“The impact of birth order upon consumers' decision-making, buying, and post-purchase processes: a conceptualization”

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The impact of birth order upon consumers' decision-making, buying, and post-purchase processes: a conceptualization

Abstract

Numerous studies have investigated birth order and its effect upon the development of an individual's personality and behavior patterns. Although some contradictory results have emerged, there is a general body of knowledge. Of particular interest are those findings that support a conceptual link between birth order and consumer behavior. After reviewing relevant portions of the literature, the author conceptualizes the impact of birth order upon consumers' decision-making, buying, and post-purchase processes. The topics of adopter categories and product life cycle are also incorporated. Marketing mix implications are interwoven throughout the discussion, which could benefit goods manufacturers, service providers, retailers, sales managers and salespeople, advertisers and advertising agencies, product and brand managers, website developers, media planners, package designers, and social media managers, to name a few.

Keywords: birth order, ordinal position, consumer behavior, consumer decision process, adopter categories, product life cycle.

Introduction

Numerous studies have investigated the order in which one is born in the family (i.e., ordinal position) and the effect such a position may have upon the development of an individual's personality and behavior patterns. Although some contradictory results have emerged, there is a general body of knowledge. Of particular interest are those findings that seem to support a conceptual link between birth order and consumer behavior, which several researchers have recognized (Kirchner, 1971; Rink, 1972; Claxton, 1995; Zemanek et al., 2000; Saad et al., 2005).

The purpose of this paper is to conceptualize the impact of birth order upon consumers' decision-making, buying, and post-purchase processes. After reviewing relevant portions of the literature, the author posits how first-born and later-born will likely behave in each stage of the decision process as a result of different personality and behavior patterns. The topics of adopter categories and product life cycle are also incorporated. Marketing mix implications are interwoven throughout the discussion.

1. Selected review of birth order literature

Birth order is one of several major variables that greatly influences parents' expectations of their children. In turn, it has an impact upon the formation of the child's personality and behavior patterns, which tend to be pseudo-permanent for the rest of the individual's life (Ernst and Angst, 1983; Eisenman and Sirgo, l991; Eisenman, 1992; Lester et al., 1992; Sulloway, 1995; Courtiol et al., 2009).

"Birth order is the single most obvious factor that makes the shared family environment different for each sibling. Birth order sums up several variables, not just one. It is a surrogate for differences in age, size, power, and privilege among siblings" (Sulloway, 1995, p. 76).

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With first-born, parents tend to overspend affection and attention in order to atone for their lack of experience. Parents' actions are more inconsistent toward the initial child. Displaying their own fears of inadequacy through cautious, overprotective, and inconsistent behavior, the child's dependence needs are frustrated by the parents. The result is a dependent, anxious, and cautious first-born child. Because first-born lack a reference point for evaluating their emotional state, they will seek to affiliate with others when anxious. First-born, therefore, use a process of social comparison to achieve a basis for self-evaluation (Schachter, 1959). Research has confirmed that under stressful situations, first-born want to be with others (Warren, 1966; Joubert, 1990), especially others older than themselves (Salmon and Daly, 1998).

1.1. Antecedent variables. Birth order will produce various types of personalities due to different environmental situations. Three important determinants are parents' expectations and future aspirations, family structure, and sibling relationships.

1.1.1. Parents' expectations and future aspirations. Because first-born have greater access to their parents than later-born, they are more sensitive to parents' expectations. As a result, first-born are likely to be more adult-oriented, dependent, and serious. Later-born, on the other hand, tend to be more peer-oriented, easy-going, friendly, and independent (Sulloway, 1996; Salmon and Daly, 1998; Paulhus et al., 1999; Rohde et al., 2003; Healey and Ellis, 2007).

