television. Responses from children interviewed also suggested that television as an agent of introduction may be most important for young girls, in terms of introduction to “nontraditional” sports or sports that have little or no interest for other family members.

Along with contributing to an introduction to sports, television may be important for providing reinforcement regarding an initial attraction to a particular sport, providing the means by which a child may watch a particular sport. One other influence on a child’s introduction to sports which previous research has not clearly examined is the influence exerted by an older sibling. Figure 5.4 suggests that an older sibling may reinforce particular sports to which a child is introduced.

Older siblings may contribute to the introduction of sports as a child characterized as preoperational begins to play different games (or sports). In the preoperational phase a child would have a strong perceptual focus (interest in what they do), which may be influenced by an older sibling that participates in a particular sport. As a child characterized by preoperational thought is introduced to various sports by his/her father, an older sibling’s participation in a particular sport may reinforce the child’s initial attachment to a sport. A younger child (at the preoperational phase) may play a particular sport as a result of an older sibling playing the sport (see Dialogue Boxes 4.51 and 4.52).

After introduction to sports, an interest in, or a preference for a particular sport may be reinforced as a child begins to play sports, or begins to play games. In terms of a
progression in the development of fan loyalty, a child beginning to play particular games may be in the early phases of transitioning from preoperational to concrete operational thought, which would be reflected in their attachment to a particular sport. As a child is developing fan loyalty, as they begin to play different games, additional influencing agents may become important.

As a child progresses from introduction to sports to forming preferences for a particular sport, friends may serve to facilitate preference formation. As will be discussed, friends may not directly influence which sport a child chooses as their favorite, but friends may serve to reinforce a child’s preference by playing a particular sport with a child.

Additional behavioral components did not seem to have much influence with respect to the introduction of sports. None of the children in the preoperational group said that they read about a favorite sport, team, or player, and their perspective of attendance focused on playing games with their friends. Figure 5.4 suggests that introduction to sports may occur primarily at a preoperational level of cognitive development as a child is influenced primarily by their father, to a lesser extent by an older sibling (if they have one), and by television through introduction to “nontraditional” sports or through reinforcement. A child who has been introduced to sports and begins to demonstrate a preference for a particular sport may be thought of as having entered the next phase in the development of fan loyalty - preference formation.

2. Preference Formation - Transitioning

Demonstrating a preference or volition for a particular sport indicates that a child has progressed from an introduction to sports to the next phase of fan loyalty.
development, preference formation. Figure 5.4 suggests that development of a preference for a particular sport may be influenced primarily by a child’s family, particularly the father, by playing with friends, and to a lesser extent by television. Family members, particularly a father, are likely to introduce a sport they are interested in to a child. It is reasonable to consider that a child will be introduced to other sports also, or to multiple sports. The introduction of different sports may be important in terms of cognitive development by providing an opportunity to distinguish between sports (greater cognitive complexity).

At a preoperational level of cognitive development a child is likely to be introduced to different sports by a father. In the early development of fan loyalty this means that a child may begin distinguishing between sports, resulting in the development of more “complex” cognitive structures. Television may contribute to cognitive development by providing additional opportunities to distinguish between sports. A child may also learn about “nontraditional” sports (gymnastics, horse back riding, roller hockey) from television, increasing the number of sports (greater complexity) to which a child is introduced.

Sport socialization research has suggested that parents may influence a child’s initial interest in sports (Malumphy, 1970; Snyder & Spreitzer, 1989). Research has not, however, examined the specific objects toward which children may for an attachment. Fathers that have a favorite sport are likely to introduce children to that sport. If a father’s favorite sport is a team event, children are likely to be introduced not only to different sports, but also to different teams. Distinguishing between different sports would
contribute to one level of cognitive complexity, and further differentiating between
different teams within a sport would contribute to a second level of cognitive complexity.

As a child forms a preference for a particular sport, they may begin to recognize
different teams within a sport. As a child begins to distinguish between different sports
they may progress in their cognitive development (developing more complex cognitive
structures) and in their development of fan loyalty. A child may first recognize different
sports, one level of cognitive complexity. By identifying a favorite sport a child may
progress to the next phase in development of fan loyalty, a second level of cognitive
complexity. Cognitive development may progress further as a child begins to differentiate
between teams within a particular sport, adding a third level of cognitive complexity.
Differentiating between teams may also assist a child in transitioning to the next phase of
fan loyalty development - strengthening a preference.

Research in sport socialization has suggested that parents may influence a child’s
initial interest in sports (Malumphy, 1970; Lewko & Greendorfer, 1977). For the
development of fan loyalty this may suggest that as a child begins to distinguish between
sports, their initial preference for a particular sport may be based on the interests of family
members, particularly the father. As seen in Dialogue Box 4.50 a child may first form a
preference for a particular sport because their father likes a particular sport. While the
preference for a particular sport may not be resistant to change, an important point to
recognize is that in the preoperational phase of cognitive development a child may
demonstrate volition. What previous research in sport and consumer socialization has not
addressed is the importance of cognitive development in the formation of preferences, particularly the importance of *involvement* in sports for children characterized as preoperational.

Research in sport and consumer socialization has not yet considered the importance of Vygotsky's sociocultural theory. Vygotsky's perspective highlights the importance of understanding the influence of the social context (a child's social interaction), as well as the importance of understanding a child's physical interaction (internalizing external actions) (Bodrova & Leong, 1996). A more complete understanding of the development of fan loyalty may emerge from considering a child's social and physical interactions.

A child at the preoperational phase of cognitive development may be influenced primarily by a perceptual focus; their *participation* in sports or playing games would likely contribute to forming a preference for a particular sport. Analysis of the interview responses indicated that 74% of the children from both groups participated at some level in sports. Figure 4.8 shows that across both groups of children interviewed who said that they participated in sports, 65% of the children participated in some type of organized youth sports and 35% said that they participated in sports by playing games with others. Children characterized as preoperational explained that their involvement in sports was primarily through recreational play. Playing different sports at a preoperational phase may be important in that *participation*, which is critical for a child influenced by a perceptual focus, provides the opportunity to form initial preferences for a particular sport. In other words, a child may form a preference for a particular sport based on what they like to *do*. 
While a child in a preoperational phase of development may play different sports with friends, it is important to recognize that the primary influence on a child comes from their personal involvement, as opposed to the influence of a friend. In terms of cognitive development, a child in the preoperational phase develops as they act on the world around them and internalize those actions. Playing with friends provides the opportunity to form a preference for a particular sport. Greater emphasis at this phase of development on individual play rather than the influence of friends is seen in Figure 4.12. Among the children interviewed who were characterized as preoperational, only 11% were able to identify their friend’s favorite sport. Dialogue Box 4.53 indicates that while children at a preoperational phase of development play with friends, providing an opportunity to form preferences, the preference is not necessarily based on an affective association or identification with the friend.

As preferences for sports are formed the behavioral components thought to indicate fan loyalty are still not demonstrated. Talking about sports and reading about sports still does not seem to be very important in terms of influencing a child, nor does ownership of sport-related products. Consistent with level of cognitive development, a child may place greatest emphasis on what they do, rather than basing their preference for a sport on additional affective elements. Through continued participation in sports, particularly as a child moves from playing with friends to involvement in youth sports, a child may continue to progress in the development of fan loyalty by introducing more complex cognitive elements into their thinking.
3. Preference Strengthened - Complexity

Sport socialization research has discussed the influence of parents, peers, and school programs on a child’s socialization into sport (Snyder & Spreitzer, 1989; Lewko & Greendorfer, 1977, 1988), along with the idea that the various socializing agents may have differing levels of influence (Malumphy, 1970; McPherson, 1968). Previous research has not considered, however, the importance of cognitive development for understanding the development of a child’s interest in sport or the development of fan loyalty. As a child is introduced to sports, as they begin to distinguish between different sports and form preferences (volition) for a particular sport, there is a gradual progression in cognitive complexity. While a child may still be characterized as preoperational in terms of their cognitive development, the increasing level of distinction between sports and teams within a sport may provide one means by which a child transitions toward concrete operational thought.

