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**Cognitive Development's Effects on the  
Development of Loyalty  
in Sports Fans**

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**Cognitive Development's Effect on the  
Development of Loyalty  
in Sports Fans**

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**Report**

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Development of Loyalty  
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Sport fans develop strong loyalties to their favorite teams, but there has been little research conducted on when this loyalty is formed. Previous research suggests that loyalty can form at very young ages, but it is difficult to classify young children based on age due to their rapid development over short periods of time. This is why it is necessary to use cognitive development stages to classify groups of young subjects in order to accurately group their predictive actions and abilities. Very little research has been done on sport loyalty development, especially using cognitive development as a categorizing tool. It is this report's suggestion that more research must be done on this subject to truly understand the implications of this measurement tool and its effects on the development of loyalty.

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## **Introduction**

Sport teams are brands, but they should not be studied or treated as such. Sports, for some reason, tend to cause individuals to remain loyal past the point they would remain loyal to a normal brand (Conrad, 2006). Because of this, researchers have looked at sports as an anomaly in brand loyalty and have looked at the communities that adopt them in attempts to mimic this intense bond between brand and consumer rarely seen outside of the sport realm.

Over the past several decades the relations and role of sports in communities around the world have changed (Putnam, 1995). In today's society, sport is a leisure activity people choose to invest spare time in. Sports must compete with other activities and commitments for a place in people's lives, and the best way to remain in an individual's life is to develop loyalty among followers. Loyal followers will not replace sport with other leisure activities, and will dedicate themselves to the sport, team, or player they form a loyalty towards, many times long after the initial loyalty began. There are still many die-hard Rams fans in Los Angeles even though the Rams left the LA area in 1994 (Williams, 2012). Fans of defunct sports teams travel long distances to nostalgically reflect on past experiences, showing how loyalty persists even after a sport team moves on (Kulczycki & Hyatt, 2005).

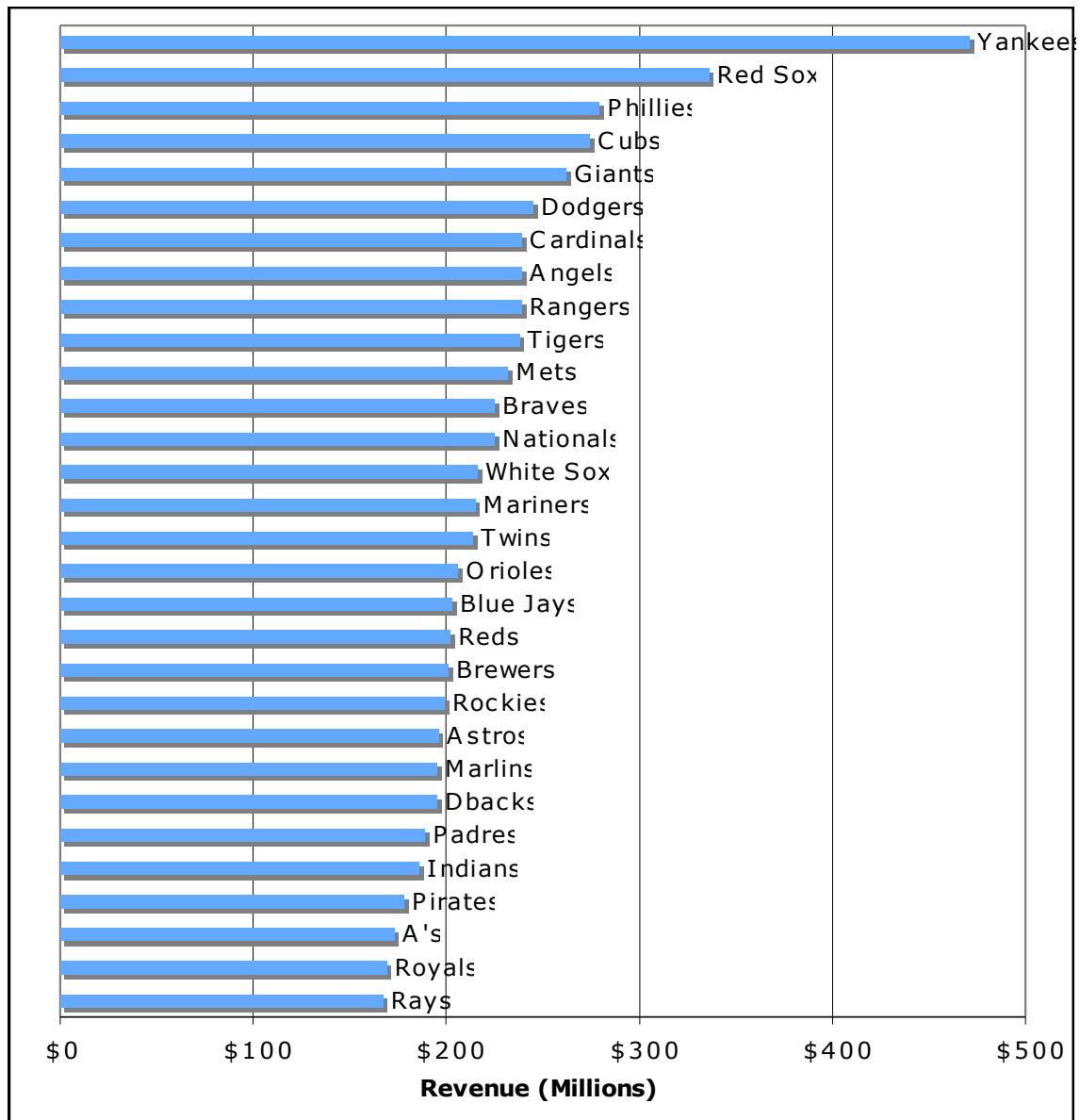
From loyalty comes economic benefit. The Chicago Cubs, who have not won the World Series since 1908, have arguable the most loyal fans in all of Major League Baseball (Shank, 2004). The Cubs know it can cost up to 15 times the amount of money to attract new customers as it does to keep existing ones (Marketing Review Panel, 1990),