Parental objectives and goals concerning the child's future have a particular influence on first-born. Lacking a point of comparison on which to base their own expectations, parents tend to overestimate the first-born's abilities. Perceived to be key to parents' future expectations, first-born are subjected to more accelerated role playing and training, motivated to achieve social position, expected to take the dominate role in family interaction, and compelled

to be more responsible and achievement-oriented than their later-born counterparts (Sampson, 1965; Harris and Morrow, 1992; Sulloway, 1996; Rohde et al., 2003; Hertwig et al., 2007).

1.1.2. Family structure. Additional variables affecting parents' attitudes toward a new child are the existing family configuration and gender of the new child. It has been found that a new male child is more favorably received by parents, especially mothers, who already have a girl than those whose first-born was a male. Also, mothers are likely to be more affectionate toward female children than their male equivalents. Variations with respect to affection and discipline, therefore, are dependent on the child's gender as well as family configuration (Angira, 1990).

Family size, role relationships, and authority structure represent additional factors modifying the effect of birth order. Role differentiation, based upon age, gender, and birth order, tends to increase as family size increases. The larger family is also distinguished by lesser emotional intensity, more insistence on organization, greater centralization of command, more emphasis on conformity and cooperation, and a shifting of the disciplinarian function from father to mother (Sampson, 1965; Sulloway, 1996; Rodgers et al., 2000; Zajonc and Sulloway, 2007).

1.1.3. Sibling relationships. Another important determinant is sibling relationships. Lacking a sibling model, first-born can only identify with and receive feedback from their parents. Consequently, first-born tend to possess low self-esteem. On the other hand, later-born can use first-born (and their parents) as a model with whom to identify. By observing their older sibling, later-born tend to develop greater self-reliance (Ernst and Angst, 1983; Burden and Perkins, 1987; Rowe et al., 1992; Sulloway, 1996; Mock and Parker, 1998; Sulloway, 2010). "Sibling diversity is testimony to the powerful role that the environment plays in personality development" (Sulloway, 1996, p. 118).

1.2. Selected dependent variables. Many dependent variables can be associated with birth order research to examine behavioral differences between first-born and later-born. Only those dependent variables corresponding most closely with consumer behavior will be highlighted. Table 1 summarizes the major distinguishing characteristics between first-born and later-born.

1.2.1. Risk-taking. Later-born tend to take more extreme risks and are more likely to pursue high-risk activities (e.g., football and skydiving) than first-born (Phillips et al., 1990; Sulloway, 1996; Jefferson et al., 1998; Paulhus et al., 1999; Rohde et al., 2003; Wang et al., 2009; Sulloway and Zweigenhaft, 2010). In a well-designed experiment involving an anonymous investment game among 510 French university students (none of whom were related), later-born participants demonstrated significantly more risk-taking behavior than first-born (Courtiol et al., 2009).

1.2.2. Cooperativeness and trustfulness. Later-born are more likely to exhibit cooperativeness and trustfulness than first-born (Sulloway, 1996). In the previously cited experiment involving an anonymous investment game, later-born university students displayed significantly more cooperation, trust, and generosity in exchanging monetary rewards than their first-born colleagues. Birth order was found to be a better predictor of cooperativeness than age, gender, income, or religion. These results represent some of the first experimental evidence that birth order differences established within the family can persist in adult behavior (Courtiol et al., 2009).

1.2.3. Openness to innovations. In general, later-born are more open to innovations, even major ones, than first-born (Sulloway, 1996; Jefferson et al., 1998; Healey and Ellis, 2007). One researcher discovered while later-born consistently supported "radical" innovations (e.g., Darwinism), first-born supported "only those scientific innovations that were highly technical or that entail distinctly 'conservative' ideological implications" (Sulloway, 1995, p. 74).

1.2.4. Assertiveness and aggression. There is a general tendency among first-born to be more assertive and aggressive than later-born (Sulloway, 1996; Jefferson et al., 1998; Paulhus et al., 1999; Rohde et al., 2003).