Consumer socialization research has also suggested that family members and peers influence a child’s socialization in terms of introduction to or awareness of products (Reinsman & Roseborough, 1955; Moschis & Churchill, 1978). Roedder-John and Whitney (1986) explained that as a child’s cognitive development progresses, differences between phases of development are reflected in the processing of information. Research has yet to clarify though, how different socializing agents may contribute to a child’s cognitive development, and research has not identified some of the differences that may be demonstrated between levels of cognitive development regarding the formation of fan loyalty.
A child’s family, primarily the father, may contribute predominantly to an introduction to sport. A child’s initial preference for a particular sport may also be influenced by a father’s preference (see Dialogue Box 4.50). In addition to introduction to sports, it is likely that a child will also be introduced by their father to different teams within a sport (see Dialogue Boxes 4.31 & 4.32). As preferences are strengthened and as a child is introduced to another element, different teams, cognitive complexity is likely to increase, contributing to a child’s continuing cognitive development.

While a child’s preference for a particular team may still be connected largely to the father (see Dialogue Box 4.31) and may not be resistant to change, a child may be viewed as transitioning to the next level of development. Figure 5.4 suggests that as preference for a sport or team is strengthened, indicators of a child’s progression in cognitive development and the development of fan loyalty may be identified. Family members (particularly fathers) may provide introduction to sports and to teams, and subsequently an introduction to different players. As a child identifies a favorite sport, then a favorite team, they may also begin differentiating between different players. At this phase of development, it is likely that the mass media, particularly television, may become more influential.

Bandura (1971) suggested that the media may function as a dispenser of information for children. This idea suggests that television may contribute to a child’s introduction to sport. Responses from children interviewed across levels of cognitive development indicated that watching sports on television primarily involved watching what was on, or what parents were interested in watching (see Dialogue Box 4.45).
Analysis of the interviews suggested that television may influence a child further by reinforcing a child’s preference for a particular sport or team.

Television may continue to influence the development of fan loyalty as a child watches particular sports then particular teams. By focusing on a particular team, a higher level of cognitive complexity is achieved, and children may begin to focus on more than their own participation. As discussed in Chapter Four, one level of influence television may have is a media effect, which was demonstrated by the high level of recognition children had for the Chicago Bulls and for Michael Jordan (see Dialogue Box 4.38). The influence of a media effect suggests that television may influence the development of fan loyalty through more than dispensing information.

The recognition of different teams and players indicates that complexity is beginning to develop, and children may begin forming their own preferences rather than just liking sports or teams that family members like (see Dialogue Box 4.32). In terms of “nontraditional” sports (gymnastics, horseback riding, roller hockey), television may also contribute to strengthening a child’s preference by providing the primary means of access to a sport (like gymnastics) that a child prefers and would like to see.

Another indicator of a child’s progression in the development of fan loyalty emerging from a recognition of different teams is a child’s identification of a favorite team. A child’s initial attachment to a sport may be based on their participation or involvement in a sport. Responses from the children interviewed at the preoperational phase of development reflected this perspective, highlighting the unidimensional focus of a child’s thinking - focusing on what they do. As a child forms an attachment to a specific team
(one indicator of developing complexity), they may also begin to consider the importance of team performance.

Response from children thought to be transitioning from preoperational to concrete operational thought emphasized attachment to a team because the team was "good," or because the team "won" (see Dialogue Box 4.30, Performance). Moving from focusing only on participation, a child may begin to incorporate an additional dimension in their thinking about sports and teams by including an emphasis on performance (see Dialogue Box 4.30 for an example of the transition in cognitive complexity).

Thinking about team performance regarding a specific sport or team suggests that a child has included a second dimension in their thinking and that they are developing cognitive complexity (transitioning from preoperational to concrete operational thought). At this phase of development a child's thoughts are not "complex" since they are based on whether a team wins or loses, and preferences are not resistant to change. This suggests that a child may not yet demonstrate fan loyalty, but they may be thought of as developing fan loyalty. At this phase of development another element which may influence a child's cognitive development and the formation of fan loyalty is a child's participation in organized sports programs.

Figure 5.4 suggests that playing with friends may strengthen a child's attachment to a particular sport. Playing with friends provides one "level" of complexity - a child shows a preference for what the *do*. Involvement through some form of organized youth program may also serve to strengthen a child's preference for a particular sport. Beyond strengthening a preference though, involvement in youth sports may serve a pivotal
function in a child’s cognitive development. As a child increases their involvement in sports through participation in organized sports (youth leagues, private lessons, school programs), they have an opportunity to progress in their cognitive complexity. Involvement in sports may provide the “scaffold” which enables a child to progress in both their cognitive development and in the development of fan loyalty.

Research in a sport context has suggested that community and school programs may influence socialization into sport by providing an opportunity to participate and by providing positive reinforcement to a child as they participate (Snyder & Spreitzer, 1989; Sage, 1974). The focus of sport socialization has been on the opportunity for involvement and the reinforcement or encouragement a child receives through participation. Research has not yet considered a developmental process, which may provide a better understanding of how organized programs influence cognitive development and the formation of fan loyalty.

Bahna’s (1986) work on brand preferences indicated that children at different levels of cognitive development form preferences, and that the complexity used to identify preferences differs by level of cognitive development. Bahna (1986) does not consider the means by which preferences form or how distinguishing between brands may contribute to a child’s cognitive development. A better understanding of cognitive development and the development of fan loyalty will be found from Vygotsky’s sociocultural theory, which stresses the importance of understanding a child’s physical interaction and a child’s social interaction (Bodrova & Leong, 1996). Vygotsky’s sociocultural perspective provides the means for looking at the influence of different socializing agents have on the development
of fan loyalty, and the influence a child’s participation may have on the development of fan loyalty. Vygotsky’s perspective emphasizes looking not only at what a child does, but also considering what a child understands in relation to their actions (Berk & Winsler, 1995).

Participation in organized youth sports may provide the platform from which a child may experience a progression in their understanding of sport and its organization. Youth sports may offer the first *concrete* experience a child has with different teams and different positions within a sport. As a child participates in youth sports and learns more about the sport, about teams, and about different positions, they may better understand the distinctions between sports and teams. In other words, the *concrete* experiences provide the means by which a child may internalize their external actions. A better understanding of the hierarchy of sports, in terms of distinguishing between sports, between levels of a sport, between teams, and between positions (or players), may develop as a child participates in sports. Participation in youth sports may contribute largely to the development of cognitive complexity. A child may learn to appreciate a sport as more than something they *do*, and may begin to form attachments for reasons beyond personal involvement. The “scaffolding” provided from participation in organized youth sports is also demonstrated in other behavioral components.

Figure 5.4 illustrates that to this point in the development of fan loyalty sport-related products may not influence a child. As a child participates in organized youth sports, however, sport-related products begin may take on added importance. At this phase of development, responses from children interviewed suggested that sport-related
products may be thought of as the “stuff” used to play a game. Participation still dominates a child’s perception (perceptual focus) in that sport-related products are thought of as equipment or uniforms. This is an important first step in differentiating sport-related products from other types of clothing or apparel. The next point of transition would include thinking of products or apparel as more than equipment or uniforms. Attendance also may begin to exert some level of influence at this phase of development.

Children transitioning between preoperational and concrete operational thought indicated through their responses that they thought of attending sporting events in terms of going to their own games, or the games of siblings and/or friends. The child’s view of sports is still centered on participation (a perceptual focus), either playing or knowing someone else who is playing. While a child at this phase of development may not be characterized as a loyal fan, it is possible to “see” the origin of fan characteristics, which as a child continues to grow and develop, will progress into more cognitive and affective attachments characteristic of fan loyalty. At this phase of development a child seems to be demonstrating a mix of preoperational thought and basic elements of concrete operational thought. Through the transition into the next phase of development, it is expected that a child will demonstrate more characteristics of concrete operational thought.

4. Emerging Commitment

As a child’s preference for a particular sport is strengthened, and as they begin to identify a favorite team and/or a favorite player, the child may demonstrate characteristics of both preoperational and concrete operational thought. A child is likely to still be
influenced by a perceptual focus, but as their understanding of the structure and organization of sports increases, their cognitive complexity should continue to increase and they may begin demonstrating characteristics of concrete operational thought. A child may progress from centration, a focus on their participation in a sport, to multidimensional thinking, enjoying sports as a spectator.