and that there is only about a 3:1,000 shot at converting a non-user to a brand (Centennial 1989). Therefore they have focused on retaining customers and building loyalty amongst their fan base. This continued loyalty translates into sold-out games and some of the highest revenues in the MLB (See Figure 1).

The question is no longer if fan loyalty makes a difference; Smith et al (1981) found that individuals who are emotionally involved and attached to a particular sports team are far more likely to repurchase tickets and be fans of the same team longer than individuals who do not have an emotional attachment to a team. The question now is how and when to target consumers in order to develop the greatest amount of loyalty. This report examines literature on the development of loyalty in sport consumers, starting with the question of how loyalty is created and then delving into the question of when individuals develop loyalty. In the study of when loyalty develops, this report focuses on stage development in youth to determine an appropriate time frame for loyalty development.



**Figure 1. Major League Baseball Comparative 2012 Revenues (Data via Forbes.com)**



### **Importance of Value-Creation in Formation of Loyalty**

Loyalty is predicated on a valuable connection between two factors: an individual cannot become loyal to something he or she is not aware of, and awareness alone cannot create a lasting bond between two things. The target object must hold some sort of value for an individual to want to continue to be aware of it. If the target object, say, a local basketball team, is able to create awareness in the community but the community does not see the basketball team as worth its time, no lasting connection forms. Without the lasting connection, no value is created. In order to create this value, loyalty must combine the economics of interactions with the social nuances of human relationships. This is done by studying social capital.

### **Value as Social Capital**

Pierre Bourdieu (1985) defined social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (p. 51). This durable network takes the form of a subculture or community around which the community bonds. A sport’s value may take the form of social capital when the people connected to the sport become a subculture or community in which an individual is a member (Coalter, 2007). Being able to associate with a group bonds like-people together, and these connections create value. While size of a community does not significantly correlate with an increase in social capital (Haley & Magdanz, 2008), the number of interactions does (Putnam, 1993). Therefore, value is created from an increase in interactions. For sports and sport participants, their social capital comes from the

communities surrounding them and those communities' abilities to increase internal interactions.