Table 1. Major distinguishing characteristics between first-born and later-born individuals

First-born	Later-born
Adult-oriented Identify with parents	Peer-oriented
Dependent	Independent Self-reliant
Low self-esteem	High self-esteem
Conforming	Rebellious
Serious Achievement-oriented Success-oriented Status-conscious	Easy-going Agreeable Friendly Sociable
Anxious Stressed Affiliate with others when anxious or stressed, especially "older" others	Accepted by others Popular Empathize well
Take less extreme risks Cautious	Take extreme risks
Assertive Aggressive	Cooperative Trustful
Prefer status quo	Open to innovations, even major ones
Traditional	Unconventional
Conservative	Liberal
Organized Responsible	Diversity of interests

Note: Confounding variables include age spacing among children, existing family configuration, age of new child, role relationships, authority structure, family size, and gender of new child.

1.2.5. Conformity and conscientiousness. Researchers have consistently found first-born to be more conforming than later-born (Sampson, 1965; Eckstein, 1983; Ernst and Angst, 1983; Burden and Perkins, 1987; Stewart and Stewart, 1995; Sulloway, 1996; Zajonc and Mullally, 1997). First-born also tend to be more responsible and organized than their younger siblings (Sulloway, 1996; Jefferson et al., 1998; Paulhus et al., 1999; Rohde et al., 2003; Healey and Ellis, 2007).

1.2.6. Sociability and social acceptance. In general, later-born are more sociable, outgoing, popular, and accepted by their peers than first-born (Eckstein and Driscoll, 1983; Fullerton et al., 1989; Paulhus et al., 1999). Later-born also seem to have an easier time making and keeping friends than their older siblings (Steelman and Powell, 1985).

1.2.7. Social and intellectual achievement, eminence, and fame. First-born tend to be more achievement- and success-oriented as well as status-conscious than later-born. Researchers have consistently found first-born are more likely to attain social and intellectual achievement, eminence, and fame than their younger counterparts (Sampson, 1965; Marjoribanks, 1989; Terry, 1989; Cherian, 1990; Wilson et al., 1990; Retherford and Sewell, 1991; Sulloway, 1995; Davis, 1997; Simonton, 2008). Some investigators have shown this is only true for small families, and if the first-born is either an only child or has a younger brother; otherwise, in large families, the youngest child is more apt to achieve eminence and fame (Feldman and Goldsmith, l986; Hudson, 1990; Stewart, 1991).

1.2.8. Empathy and identification. In general, later-born tend to empathize and identify more with individuals who are experiencing anxiety or stress than their first-born complements (Sampson, 1965; Vicente, 1983; Sulloway, 1995).

2. Conceptual application of birth order to consumers' decision-making, buying, and post-purchase processes

Having summarized the findings of relevant studies, the author will conceptually relate birth order to consumers' decision-making, buying, and post-purchase processes. The topics of adopter categories and product life cycle will also be incorporated. Implications for the marketing mix will be integrated throughout the discussion.

2.1. Consumer decision process. In analyzing the consumer decision process, five stages will be delineated: problem recognition, information search, alternative evaluation, purchase, and postpurchase processes (Hawkins and Mothersbaugh, 2010). Birth order will be applied to each stage of the consumer decision process, and marketing mix implications will be discussed. Table 2 summarizes the major points of this Section.

A problem is recognized by the consumer whenever there is an imbalance between his or her desired state and actual state of affairs. This disparity creates a state of tension or anxiety within the consumer. Given this condition of anxiety, first-born will tend to affiliate with other individuals (Jobert, 1990), especially ones older than themselves (Salmon and Daly, 1998), in this and subsequent stages of the decision process. They use this social comparison as a basis for self-evaluation, because first-born are less self-reliant. Later-born, on the other hand, are able to handle the tension themselves as they tend to be independent and more confident (Rowe et al., 1992; Sulloway, 1996; Mock and Parker, 1998). They also empathize better and identify more with others who are experiencing stressful situations (e.g., emergency buying) (Vicente, 1983; Sulloway, 1995), because later-born tend to be more peer-oriented.