A child transitioning from unidimensional thinking (liking a sport because they play the game) to multidimensional thinking (liking a sport because they play the game and because it’s fun, or because a favorite team or player is good) may provide multiple reasons to explain their attachment to a favorite sport, team, and/or player (see Figure 5.4). Cognitive complexity may not be completely developed, considering that reasoning is still heavily influenced by a perceptual focus, but a child may be thought of as transitioning to a higher level of cognitive development.

Figure 5.4 suggests that at this phase of development a child’s participation in organized sports may have a large influence on the development of fan loyalty. Participation may be in the form of taking lessons in a particular sport (like gymnastics), playing in organized youth leagues (such as t-ball or Pop Warner football), or participating in school programs (learning about different sports in gym classes). It is likely that a child gains a greater understanding of the structure of organized sports, particularly after having participated. Sport socialization research has considered what agents may influence a child’s participation in sports (Sage, 1974; Snyder & Spreitzer, 1989). This research
study goes further by incorporating Vygotsky's sociocultural perspective (Bodrova & Leong, 1996) in order to better understand how participation in sports may contribute to cognitive development and influence the formation of fan loyalty.

Children who have started to understand the structure and organization of sports would be expected to differentiate between different teams, between different positions, and as a result, to recognize different individuals that play various positions (player recognition). Children in this phase of development may begin to form attachments with specific teams and players. Participating in organized sports may contribute to a child's transition from preoperational to concrete operational thought. A child may internalize their physical involvement (playing a certain position on a team), and as a result begin to differentiate between teams and players at different levels of a sport. In this phase of development a child may begin to enjoy watching a favorite team or player (becoming a spectator) because of the understanding they have from playing a sport.

Responses from the children interviewed suggested that, as a child transitions between preoperational and concrete operational thought, cognitive complexity emerges. Children begin to offer more than one reason for liking a particular sport. Roedder-John and Whitney (1986) reported that as children progress in their cognitive development they utilize greater amounts of information, which may be represented in abstract and complex forms. This suggests that as fan loyalty develops children transitioning between preoperational and concrete operational thought would offer a greater number of reasons, as well as more complex reasons, to explain their attachment to a sport, team, or player.
Children characterized as preoperational primarily explained that a sport was their favorite because they “liked it,” or because they played the sport (see Dialogue Box 4.26). Children characterized as concrete operational gave multiple reasons for liking a favorite sport, and included a level of specificity in their reasoning. Reasons included liking a particular sport because of a specific aspect of participating, and because they enjoyed watching a specific element in a sport (vicarious enjoyment; see Dialogue Box 4.25). As a child transitions from preoperational to concrete operational thought, the influence on the development of fan loyalty is likely to emerge through the “complexity” in a child’s thinking about a favorite sport, team, and/or player.

As children demonstrate more characteristics of concrete operational thought, their reasoning regarding sports would be expected to include multiple items. Until concrete operational thought is attained, a child’s reasoning may still focus on personal involvement and team performance. Responses indicated that even though a child transitioning toward concrete operational thought identified a favorite team, their attachment was not resistant to change. Without resistance to change a child would not be thought of as a loyal fan, but this type of progression in complexity does represent developing fan loyalty. A child’s participation in organized sports may provide the “scaffold” which contributes to the transition in cognitive development and the development of fan loyalty.

Vygotsky’s sociocultural theory has emphasized the importance of social interaction (such as participation in the case of developing fan loyalty) as a means by which a child may “internalize” their external actions (Berk & Winsler, 1995; Bodrova & Leong, 1996). Research to date has not examined the importance of participation in the
development of fan loyalty. Participation in organized sports may provide a scaffold for children by providing the concrete examples from which actions may be internalized, and a child may transition to more cognitive or abstract thinking.

For example, playing on a team may enable a child to better understand different levels of a sport. As a child plays on a team they will be able to differentiate between teams - their own team and other teams in a youth league. A child may recognize teams similar to their own (same age-group), and they may begin to recognize teams at different levels (like high school, college, and the professional level). By participating on a team, a child may also begin to appreciate the importance of team performance, in addition to individual performance. Differentiating between different levels of a sport and recognizing team performance as well as individual performance are both examples of increasing cognitive complexity. As a child transitions to multi-dimensional thinking, the mass media, specifically television, may also provide a scaffold which contributes to a child’s development.

Responses from the children interviewed that were characterized as preoperational indicated that sports on television were watched mainly through parental influence, or because “they (sports) were on” (see Dialogue Box 4.45). As a child transitions from preoperational to concrete operational thought, and as they form preferences for particular teams and/or players, television may serve to reinforce or strengthen that preference. Television may provide opportunities for children to watch a favorite team or player. Attachment at this phase may still be based on a child’s participation, they may like a team or player because they play on a team with the same name, or because they play the same
position (or would like to play the same position) as a particular player. Television may also influence children at this phase through a “media effect” (like the popular player or team). Liking a particular team or player because they are “popular” is not based on complex thought, but it is a progression from focusing on participation.

A view of television as a reinforcing agent in the development of fan loyalty is similar to Bandura’s (1971) point that the mass media may serve as a dispenser or source of information in the socialization process. The current research suggests that television may contribute to a child’s cognitive development and the development of fan loyalty to a much greater extent than just as a “source” of information. Television may provide a framework for children as they progress from watching sports on television because of parents, to watching particular teams and/or players because they are on (watching the “popular” athletes or teams), to providing an opportunity to watch a favorite team or player. In other words, as a child transitions from preoperational to concrete operational thought, they may like a particular sport, team, and/or player for reasons beyond personal involvement. Television may contribute to the development of fan loyalty by influencing the transition from enjoyment as a participant to vicarious enjoyment. At a concrete operational level of development, a child would be expected to utilize media sources, particularly television to watch specific sports, teams, and players.

As a child transitions to concrete operational thinking (multi-dimensional thinking), the influence of family and friends may change. Research from sport and consumer socialization has suggested that family and friends are important socialization agents, particularly early in a child’s life (Sage, 1974; Ward, 1974; Moschis & Churchill, 1978;
Snyder & Spreitzer, 1989). The influence of family and friends is also thought to be differential over time. McPherson (1968) suggested that initially a father may exert influence on a child’s interest in sport, and over time that influence was reported to decrease while the influence of peers and coaches increased. Mahumphy (1970) also reported that the level of influence a family has on a child’s socialization into sport decreased and the level of influence from other agents increased over time.

Figure 4.9 shows that children across the levels of cognitive development identified a father’s favorite sport most readily, but were not as familiar with a friend’s favorite sport. Between groups, 78% of the children characterized as preoperational identified a favorite sport for their father, while only 11% identified a favorite sport for their friend (see Figure 4.11). A comparison between groups suggested that children characterized as preoperational associated sports with their father. Among children characterized as concrete operational, however, 75% identified a favorite sport for their father and 38% identified a favorite sport for their friends. The difference between groups suggests that as a child progresses in their cognitive development, the influence of family members may decrease while the influence of friends may increase.

The influence of friends (and other socializing agents) may change over time, exerting more or less influence, which would be consistent with sport and consumer socialization research (Mahumphy, 1970; Moschis & Churchill, 1978). The high level of association that children had between fathers and sports suggested, however, that at least through the concrete operational phase of cognitive development, the initial influence exerted by fathers may continue. Figure 4.9 shows that across groups a higher percentage
of children identified a favorite sport for their father than for friends. Responses from the interviews also suggested that the father is still an important influence in terms of reinforcing or strengthening a child’s preference for a particular sport, team, and/or player.

Lewko and Greendorfer (1988) suggested that the balance between the influence of parents and peers shifts between childhood and adolescence. This suggests that in a later phase of the development of fan loyalty, the influence of friends may become more important. As a child begins to identify with a particular sport, team, and/or player, the value-assessment by others, particularly friends, may exert a higher level of influence on the development of fan loyalty. One socializing agent which did not seem to exert much influence on the development of fan loyalty was a child’s mother.

Figure 4.9 indicates that across groups only 30% of the children interviewed identified a favorite sport for their mother. Thirty-one percent of the children characterized as concrete operational identified a favorite sport for their mother (see Figure 4.10), and 28% of the children in the preoperational group identified a favorite sport for their mother. Compared to fathers and siblings, mothers seemed to have the smallest influence on the development of fan in the early stages of cognitive development. From the children that did identify a favorite sport for their mother, only six of the 50 children correctly identified their mother’s favorite sport. The pattern of responses suggested that children had the general impression that mothers were not interested in sports (see Dialogue Box 4.55).