### **Sports Players' Social Capital**

When communities and followings form around sports teams or players, the members of these groups invest time in maintaining their connections (i.e., value) within the groups. This investment can become less important to an individual as the community loses value over time (Wang et al., In Press; Glaeser et al, 2000). Therefore, the sports teams or players around which these communities form must constantly work to leverage their power to maintain their value in people's lives.

Sports players are especially good examples of how increasing value affects fan loyalty and their relative worth. Kobe Bryant has played 14 seasons in the NBA, all with the Lakers, and is ranked as one of Los Angeles' top athletes of all-time (Glicksman, 2013). His contract was set to expire in 2014, and in 2013 the Los Angeles Lakers assured fans that keeping him was a "top priority" (Shelburne, 2013). He has been the cause of millions of fans remaining loyal to the Lakers over the course of his career. Had Kobe been traded, or not been the unanimous favorite amongst NBA players when asked who they would want to take the last shot with the game on the line, millions of current Lakers would most likely not be Lakers fans at all (Griffin, 2011). Star players have a significant impact on team branding power and increases in loyalty amongst fans of sport teams (Pifer 2012). Kobe's star power is the reason for many fans associating with the Lakers brand, which means Kobe Bryant holds a great deal of social capital. He can use

this social capital to increase his own value as a player and demand more from the Lakers organization as it works to renew his contract.

### **Community Social Capital Capacity**

Individuals gain more social capital as they gain access to more people, so larger communities generate more social capital for members than smaller communities do on average. The communities that people want to associate with are chosen because an individual believes he or she can gain social capital from the community (Colman, 2003). This desire to associate with an organization on the part of fans creates a demand for the organization. In the case of sports, the easiest form of demand to identify is popularity. This concept of popularity causing more people to associate with an organization is also classified as bandwagoning. The community with more members draws more individuals to it naturally because those outsiders see the community is successful and offers them large amounts of social capital.

### **Fan Social Capital and Its Relationship to Loyalty**

Social capital deals with a relationship, and relationships allow both individuals involved to receive the benefits, and occasionally detriments, of the connection. So while Kobe Bryant gains social capital from associating with more and more fans, those fans gain social capital from associating with him. As fans spend more time around a player or organization they will build a connection (Putnam, 1993). This connection is infused with value in the form of social capital, and the more value the fans place on the relationship the greater the loyalty.

The amount of social capital each fan gets out of his or her associations with players and organizations fluctuates as he or she creates or limits the amount of personal overlap and dependence he or she has in that relationship (Putnam, 1995). Fans will vary the amount of social capital they invest in a player or an organization based on the amount of trust they have in the player or organization to benefit them (Baier, 1995).

When a Twitter user tweeted Dwight Howard asking him to come to his high school game, the twitter follower was investing social capital into his connection with Dwight Howard. This is because as the user reaches out to another individual, investment is made in the relationship in the form of potential social gain (Glaeser et al, 2000). Granted, the amount of social capital he invested was most likely low because the user tweeted Dwight Howard. In this interaction there is little to lose: it is well-known that influential users do not normally tweet back to users who tweet them. But when Dwight Howard tweeted him back asking for details, he gained social capital from the interaction. When Dwight Howard actually showed up at the hopeful teen's high school for the game, he gained even more social capital (c.f. Zaldivar, 2013). As fans interact more with athletes with whom they have developed a relationship, be it through in-person communication or through media outlets like Twitter or Facebook, the fans' connections grow stronger, more social capital is invested, and their loyalty and commitment to that player grows (Singh, 2004). Therefore, as social capital is increased through increased interactions, loyalty increases.

While larger communities may be more appealing to individuals, they are not always the ones that create the most social capital. Social capital, meaning an

individual's interactions and social connections, is created only by the individual and the connections he is able to make in a given situation (Putnam, 1993). This is why larger communities are more appealing: they offer the potential for more interactions.

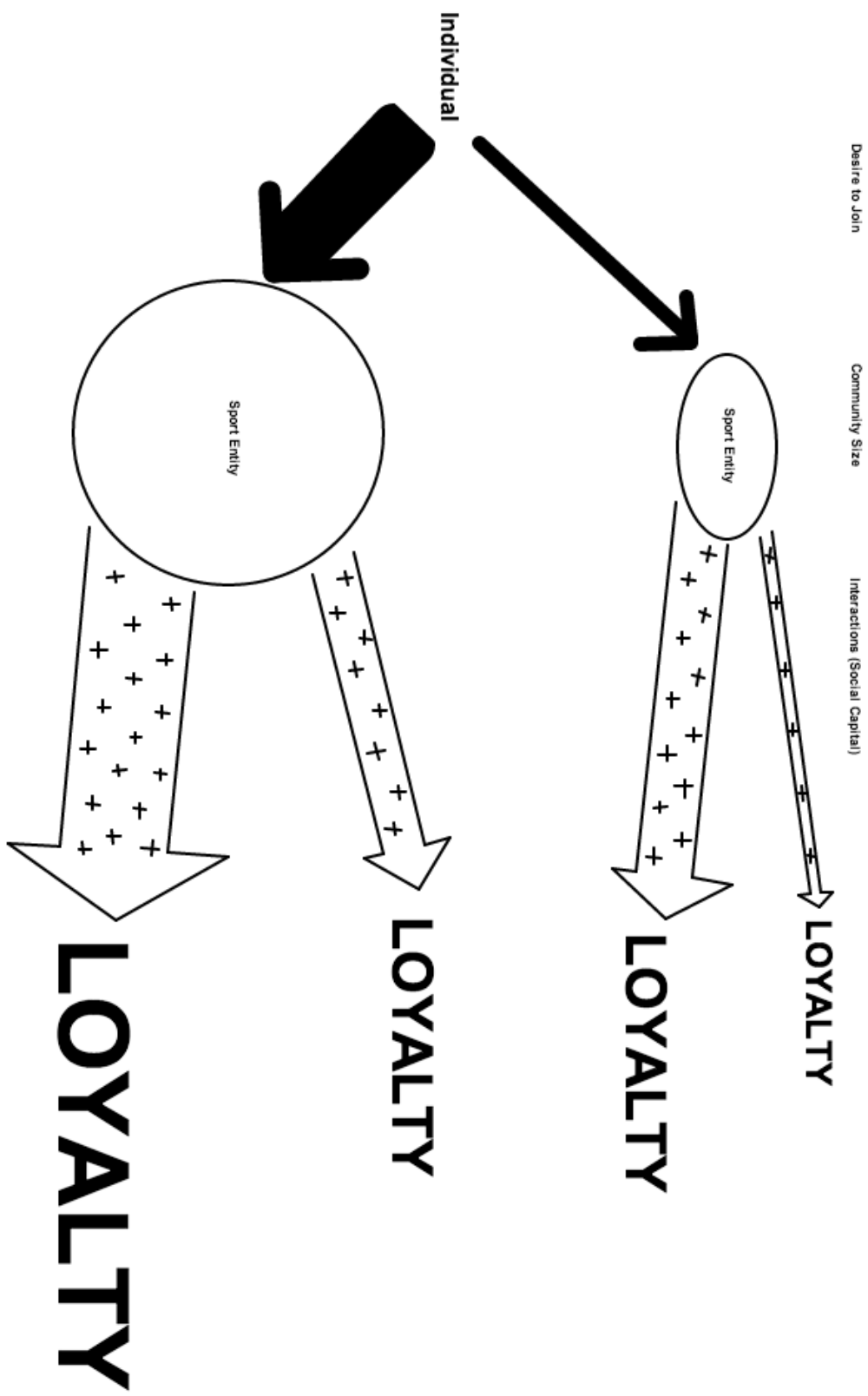
However, it is not always possible for the individual to meet the potential afforded by the large community, making the social capital gained from the larger community fairly small.