Lewko and Greendorfer (1988) attributed the higher level of influence on children’s sport socialization to gender stereotyping, suggesting that boys and girls are
treated differently. Lewko and Greendorfer (1988) proposed that boys and girls may be treated differently with respect to sports in that boys may be taught "gender-appropriate" activities, while girls are given more latitude to become involved in a variety of sports. While girls may have the latitude to participate in a variety of activities, they may recognize that boys are directed more towards sports, and as a result may associate sports with fathers rather than mothers. A better understanding of a mother's influence may emerge from a consideration of relative influence.

Responses from the parental questionnaire indicated that across groups fathers thought that they had more influence on their child participating in sports, while mothers indicated that they had less influence on a child participating in their favorite sport. Earlier research on the perceived influence of parents reported that mothers had a higher level of influence in the decision to enroll children in an organized sports program (Howard & Madrigal, 1990)

Several points should be considered with respect to early research and the current study. Howard and Madrigal (1990) examined the relative influence of parents and a child in a decision process. Respondents identified how much influence they believed each parent and a child had on the. (1) initial idea to participate in a youth program, (2) the search for information on alternative programs, and (3) on the final decision of whether or not to participate in the activity. The study by Howard and Madrigal (1990) examined a decision process, while the current study examined one component of the decision process, asking parents to identify their relative influence on whether or not a child participated in a favorite sport.
Considering the majority of respondents surveyed by Howard and Madrigal (1990), there is some basis for comparison regarding parental influence on the decision for a child to participate in organized programs. While respondents gave their perception regarding the influence of family members in the decision process, over 80% of the respondents were mothers. In the current study mothers and fathers were asked to identify (where possible) what they perceived was their own level of influence, not the influence of other family members. Between the studies, the influence attributed to fathers may not be directly compared, since fathers provided information on their influence in the current study, but the influence attributed to fathers from Howard and Madrigal (1990) came primarily from mothers. The perceived influence of children in the decision process was also assessed by Howard and Madrigal (1990), but not in the current study. It is possible, however, to compare the influence attributed to mothers in both studies.

The level of influence attributed to mothers in the decision to participate from Howard and Madrigal (1990) and the level of influence reported by mothers in the current study suggest similar patterns. Earlier research reported that mothers had a substantial level of influence on the final decision for children to participate in an organized program (M=52.6; Howard & Madrigal, 1990). Current findings indicated that mothers believed that they had a substantial level of influence on their child’s participation in a favorite sport. The mean influence reported by mothers of children in the preoperational group was 56.13; the mean influence for mothers of children in the concrete operational group
was 55.96. Figure 5.4 reflects the findings from previous research and the current study, indicating that mothers have a substantial influence on the decision for children to participate in organized youth programs.

The current research suggests that in the initial phase of the development of fan loyalty, while children may associate sports primarily with their fathers, both mothers and fathers may influence the decision for children to participate in sports. In other words, mothers are likely to influence whether or not children participate in sports, even though children may not recognize their mothers’ influence. As development progresses, one parent may begin to exert a higher level of influence. Considering the age of children associated with the findings reported by Howard and Madrigal (1990), average age 7.5 years, it is possible that as a child transitions to a concrete operational level of development, mothers may exert a greater influence. In the current study the relative influence reported by mothers and fathers for children in the preoperational group were comparable (M=56.13 for mothers, M=55.00 for fathers), but for children in the concrete operational group, the relative influence of mothers (M=55.96) was higher than that of fathers (M=42.84).

From a child’s perspective findings suggested that sports are associated primarily with a father, into a concrete operational phase of development. Additional research should be conducted to determine whether or not that association may change at later phases of development. The decision for children to participate, however, may be influenced by fathers and mothers, even though children may not recognize a mother’s influence. Research examining the relative influence of family members should be
conducted at different phases of development, and to better understand the influence of family members, responses should be obtained from parents and children.

Figure 5.4 illustrates that for a child transitioning between preoperational and concrete operational thought, other behavioral indicators may provide some influence on the development of fan loyalty, but at a lower level of influence than participation and television. Responses from the children interviewed indicated that reading about sports would still not be a primary influence. A child transitioning between preoperational and concrete operational thought may just be starting to read and are not likely to focus on sport-related reading material. Talking about sports with others, particularly family members may contribute to strengthening a preference for a team or player, but responses from the interviews still indicated that talking about sports was not a primary influence on children. Attendance at sporting events is likely to remain tied to a child’s participation at this phase of development. A child’s perception of sport-related products, however, may provide one indicator of developing fan loyalty.

Children in a previous phase of development indicated through the interview responses that sport-related products or apparel were thought of in terms of equipment needed to play a particular game. As a child transitions in their cognitive development, as they begin to identify with a favorite team and/or player, they may begin to view sport apparel as more than equipment to play a game. Beyond thinking of sport apparel or other products as equipment or uniforms, an indicator that a child is developing fan loyalty may be recognition of sport-related products in general. Responses from the children
interviewed indicated that children progressed from thinking of sport-apparel as equipment or a uniform, to recognizing sport-apparel in general (see Dialogue Box 4.47).

Thinking of sport-related products as sporting-apparel in general does not necessarily mean a child associated apparel with a favorite team or a favorite player. A child may recognize that they have a hat or t-shirt with a team logo or player number, but it may not be their favorite team or favorite player. Recognition of sporting apparel in general does suggest, however, that a child may be developing fan loyalty by transitioning from thinking of sport-related products as equipment or uniforms, to thinking of products as general apparel. Children continuing to develop fan loyalty would be expected to next value particular products for their favorite team and/or player. Identification with particular team and/or player through sport apparel provides one indicator that a child may have achieved concrete operational thought, and may have transitioned to the next phase in developing fan loyalty, *identification with sports*.

5. Identification with Sport/Team/Player - Concrete Operational

Responses from the interviews suggested that children characterized by concrete operational thought are capable of demonstrating fan loyalty. Children characterized by concrete operational thought were able to identify a favorite sport (100%), a favorite team (56%), and a favorite player (44%) (see Figure 4.1). By identifying a favorite sport, team, and/or player, a child may have transitioned to the point where a psychological commitment has formed which will be demonstrated through a child’s behaviors. Some children in the concrete operational group demonstrated behavioral and attitudinal components in relation to a favorite sport, team, and/or player (watching a favorite team
on television, going to games, owning team apparel). No previous research has examined a child’s psychological commitment to a sport, team, or player. The findings which emerged from this study represent the first attempt to explain fan loyalty as a developmental process.

Children characterized as concrete operational demonstrated cognitive complexity regarding a sport, team, and/or player by giving multiple reasons, as well as specific reasons for liking a particular sport, team, and/or player. As indicated in Dialogue Box 4.25, children in the concrete operational group explained that they liked a particular sport because they enjoyed a specific aspect of participating in the sport, and because they enjoyed watching specific elements in a sport (vicarious enjoyment). Children identifying a favorite team demonstrated a clear progression in their cognitive development, providing more complex reasons for liking a particular team in the progression from preoperational to concrete operational thought (see Dialogue Box 4.30). While fewer children overall demonstrated fan loyalty regarding a particular player, children in the concrete operational group who did demonstrate loyalty toward a particular player exhibited cognitive complexity. The children explained that they enjoyed a specific element in a player’s performance, or there was some personal involvement with a particular player (see Dialogue Box 4.37).

Children characterized by concrete operational thought who were able to distinguish between sports, teams, and players also demonstrated volition and resistance to change. Responses indicated that children in the concrete operational group would continue to participate in a “favorite” sport when given the opportunity to play other
sports, that they would follow a particular team even if a team lost all of its games (see Dialogue Box 4.33), and that they would like a particular player even if the player were on another team or didn’t perform well (see Dialogue Box 4.39). Children interviewed that had achieved concrete operational thought were capable of demonstrating psychological commitment - cognitive complexity, volition, and resistance to change.