Where individuals limit the social capital gained from a large community, it is the size of the community that limits the social capital of the individual when the community is small. There are fewer members in the community, which makes it less appealing to join. However, due to its smaller size, the individuals who do become members tend to feel more involved due to their automatic closer proximity to the nucleus: the sport team or individual the community is centered around. Because of this, it is easier to get access to the athlete, which makes members of this community feel more involved, important, and connected. The more access an individual gets to an athlete, the more social capital he develops (Singh, 2004), leading smaller communities to produce a greater amount of social capital than larger communities relative to size.

The amount of social capital an individual receives reflects the amount of loyalty he or she has to the individual or community from which he or she received that social capital (Putnam, 1995). The more social capital an individual receives from an association with a community, an actual individual, or a team, the more strongly that individual feels about the entity he or she has formed that bond with through the exchange of social capital. As discussed, it can be very complicated to determine the

amount of social capital or loyalty a community, individual, or team can produce. Figure 2 describes the relationship between the individual, his desire to join a community, the amount of social capital he or she is likely to get out of his association with the community, and the resulting amount of loyalty he has to that group.

Figure 2. The Path to Loyalty Through Social Capital





### **Identity's Role in Loyalty**

To truly understand social capital we look to the creation of individual identity, because personal identities are the points from which individuals create value (McCall & Simmons, 1966). A team identity is based on an individual's sense of belonging to a community surrounding a team or a perceived direct connection to a team (Funk & James, 2001). As an individual increases his sense of belonging or perceived connection, his identity with that team or that community will grow stronger, more stable, and more important. The formation of this identity leads to an inability to separate the self from the team, which leads the individual to become and remain loyal. The amount of loyalty created from interactions within a community varies, which means the amount of social capital generated from the community association also varies between individuals (Putnam, 1995). While this variation is caused by many different factors, one of the major causes is the amount an individual identifies with the team or player the community forms around.

People strive to make connections between themselves and other groups through shared beliefs, practices, and preferences (Tajfel & Turner, 1979). These connections form the basis for a collective identity through which an individual connects with other groups that share common characteristics (Ashmore et al, 2004). The more groups that the individual can identify with, the more complex his collective identity becomes and the more connections the individual can make between himself and others, increasing the possible ways he can form connections.

These collective identities are heterogeneous because an individual defines the groups he identifies with differently and holds each group in varying levels of esteem (Deaux et al, 1995). When an individual connects with a team, for example, he is identifying with the culture that exists in the community surrounding the team. He takes pride in associating with others in the same community. People that choose to follow the Los Angeles Lakers, for example, will identify as a fan of the team because they feel the community surrounding the Lakers is a group that they would like to identify with and can gain social capital from (Putnam, 1995). That individual is attempting to define himself in terms of his level of immersion in the group and derives personal value from this connection (Breckler & Greenwald, 1986; Greenwald & Breckler, 1985). The deeper the individual's level of immersion is within a community or to a team, the deeper and more resilient the loyalty to the team he identifies with. The individual then places his identification with that team in an order of importance compared to his identification with other groups (Turner et al, 1987).

A perfect example of the layers of identity an individual can have to a sports team is in a recent Bleacher Report article by Tristan Thornburgh (2013) about two National Football League (NFL) fans. In this article, a New York Giants fan surprises his father, a Cincinnati Bengals fan, with tickets to a Bengals game. The father has been a Bengals fan for 40 years, showing dedication and commitment to a team over a long period of time. He also lives outside of Ohio, showing resiliency in his identity as a Bengals fan outside of the Bengals' geographical market. This resiliency is a sign that he values his identity as a Bengals fan over the social capital he could gain from joining the larger

community following the popular football team in his area, most likely the New York Giants (Ring, 1996). It also shows that, because of his father's strong identification to the Bengals, the son holds the Bengals in higher esteem than most Giants fans, and has ordered the Bengals higher on his list of personal identities than most individuals.

Prior research has shown that the more salient the identification to the group is to the individual, the more difficult it becomes for him to change his loyalty or commitment to that group (Wann & Branscombe, 1990; Murrell & Dietz, 1992; Wann et al, 1995; Heere & James, 2011; Heere et al, 2011). In other words, as an individual's personal identity becomes more in line with the team he supports, it becomes very unlikely the individual will ever support another team. If a team can find a way to make individuals' identification to the team more personally valuable, the team would have a more loyal fan base.

In the case of the Bengals fan and Giants fan, the loyalty of the Bengals fan led to the extraordinary act of a Giants fan exhibiting signs of loyalty to the Bengals organization. By purchasing the tickets and committing to travel to and watch the Bengals game, the Giants fan is signaling to the world that he values his relationships that revolve around football more than the relationships he has revolving around other things in his life. While he and his father have a relationship outside of their football identities, the son decided this identity was so meaningful to his father that he chose to invest in the football identity to exemplify the meaning and importance of his identity as a son. It is clear that the son still values the Giants over the Bengals, expressed through his choice to wear his Giants memorabilia. However, his actions show that he also values the Bengals

because purchases show appreciation and preference for the brand that was purchased (Ravald & Gronroos, 1996). The son gains social capital through his football identification with his own team (Putnam, 1993), but now gains social capital from also identifying with the Bengals because his identity as the son of a Bengals fan is important to him (Leibig & Green, 1999).

The Giants fan, while more loyal to his team, has now developed a secondary loyalty to the Bengals through his relationship with his father. This secondary loyalty may not be as definite as his loyalty to the Giants: it is unclear if the Giants fan will remain partial to the Bengals if his father's loyalty changes. However, seeing that his father has been loyal for 40 years, it is likely the son will remain loyal through his father for the rest of his life (Leibig & Green, 1999). While not as salient, secondary loyalty is still valuable to the team that loyalty is associated with because it increases the likelihood of product purchases as well as other support regardless of team performance (Ravald & Gronroos, 1996).

### **Piaget's Developmental Stage Theory**

Many theories have been posited to address the question of how to create stronger commitments to a team, ranging from integrating more aspects of the brand community into the lives of community members (Schau et al., 2009) to eliciting emotional responses to encourage pro-social behavior within the brand community (Scheff, 1979). The question of when to create stronger commitments to sport brands and athletes, however, has not received a lot of attention to date.

Preferences have been shown to develop very early in life (Bahn, 1986), and strong commitments to a brand made at a young age tend to endure for long periods of time (Guest, 1964) and be stronger than commitments made later in life (Ross & Harradine, 2004). By creating a strong commitment to the brand value is created because that individual becomes a loyal member of the brand community (Muniz, 2001). The question then becomes, how do we determine the best age at which to develop lasting loyalty? Since enduring preferences develop early in life, it would make sense that loyal fans would first and most effectively develop as children. When looking at children, however, it is difficult to form age groups because brain development occurs so quickly. While preferences for adults still change over time, the process of change occurs much more rapidly as a child. Therefore, the best way to classify child age groups is to look at their development level instead of their age. One of the original researchers in this field was Jean Piaget.

Piaget pioneered a unique classification system of developmental stages, commonly referred to as his theory of cognitive development (Piaget, 1970). This theory

breaks down child development based on children's intelligence capabilities.

Specifically, he focused on children's abilities to learn about the world around them. His four stages, summarized in Table 1, are the sensorimotor stage, the pre-operational stage, the concrete operational stage, and post operational (or formal operational) stage.

### **Sensorimotor Stage**

The sensorimotor stage lasts from birth until about two years old. In this stage, children learn about the world by acting upon it. They begin only able to perform reflexive actions such as blinking when something surprises them, but they soon use their senses to increase their ability to perform more complex actions. They will begin to grasp at certain objects, signaling their desire for specific things. They will also start to experiment with objects to see what they can do to them; they gain a mild understanding of cause and effect: when they do something, something else happens.