It should be noted that not all of the children in the concrete operational “group” demonstrated psychological commitment. Children not demonstrating all three components of psychological commitment may be transitioning in their cognitive development and in the development of fan loyalty. Children in earlier stages of developing fan loyalty (those still focused on their own participation) would not be expected to place as much importance (or value) on following a favorite team or player. Children transitioning toward development of fan loyalty would be expected to increasingly value their association or identification with a favorite sport, team, or player.

A child may place more and more importance on following a particular team or player as fan loyalty develops. This suggests that a developmental perspective is an appropriate means for better understanding the different levels of importance children may place on sports (whether importance is placed on participating, watching a team or player, or some combination of being a participant and a fan). A developmental perspective also may provide a better understanding of when fan loyalty may develop, and what may influence the development of fan loyalty. Analysis of the responses from children in the concrete operational group that demonstrated fan loyalty provided the means to better
understand how different socializing agents influenced the development of fan loyalty at the concrete operational level of cognitive development.

Figure 5.4 illustrates how different influencing agents may contribute to the development of fan loyalty. Children at a concrete operational level of development are capable of identifying a favorite sport, team, and/or player. Once preferences have formed, several items may serve to reinforce or to strengthen the preference a child has for a favorite sport, team, and/or player. Participation is thought to be an important factor contributing to a child’s identification with a favorite team or player. Children characterized as concrete operational indicated through their responses that they were involved with sports through playing with friends and through organized youth programs; the primarily means of participation was through organized youth sports.

Children that have participated in organized youth sports for one or to two seasons (if not more), and are likely to have a greater understanding of the structure and organization of sports, contributing to greater cognitive complexity. Great cognitive complexity suggests that a child is able to distinguish between sports, between levels within a sport, between teams, and between players. And based on responses given, children characterized by concrete operational though also appreciate at some level the difficulty associated with playing sports.

Appreciation of specific player movements or enjoyment of particular aspects of a player’s game may have developed from a child’s participation. Through participating in sports a child encounters their first concrete experience with different teams and different positions. These experiences may provide the scaffold for developing greater cognitive
complexity. At the same time, as a child plays a specific position, or plays different positions, these concrete experiences provide an appreciation for the skill required to play a position. As a child learns to play a particular position, as they develop their own skills, they are able to internalize their experiences and as a result may begin identifying with particular players (having some appreciation for what is involved in playing a game). As children participate on a team they may also begin to appreciate that the performance of others is as important as their own performance. In other words, a child may begin to think of others along with considering their own involvement. Participation may help a child understand the importance of team performance as well as individual performance, and through an appreciation for team performance children may begin identifying with particular teams.

Previous research has shown that individuals identify with particular teams. Cialdini et al. (1976) first demonstrated that individuals may identify with a particular team (a university football team), and explained that such attachment provides an opportunity to bolster one’s self-esteem or sense of achievement. Wann and Branscombe (1990) proposed that based on level of identification, an individual may be described as a “die-hard” or “fair-weather” fan. Die-hard fans are thought to be highly identified with a particular team, and have an allegiance that is resistant to change. In contrast, fair-weather fans have a lower level of identification and their allegiance is not resistant to change (Wann & Branscombe, 1990). Wann and Branscombe (1993) have also developed a scale for measuring an individual’s level of identification with a particular team.
Research on team identification has focused primarily on measuring identification, and considering how identification with a sports team may affect the reactions of spectators (Branscombe & Wann, 1992; Wann, 1994; Wann, Dolan, McGeorge, & Allison, 1994). Research has not yet examined how an individual may develop an identification with a team or player, and what factors may influence the development of identification.

A recent study by Wann, Tucker, and Schrader (1996) has attempted to provide some direction for understanding what factors may influence identification. Wann et al. (1996) asked college students to list reasons why they currently followed their favorite team, to list reasons why they originally followed their favorite team, and to list reasons why they no longer followed a formerly favorite team. The exploratory study purported to examine the factors influencing the origin, continuation, and cessation of identification with sports teams. Wann et al. (1996) concluded that “there are several factors which play a role in the origination, continuation, and cessation of identification with sports teams” (p. 1000-1001).

The results reported by Wann et al. (1996) reaffirmed the findings from sport socialization which concluded that different socializing agents may influence an individual’s identification with a particular team. Items reported to be important included success of the team, geographic concerns, family, and friends. Parents, family members, and the abilities and traits of players were determined to be important in the origination
and continuation of identification with a team. The results of the study by Wann et al. (1996) highlights the importance for examining fan loyalty (including identification) from a developmental perspective.

Research has determined that various factors may influence the development of fan loyalty, but the current study represents the first effort to propose that an individual becomes a loyal fan through a developmental process. The current project examines when fan loyalty may first develop, based on level of cognitive development, and what factors may influence that development. Figure 5.4 represents the first attempt to illustrate a potential progression in the development of fan loyalty, including a representation of how different factors may influence the development of fan loyalty. A developmental prospective provides the means from which to better understand not just what factors may influence the development of loyalty, but also to better understand how different factors like family, television, and a child’s participation may influence the development of fan loyalty (including identification). Previous research is also limited from the perspective of examining only team identification, and has not considered player identification or a progression in the development of fan loyalty.

One factor that previous literature has not examined with regards to identification with a favorite team or player is television. As fan loyalty develops, and as children form preferences for a particular team and/or player, television may help strengthen childrens’ identification with a particular team or player. Children at an earlier phase of development may watch sports on television due to the influence of others (watch what parents watch, or watch what’s on). Children at a concrete operational level may choose to watch sports
on television in order to see a favorite team or player, not because of what others watch or because of what's on. In addition to watching a favorite team or player on television, sport-related products may become more important in this phase of development.

Children at a concrete operational level may recognize and value sport apparel for a favorite team or player, rather than thinking of sport apparel as equipment to play a game (a uniform) or thinking of sport products in general. Dialogue Box 4.46 illustrates that a child characterized as concrete operational may identify with a specific team and/or player, and that child may have specific products (or clothing items) representing that team or player. At a concrete operational level (those developing fan loyalty) children may think of sports apparel as a means of identifying with a team and/or player, and wearing some type of team or player apparel may reinforce the attachment.

The influence of family and friends on children in the concrete operational group seemed to diminish, compared with earlier phases of cognitive development. Children demonstrating the attitudinal and behavioral characteristics of loyal fans did recognize the favorite sport, team, or player of their father and friends, but they were not necessarily dependent on those preferences when identifying their own favorite sport, team, and/or player (see Dialogue Box 4.32). In other words, at this phase of development a child may place greater emphasis (or value) on their own choice instead of basing their choice of a favorite sport, team, or player on the influence of others.

Research in sport socialization suggested that the influence of parents and peers may change over time (McPherson, 1968, Malumphy, 1970; Lewko & Greendorfer, 1988), but research has not adequately explained why the relative influence of parents and
peers may vary. A development perspective suggests that as children transition between preoperational and concrete operational thought and as fan loyalty develops, parents and friends initially may reinforce an attachment. Actual identification with a particular team and/or player, however, may be influenced to a greater extent only by a child’s participation in organized sport programs.

The perspective that family and friends have less influence at this phase of development was also found with respect to another behavioral factor - talking about sports. The analysis of responses indicated that at earlier phases of cognitive development children did not use sports as a topic of conversation, or that they talked about sports while participating (see Dialogue Box 5.1) or when asked about their participation (see Dialogue Box 5.2).

**Dialogue Box 5.1**  
Talking With Friends

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you ever talk to your friends about football?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT:</td>
<td>When I want to play, yeah, I go get them.</td>
</tr>
</tbody>
</table>

**Dialogue Box 5.2**  
Talking With Others

<table>
<thead>
<tr>
<th>JJ:</th>
<th>Do you ever talk to anybody about soccer?</th>
</tr>
</thead>
<tbody>
<tr>
<td>KL:</td>
<td>Mm...sort of. Well, usually people will ask.</td>
</tr>
<tr>
<td>JJ:</td>
<td>How you’re doing?</td>
</tr>
<tr>
<td>KL:</td>
<td>If I play, or whatever.</td>
</tr>
</tbody>
</table>

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Children in the concrete operational group indicated that sports were still not a general topic of conversation. Reading about sports did not seem to have much influence at the concrete operational level either. The internalization of a child’s experiences from participation in sports and identification with a particular team or player seemed to exert the most influence on the development of fan loyalty for children characterized by concrete operational thought.