The greatest achievement in the sensorimotor stage, according to Piaget, is the development of an understanding of object permanence. This is when a child comprehends the fact that objects continue to exist even when the child cannot hear or see it. A prime test for this ability is the child's game of Peek-a-Boo. Children still in the sensorimotor stage of cognitive development will find this game extremely entertaining because they do not comprehend that, when the face is behind the hands, the face still exists.

### **Pre-Operational Stage**

The pre-operational stage of cognitive development lasts from the point at which a child learns to speak until around age seven. In this stage, Piaget notes that children do

not yet understand concrete logic and cannot yet manipulate information. They will increase their play, but will be unable to see things from others' points of view. They are also unable to perform tasks mentally as opposed to physically. This would mean a child in the pre-operational stage would be able to turn a cube to see the opposite faces, but would be unable to picture what the opposite faces of that cube would look like in his or her mind.

An easy way to test if a child is in the pre-operational stage is to perform Piaget & Inhelder's (1956) Three Mountain Task. In this task, three different sized and colored mountains each with different features are shown to a child from all angles. The child is placed on one side of the mountains, and a doll is placed facing the mountains from a different side. The child is then asked what the doll sees from its point of view. Children in the pre-operational stage will not be able to comprehend what the doll sees because at this stage they are still egocentric thinkers (Piaget & Inhelder, 1956).

### **Concrete Operational Stage**

The concrete operational stage occurs between the ages of around seven and eleven, from the acquisition of the ability to understand conservation (e.g., that two columns of 5 quarters, no matter how spread out, are equal) to just before the ability to deductively reason through problems. Children in this stage will be able to perform such tasks as classification and reversibility. Classification is the ability to name and sort objects according to the objects' characteristics (i.e. size, color, groupings), and reversibility involves the child's ability to comprehend that things can be changed and changed back (e.g. a ball of clay can be flattened and molded back into a ball again).

There are many ways to test if a child is in the concrete operational stage of cognitive development, but the key to the test is the child's justification (Karplus & Lavatelli, 2010). One of the common tests used to determine whether a child is in the concrete operational stage is the test using different shaped glasses. In this test, a child is shown two identical glasses of water with the same amount of water in each. When one glass of water is poured into a taller, thinner glass, children in the pre-operational stage will say the taller, thinner glass now holds more water, while children in the concrete operational stage will say they are still the same amount. When asked to explain why the two differently-shaped glasses still contain the same amount of water as each other, a child in the concrete operational stage would be able to explain why the mass was conserved while the shape of the glass changed and now the water levels are different.

### **Post Operational Stage**

In the post operational stage, which stretches from adolescence into adulthood, children begin to use deductive reasoning and abstract thought. They are able to think about what could happen instead of being limited to what happens. Problem solving now involves hypothetical situations and reasoning through problems in a child's own head instead of having to write it down and reason it out concretely.

Piaget used a pendulum to test whether children had the ability to think scientifically and consider multiple variables, proving entrance into the post-operational or formal stage of cognitive development. Children are given strings of different length, weights of different weights, told to drop the weights from different heights, and then asked to determine what causes the rate of the swinging to vary. Children with the ability



to scientifically and deductively reason will be able to grasp the idea all three variables affect the rate of swinging.

### **Loyalty Development in Terms of Piaget's Stages**

These four stages of cognitive development make it easier for researchers to look at children and determine where there might be significant differences in abilities to form loyal bonds. Due to the fact abilities differ between individuals, using age to group them would not create reliable data. One seven year-old may be able to perform the Three Mountain Task, while another may not be able to comprehend the doll's point of view just yet. By grouping children based on their cognitive abilities researchers can determine whether a certain grouping is developmentally able to comprehend the idea of loyalty to a product or person.

In Bahn's (1986) study, the developmental stage of children was used to group subjects to see if cognitive development could determine differences in abilities to discriminate between brands. He found that, using Piaget's (1970) cognitive developmental stage theory, children at the preoperational stage of cognitive development (ages 2-7) had distinct cereal and beverage preferences but that the preferences were not resistant to change like children in the concrete operational stage (ages 7-12). This meant that, although preoperational children developed brand preferences, they were unable to develop lasting brand loyalty.

James (2001) used Bahn's idea of cognitive development having an effect on brand loyalty and applied it to sports teams. His findings suggested that preoperational and concrete operational children were both able to show cognitive complexity,

resistance to change, and volition in their team loyalty. This is significant because it shows that the age at which loyalty can first form is at the beginning of the preoperational stage of cognitive development, which is around age two. This, however, contradicts what Bahn found in his 1986 study. Since these are the only studies that have looked at loyalty using cognitive development as a segmenting strategy, we cannot be sure whose work to trust.

**Table 1. Jean Piaget's Stage Development Theory**

	<u>Sensorimotor</u> Development	→ Preoperational Thought	→ Concrete Operations	→ Formal Operations
Skill Mastered	--	Object Permanence	Loss of Egocentrism, Conservation	Deductive Reasoning, Abstract Thought
Major Skill Not Yet Mastered	Object Permanence	Loss of Egocentrism, Conservation	Deductive Reasoning, Abstract Thought	--
Test Child Must Pass to Move Out of Stage	Peek-a-Boo	Three Mountain Task	Pendulum Test	--

### **Future Research Using Cognitive Development to Determine Loyalty Development**

While James' (2001) study was groundbreaking in the sport loyalty field, there were many factors limiting the validity of these results. The sample size for his study was relatively small, which could have caused his results to show findings not representative of the population. The wording James used seemed to not connect with the young children. It is possible the young subjects were not able to comprehend James' meaning, invalidating his findings. Had James used a larger sample and made the wording reflect the cognitive level of his subjects he may have found, as Bahn found in 1986, that children at the preoperational level of cognitive development were mentally incapable of developing lasting loyalty to a sport team.

While limiting, this study is the most recent and most significant research on the development of loyalty in terms of the advancement of intellectual and cognitive capabilities of children. Seeing how helpful it is to look at children from a cognitive development perspective instead of age, it is surprising that no one has done research on this subject since 2001. With the limitations to James' (2001) study and the fact that Bahn's (1986) study was not done on sports or sport fans, further research is needed to truly understand the effects of cognitive development segmentation on our understanding of the development of loyalty. It remains to be seen if James' (2001) work can be repeated with a study designed to better capture the cognitive abilities of young subjects, and improvements to his methods may show that he was looking at the wrong stages of development altogether. It is possible that James overlooked the significance of the formal operational stage's ability to think abstractly and critically, which may prove

necessary when explaining their loyalty to a team. It may also be simpler than that, and may be a human instinct to cling to preferences formed before the ability to explain them is learned. It will be necessary to develop a way to detect loyalty before this level of research can be conducted.

More research can be done on the effects of cognitive development level on not just fan loyalty, but on many different subjects. When thinking about how this data can be applied to other fields, family relations come to mind. It may be interesting to study adoptions and how the developmental stage of the child at the time he or she was adopted affects their ability to accept the new parents as their own. This type of classification system can be very beneficial when doing any studies with subjects under the age of 18.

When looking at loyalty, cognitive development classifications can help us better understand when the optimal time is to form lasting bonds to a brand like a sports team or athlete. It may change the face of product and brand marketing as we know it. If a window of time exists early in cognitive development where loyalty can form, grow, and become almost irreversible, companies would target this segment alone to all but ensure the success of the company into the next generation. With very few companies able to maintain progress beyond a decade, this would allow businesses to focus less on keeping customers and more on improving products. Making consumers a non-issue by ensuring their loyalty at a young age could change the way the world sees consumers in general. The key, now, is to find the window where this loyalty formation exists.

To truly understand the implications of cognitive development on loyalty there is a need for more research done on the formation of lasting loyalty to a brand or sport, how

this forms, and what factors affect the formation process. Once we know the implications of cognitive development on loyalty formation, we may be able to solve the complex psychological and economic puzzle of how loyalty can be created and maintained over a lifetime with minimal defection and maximum returns.

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