A final element influencing the development of fan loyalty at this phase was attendance at sporting events. Through the previous phases of development, attendance for children focused primarily on participating in games, or watching family members or friends participate in games. As cognitive development progresses and as fan loyalty develops, a child may identify with teams and players. Television may serve to reinforce a child’s preference for a particular team and/or player and enable a child to enjoy sports vicariously (through watching sports). Children may begin to think about attending sporting events to watch games and not to just participate in them. In other words, children at this phase of development may think of attendance not only in terms of the games they play in, but they may also enjoy watching and attending collegiate and/or professional events. Vicarious enjoyment of sports suggests greater cognitive complexity, and contributes to a child’s resistance to change. A child would no longer base their attachment to a sport, team, or player on just a single idea, reasoning would become more complex and multiple reasons may be articulated. Children at a concrete operational level of thought may have developed a psychological commitment to a sport, team, and/or player, and through behavioral elements may demonstrate fan loyalty.
Implications

The research project provides a first attempt to conceptualize the development of fan loyalty. The study illustrates a potential progression in the development of fan loyalty based on a child's level of cognitive development. Responses from the interviews suggested when a child may first be capable of demonstrating fan loyalty and what factors may influence the development of fan loyalty. Research in sport socialization (Snyder & Spreitzer, 1989; Lewko & Greendorfer, 1988; McPherson, 1968; Malumphy, 1970) and consumer socialization (Moschis & Churchill, 1978; Bandura, 1971) has shown that different socializing agents influence a child's socialization into sport and consumption roles. Results from this study indicate that different socializing agents may influence the development of fan loyalty, and that through the developmental process various agents may exert differing levels of influence (see Figure 5.4).

This study provides the basis for distinguishing between loyalty and preferences. Children as young as five years of age (perhaps younger), may demonstrate a preference for a particular sport, but genuine fan loyalty, based on a psychological commitment to a sport, team, or player, is not likely to be achieved until a child reaches at least eight or nine years of age.

A better understanding of fan loyalty as a construct, including both attitudinal and behavioral components, allows for a distinction between preferences based on a media effect and legitimate fan loyalty. Previous research indicated that media sources may serve to dispense information to children (Bandura, 1971), and from various media sources children may form preferences. Some of the responses from the children interviewed
suggested the possibility that a child will express a preference for a particular team or player, based on the “popularity” of a team or player. Such a preference, however, is not based on cognitive complexity nor is it resistant to change. While a child may recognize particular teams or particular players that does not necessarily indicate that they are loyal fans of those teams or players.

A better understanding of fan loyalty also provides the means by which to measure the strength of fan loyalty. Assessment of psychological commitment will enable researchers to measure the strength of a fan’s loyalty with respect to their cognitive complexity and their resistance to change. An attachment based on cognitive complexity (multiple reasons and specific reasons) is likely to be resistant to change. Loyalty may be thought of in terms of having greater stability (compared to simply having a preference), and with greater stability there is likely to be greater predictability of behavioral intentions and actual behavior.

An individual that has achieved the cognitive development requisite for demonstrating fan loyalty is likely to engage in behaviors that are important to a sports organization. For example, a loyal fan is likely to identify with a particular team and/or player, and may express that identification (and reinforce the attachment) through purchasing and wearing team- and/or player-related apparel, attending games, and watching games on television.

A better understanding of the development of fan loyalty is also important with respect to more effectively communicating with children about sports, teams, and/or players. It is important to recognize a child’s level of cognitive development with respect
to the type of information they may attend to, and also in terms of what may influence
their introduction, attachment, and identification with a sport, team, and/or a player. A
child's actions on the world around them and the subsequent internalization of those
actions as they progress in their cognitive development, provide some indication of how to
effectively communicate with children according to a particular phase of cognitive
development.

Children at a preoperational phase of development, or children transitioning from a
preoperational phase are likely to attend most to information in the context of
participation. In other words, children may begin to distinguish between sports and form
preferences for sports through their involvement in sports. Initially this may take the form
of playing with friends and/or siblings; as a child grows both physically and cognitively,
participation may occur through organized youth sports. Involvement in organized youth
programs provides an opportunity to effectively communicate with children. For example,
sponsorship of little league teams by Major League Baseball may provide an opportunity
to introduce different teams and players to children. A child in a community program may
form a preference for a particular team based on their participation; as the child progresses
in their cognitive and affective development, a particular preference may develop into fan
loyalty.

As children develop a better understanding of the structure and organization of
sports through participation, sport organizations (like the NFL, MLB, the NBA, the NHL,
and MLS) have opportunities to: (1) introduce teams and players, and (2) reinforce or
strengthen an attachment to a particular team and/or player. In other words,
communicating with children (i.e. introducing different sports and teams) in the early phases of cognitive development (preoperational and transitioning to concrete operational thinking) about sports, teams, and/or players should take place at the level in which children participate in sports. Media sources (television) may provide some introduction to a particular sport, team, and/or player, or television may produce recognition of a particular team and/or player (media effect). In the early phases of cognitive development and the development of fan loyalty, effectively communicating with children (introducing sports and teams) at the preoperational or transitional phase of development may best be done through a child's participation in sports. A better understanding of the development of fan loyalty also has implications for community and school programs.

Organized youth programs may provide the "scaffold" by which children progress in their cognitive development, at least in respect to their understanding of the structure and organization of sport. In terms of general cognitive development, programming through schools may consider the advantage of introducing organized sports (team activities) to children at early ages (third grade or even second grade) through physical education programs.

The structure and organization of different sports provides an opportunity for introducing children to concrete examples which may help them better understand concepts such as grouping, categorizing, and forming hierarchies. By playing on teams in school programs children may have the opportunity to progress in their cognitive development through an increased cognitive complexity. Distinguishing between individual play and team play, recognizing the importance of team performance, and
appreciating the different positions within a sport, all may contribute to a child’s cognitive complexity. Through coordinated efforts, classroom instruction may be designed to draw from the concrete experiences children have with sport programs, to reinforce the ideas presented and at the same time contribute to a child’s continued development, assisting them to progress from a perceptual to a cognitive focus. Sport sociologists talk of socialization into sport and socialization through sport (Sage, 1974; Snyder & Spreitzer, 1989). Ideas drawn from the development of fan loyalty may provide some contribution to a child’s cognitive development. Instead of socialization through sport or socialization into sport, the development of fan loyalty may contribute to a child’s cognitive development.

A better understanding of the development of fan loyalty may also provide some indication of how to effectively communicate with children who have achieved concrete operational thought, or are transitioning to concrete operational thought. Organizations electing to sponsor organized programs like youth leagues (baseball, ice hockey, basketball, etc.) would have an opportunity to introduce their name and possibly a product to children. Introduction to various organizations and potentially to different products for children at an earlier phase of cognitive development may be most effective through a link with a child’s participation in sports (like sponsoring a youth league). Communication with children at a higher level of cognitive development may take place through a child’s participation in sports (youth leagues), and also through advertising, targeting cognitive elements. In other words, efforts to communicate with children at a concrete operational
phase of development may focus on youth programs (sponsoring youth leagues), and also through more traditional avenues (like television).

Responses from those characterized as concrete operational indicated that children at that level of cognitive development may watch televised events in order to see particular teams and players. Such programming provides an opportunity to strengthen an attachment for children at a concrete operational phase of development. Children at a concrete operational level of development are also more likely to think of sport-related products in terms of attachment to a particular team and/or player. This suggests that children at a concrete operational phase of development may be viable targets for sport apparel marketing.

An understanding of the factors which may influence the development of fan loyalty also has important implications. In the early stages of fan development family members, particularly the father, are likely to have a high level of influence in terms of introducing sports and teams to children (see Figure 5.4). The children interviewed seemed to associate sports most consistently with their father. Friends were not found to exert much influence early in a child’s cognitive development, and television may have it’s greatest influence early in a child’s cognitive development in terms of reinforcing a sport introduced by a family member, or by introducing a “nontraditional” sport (or a sport in which family members do not have an interest).

Organizations taking an active role in youth programs through schools, communities, or private programs, may have the opportunity to influence the development of loyalty through emphasis on a particular sport, or team. Television may provide some
reinforcement in terms of exposure and popularity for children at a preoperational phase of development. As children progress in their cognitive development, attendance at other sporting events (besides those a child participates in), may provide opportunities to strengthen an attachment. Sport-related products become increasingly important as a child progresses from thinking of apparel in terms of equipment or uniform, to recognizing products for specific teams and players. Through a better understanding of the development of fan loyalty the potential exists for not only introducing children to organizations and potentially various products through sports, teams, and players, but also for utilizing sports as a means of contributing to a child’s continued cognitive development.

DIRECTIONS FOR FUTURE RESEARCH

The current study provides a foundation for understanding the development of fan loyalty and highlights the need to conduct additional research. Understanding the formation of fan loyalty requires working with children and adults as their development occurs. This study provides the basis for a longitudinal research program analyzing fan loyalty as a developmental process. Results from this study demonstrate that a developmental perspective is a viable approach for studying fan loyalty and provides a better understanding of when and how children begin to form attachments with a sport, team, and/or a player. Previous research (Wann et al., 1996; Moschis, Moore, & Stanley, 1984) has gone only so far as to identify factors which may influence the development of fan loyalty, but have not adequately addressed the process of when and how fan loyalty develops.
Earlier research has relied primarily on retrospective analysis, asking adults or adolescents to think about a favorite sport they have or do participate in (Malumphy, 1971; McPherson, 1976), or to think about a team that they consider to be their favorite (Wann et al., 1996), and then to indicate to what extent specific socializing agents may have influenced their decision to participate or to follow a particular team. One problem with this approach is faulty recall; it is uncertain how accurate an individual’s recall may be, particularly over long time spans. Working with young children eliminates the need for retrospective analysis. A developmental perspective utilizes a process which includes interviewing young children. This approach provides an opportunity to examine fan loyalty as it develops; no research to date has studied fan loyalty from a developmental perspective (studying loyalty as it develops).

Working with young children instead of relying on adolescent or adult recall may provide a clearer understanding of when fan loyalty may first be demonstrated, and what influences the development of fan loyalty. An interview protocol allows the opportunity to clarify responses so that analysis of responses is reasonably clear. This study demonstrates that a developmental approach is also superior because it provides an opportunity to assess the influence of different socializing agents at different phases of the developmental process. Being able to identify and isolate the influence of different socializing agents at different phases is particularly important considering the temporal element in the development of fan loyalty - the influence of various socializing agents may change over time.
This study began with an initial analysis of the development of fan loyalty from a preoperational to a concrete operational phase of cognitive development. The potential progression in the development of fan loyalty which emerged provides the basis for extending the study to successive phases of cognitive development, to determine if the various socializing agents exert more or less influence at different phases in the developmental process. A longitudinal study beginning with children at a preoperational phase of development and following through the formal operations phase, would enable researchers to clarify which socializing agents have a primary influence on the development of fan loyalty, and to establish the relative influence of different agents through the development and reinforcement of fan loyalty. A longitudinal study would also provide the means with which to identify whether or not fan loyalty may change, and if so, how such change may occur.

Using the data collected in this study as a foundation, the investigator intends to continue monitoring childrens’ loyalty development process into early adolescence. The first step will be to bolster the existing data base by conducting an additional fifty interviews with children at a preoperational level of development. The development of fan loyalty in children within the base group will be assessed every two years, until a child has achieved the phase of formal operations, approximately ten to twelve years of age. The interview protocol devised in this study will be utilized to assess the development of fan loyalty until children reach the formal operational phase of cognitive development.
A longitudinal research program will provide an extended and, hopefully, richer understanding of both the development of fan loyalty, and a more complete understanding of the factors which influence the development of fan loyalty.

While assessment of children in the base group is on-going, in-depth interviews with parents and possibly older siblings will also be done. Working with the family will provide a better understanding of the social context, particularly how parents and television influence the early development of fan loyalty. As base-line data is accumulated, surveys may be developed for use with parents and older siblings, and in time with the base group.

The overall group of subjects will also be extended to include interviews with a second group of children in different context. This study was conducted with children from middle- to upper-middle class families. It is uncertain if the progression of loyalty may be similar across socioeconomic groups, or if different socializing agents may have different levels of influence than those found in this study. Interviews with children in an inner-city setting enrolled in a public school setting should be conducted in order to understand the influence of socializing agents in different contexts.

In the short term, interviews with older children, adolescents, and adults should be conducted in order to identify pertinent agents of influence regarding fan loyalty, and to provide comparison data for the longitudinal program. Among subjects with established loyalties, topics such as resistance to change should be further examined. Is it possible to sway existing loyalties, or in the case of moderate fans, to strengthen loyalty? Additional
questions to consider are loyalties to multiple sports, teams, and players, and the implications of cross-seasonal loyalties.

As base-line data is accumulated the potential for experimental manipulations is also a possibility. Different elements of psychological commitment may be tested at various phases of cognitive development. Choice scenarios may be developed to assess whether children at preoperational and concrete operational phases of development demonstrate volition, or whether there attachment is based on the influence of parents or friends. Assessment of cognitive complexity between levels of cognitive development may be assessed according to the multiplicity and specificity of reasons children may or may not provide regarding an attachment to a sport, team, or player. At a concrete operational phase of development, resistance to change may be examined with scenarios which challenge a child’s “loyalty” toward a particular team or player. As a better understanding of the development of fan loyalty emerges, a variety of studies may be designed to experimentally assess the viability of a model for the development of fan loyalty.

Research on the development of fan loyalty has the potential to keep multiple investigators busy for many years. Additional issues which others may elect to consider include gender. What differences, if any are there in the development of fan loyalty across genders? Are girls “socialized” away from sports, as some sport sociologists suggest? An area of research that may be extremely interesting is an assessment of the development of fan loyalty across different cultures. In different countries, sports that one culture considers “traditional” are likely to be different from other cultures. A question of interest is whether or not the emphasis placed upon sport participation or sport fandom may be
different across countries. Cultural studies should be conducted in order to contrast the development of fan loyalty for different groups.

Final Statement

With the increasing number of sports competing for the attention of fans, it will be important for sport organizations to better understand when individuals may develop fan loyalty and also to understand what may influence the development of fan loyalty. A longitudinal project will provide some of the best information with respect to understanding loyalty at different points in an individual’s life, as well as at different phases of cognitive development. A better understanding of both the behavioral and attitudinal components will provide an opportunity to more effectively communicate with sport enthusiasts, and potentially to help influence the development of the next generation of fans.
APPENDIX  A

INTERVIEW PROTOCOL
Interview Protocol - Discussion Sequence

Note: Sequence provides a guideline for the discussion; familiarity with the topic areas will allow for inclusion of items in the course of a conversation, without necessarily following a prescribed questioning sequence. The course of the conversation will direct the sequence in which questions may actually be asked.

1. What do you like to do for fun?

   An initial objective is to find out if a child will identify interest in a sport as something they consider to be fun or important. Interest may be indicated through participation in a sport or activity, through watching a particular sport, team, or player, through various activities like collecting trading cards, sports paraphernalia, etc.

   Potential follow-up questions:
   - What is your favorite thing to do?
   - What is the most fun thing you do?
   - What is your favorite game?
   - What do you like to play?

   If child indicates they like a particular sport, or they play a particular sport,

   Is <sport> your favorite sport?

   The following set of questions will be used to help qualify level of cognitive development, to compare progression, and to provide “practice” with the types of questions that will be asked.

   What is your favorite food?
   Why do you like <favorite food>?
   How often do you eat <favorite food>?

   Note: Questions regarding family and friends may vary according to the influence of parents, siblings, friends, etc. The conversation will guide the particular word choices used in the discussion. Use of “dad” and “friends” provide examples of the types of questions that may be asked.

   Does your dad like <favorite food>?
   Do you like <favorite food> because your dad likes <favorite food>?
   Do your friends like <favorite food>?
   Do you like <favorite food> because your friends like <favorite food>?
   Would you rather eat <favorite food> or <other food>?
   If you had to choose between <favorite food> or <other food>, which would you eat?
If child has indicated that they like a particular sport, or they play a particular sport, proceed to 2a, otherwise proceed to #2.

2. When I say “sport” what is the first thing you think of?

If a particular sport is not identified, ask global question:
Do you have a favorite sport?

Question potentially identifies initial preference toward sport, team, or player.

Depending upon the object (sport, team, or player) identified by subject, ask questions about preference, then follow-up with questions regarding remaining objects (sport, team, and/or player); proceed to 2a, 2b, or 2c, according to object identified.

Potential follow-up questions:

a. Sport Identified:
   Is <sport> your favorite sport?
   Do you like other sports?
   (yes) What other sports do you like?

   (1) Team
   Do you have a favorite <favorite sport> team?
   (yes) Which <favorite sport> team do you like best?
   Do you like any other <favorite sport> teams?

   (2) Player
   Do you have a favorite <favorite sport> player?
   (yes) Which <favorite sport> player do you like best?
   Do you like any other <favorite sport> players?

Proceed to #3.

b. Team Identified:
   Is <team> your favorite <sport> team?
   Do you like any other <sport> teams?
   (yes) What other <sport> teams do you like?

   (1) Sport
   Is <sport> your favorite sport?
   (no) What is your favorite sport?
   Do you like any other sports?
   (yes) What other sports do you like?

   (2) Player
   Is there a player on the <favorite team> that is your favorite?
   (yes) Which player on the <favorite team> is your favorite?
Do you like any other <sport> players?
(yes) What other <sport> players do you like?

Proceed to #3.

c. Player Identified:
Is <player> your favorite <sport> player?
   Do you like any other <sport> players?
   (yes) What other <sport> players do you like?

(1) Sport
Is <sport> your favorite sport?
(1) Do you have a favorite sport?
   (yes) What is your favorite sport?

Do you like any other sports?
   (yes) What other sports do you like?

(2) Team
Do you have a favorite <favorite sport> team?
   (yes) What is your favorite <favorite sport> team?

Do you like any other <favorite sport> teams?
   (yes) What other <favorite sport> teams do you like?

Proceed to #3

3. Returning to initial object (sport, team, or player) identified by subject, ask questions to ascertain fan loyalty.

You said that <object> was your favorite <sport, team, or player>.

Participation
a. Do you play <sport>?
   (yes) How often do you play <sport>?
      Do others play <sport> with you?
         Who plays <sport> with you?
         Does your dad play <sport> with you?
         Does your mom play <sport> with you?
         Does your brother/sister play <sport> with you?
         Do your friends play <sport> with you?

   Do you play other sports?
   (yes) What other sports do you play?
      How often do you play <other sport>?
**Complexity**

b. Why is your favorite sport, team, player? 
   or
   Why do you like favorite sport, team, player more than other sports, teams, players?

*If child indicates that they like multiple sports during earlier questioning (§2), probe into other sports.*

Besides favorite sport, you told me you also liked other sport(s). Why do you like other sport(s)?

**Volition**

c. Would you like to go to a favorite sport game or to a other sport game?
   *If you could go to either a favorite sport game, or a other sport game, which would you go to?*

*At this point favorite sport has been identified; probe into why other sports may not be liked as well.*

You told me that favorite sport was your favorite sport. Could you tell me why you don’t like other sport(s) as much as you like favorite sport? If reasoning repeats from earlier answers, may help identify level of cognitive development (ie. complexity of ideas)

**Behavior**

d. Do you watch sport, team, player on TV?
   (1) How often do you watch favorite sport, team, player on TV?
   (2) Do others watch favorite sport, team, player with you?
      (yes) Who watches favorite sport, team, player with you?
   (3) Do you remember any commercials with favorite sport players? 
      or
      Have you seen any commercials with favorite sport players? 
      Do you remember which players were in the commercials? 
      Do you remember what the commercial was about?

e. Do you go to see favorite sport, team, player?
   (1) How often do you go see favorite sport, team, player?
   (2) Does anyone go with you to see favorite sport, team, player?
      (yes) Who goes to see favorite sport, team, player with you?
f. Do you talk to others about <favorite sport, team, player>?
   (yes) Who do you talk to about <favorite sport, team, player>?
   (1) How often do you talk about <favorite sport, team, player>?

g. Do you read about <favorite sport, team, player>?
   (1) Where do you read about <favorite sport, team, player>?
   (2) How often do you read about <favorite sport, team, player>?

Socialization
Note: Conversation with the child will direct which socialization agents to ask about (parents, siblings, peers, etc.). Following questions provide examples to work from.

h. Does your dad like <favorite sport, team, player>?
   Does your dad have a favorite <sport, team, player>?
   Do you know your dad’s favorite <sport, team, player>?
   What/Who is your dad’s favorite <sport, team, player>?

Does your mom like <favorite sport, team, player>?
   Does your mom have a favorite <sport, team, player>?
   Do you know your mom’s favorite <sport, team, player>?
   What/Who is your mom’s favorite <sport, team, player>?

Do you have a brother or a sister?
Does your brother/sister like <favorite sport, team, player>?
   Does your brother/sister have a favorite <sport, team, player>?
   Do you know your brother/sister’s favorite <sport, team, player>?
   What/Who is your brother/sister’s favorite <sport, team, player>?

Do your friends like <favorite sport, team, player>?
   {Does your best friend like <favorite sport, team, player>?
   Do your friends have a favorite <sport, team, player>?
   Do you know your friends’ favorite <sport, team, player>?
   What/Who is your friends’ favorite <sport, team, player>?

Resistance
Note: If child indicates that others like the same <sport, team, player>, ask series of questions to find out strength of attachment.

I. Do you like <favorite sport, team, player> because your dad likes <favorite sport, team, player>?
Would you like <favorite sport, team, player> if your dad liked <other sport, team, player>? 

Do you like <favorite sport, team, player> because your mom likes <favorite sport, team, player>? 
Would you like <favorite sport, team, player> if your mom liked <other sport, team, player>? 

Do you like <favorite sport, team, player> because your brother/sister likes <favorite sport, team, player>? 
Would you like <favorite sport, team, player> if your brother/sister liked <other sport, team, player>? 

Do you like <favorite sport, team, player> because your friends like <favorite sport, team, player>? 
Would you like <favorite sport, team, player> if your friends liked <other sport, team, player>? 

Note: If child indicates a favorite <sport, team, player> that is different from the <sport, team, player> that other socialization agents favor, or as an alternative series to examine resistance, the following questions may be appropriate.

Scenarios

j. Team
If the <favorite team> lost half of their games, would they still be your favorite team? 
If the <favorite team> lost all of their games, would they still be your favorite team? 
If the <favorite team> lost in the championship game, would they still be your favorite team? 
If the <favorite team> moved to another city, would they still be your favorite team? 
If the <favorite team> did not have <star player(s)> would they still be your favorite team? 

k. Player
If <favorite player> was traded to another team, would you still like <favorite player>? 
Would you like <favorite player> if he/she played on another team?
*Sport-Related Products*

1. Do you have a hat/cap with a `<favorite sport/team>` logo on it?

m. Do you have a shirt/jacket with a `<favorite sport/team>` logo on it?

n. Do you have `<sport equipment>` with a `<favorite sport/team>` logo on it?

o. Do you have any `<favorite sport, team, player>` trading cards?
APPENDIX  B

PARENTAL QUESTIONNAIRE
PARENT’S INTEREST IN SPORT

Please answer the following questions by writing in the appropriate answer, or by marking the appropriate answer.

1. What would you say is your favorite sport? ____________________________
   How long has <favorite sport> been your favorite sport? _______________

2. Thinking of your favorite sport, identify your favorite team. _____________
   How long have the <favorite team> been your favorite team? ____________
   Do you watch your favorite team when their games are televise? Yes ___ No ___
   Do you talk with your son or daughter about your favorite team? Yes ___ No ___
   Do you have any clothing or other items with your favorite team’s logo on them? Yes ___ No ___

3. Thinking of your favorite sport, identify your favorite player. ______________
   How long has <favorite player> been your favorite player? ______________

4. What sport(s) do you participate in? _________________________________
   How often do you participate in the sport(s) identified? ________________

5. What would you say is your son’s/daughter’s favorite sport? ______________
   What would you say is your son’s/daughter’s favorite sport to participate in? ______________
   What would you say is your son’s/daughter’s favorite sport to watch? ______________

6. What sport(s) does your son or daughter participate in? ________________

7. On a scale of 0 to 100, please indicate the extent to which you believe you influenced your son’s/daughter’s decision to participate in their favorite sport:

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BIBLIOGRAPHY