Having acknowledged a problem, the consumer may or may not solicit information relative to alternative solutions. Since first-born typically take less risks (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009) and have a lower self-concept (Rowe et al., 1992; Sulloway, 1996; Mock and Parker, 1998), they are more apt to seek information concerning possible problem-solving solutions than later-born. Further, first-born will probably use a wider variety of different sources of information (e.g., websites, mass media, salespeople, advertisements, social media, etc.) to ascertain feasible alternatives (McClelland and Winter, 1969). These information sources should probably be, or at least appear to be, "older" in orientation than the first-born consumer, because they tend to affiliate with others older than themselves when anxious (Salmon and Daly, 1998). Otherwise, they will likely ignore the source. First-born will be particularly receptive to salespeople, opinion leaders, or any personal selling technique that incorporates human beings (Kirchner, 1971; Sulloway, 1996; Saad et al., 2005), especially ones "older" than themselves (Salmon and Daly, 1998).

If later-born search for information, which could occur in a situation where either they know very little about some product or the purchase is a major one (e.g., house), they will be more apt to seek product information from only a few individual sources, primarily peer-oriented ones (Kirchner, 1971; Sulloway, 1996; Saad et al., 2005). Being independent, later-born will more than likely weigh the facts and information personally, irrespective of influences from the outside world (Kirchner, 1971; Sulloway, 1996; Saad et al., 2005).

After recognizing a problem, and perhaps seeking information concerning possible alternatives, the consumer may or may not assess alternative problem-solving solutions. Because of their over-cautious, risk-averse, and more serious orientation (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al.,

2009), it is highly probable first-born will engage in an extensive evaluation of alternative solutions (McClelland and Winter, 1969). The rationale behind this conclusion is: first-born are more achievement-oriented as well as social- and status-conscious (Sulloway, 1995; Sulloway, 1996; Davis, 1997; Rohde et al., 2003; Hertwig et al., 2007; Simonton, 2008). On the other hand, later-born will probably do very little, if any, alternative evaluation; they tend to be more self-reliant, independent, and risk-oriented as well as possess a higher self-esteem (Rowe et al., 1992; Sulloway, 1996; Mock and Parker, 1998; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009).

Table 2. Birth order and the consumer decision process

Stage	First-born	Later-born
Problem recognition	Unsure; anxiety causes affiliation with others who are "older"	Confident; operate independently
Information search	Seek information from adult-oriented sources, especially "older" ones; consult many, varied sources of information	Seek information from peer-oriented sources; consult a few sources of information
Alternative evaluation	Do extensive amount	Engage in little, if any
Purchase	Buy national brands; retail stores, websites, products, ads, salespeople, etc., should project image of social status, achievement, conservatism, etc.; salespeople, etc. should be "older", as first-born prefer to affilitate with "older" others when anxious; assertive or aggressive behavior is possible, so company personnel should be trained in techniques for handling such behavior	Buy private brands; retail stores, websites, products, advertisements, salespersons, etc., should project image of independence, peer-orientation, high esteem, friendliness, etc.
Post-purchase processes	Require positive confirmation that purchase was correct decision; need is immediate; if not satisfied, product brand or firm may be discarded; post-purchase dissonance likely, leading to anxiety, which triggers affiliation; salespeople, etc., should be "older", as first-born prefer to affiliate with "older" others when anxious; assertive or aggressive behavior is likely, if sufficient positive personal affirmation for purchase is not promptly provided, so company personnel should be trained in techniques for handling such behavior	Do not avidly seek confirmation, although some may be necessary (e.g., from a peer)

The purchase stage represents the effects of customer interaction with various aspects of a company's website or a retail store's environment (e.g., breadth and depth of product assortment, store layout, prices, advertising, and salespeople). The type of firm website or store frequented by later-born would likely be one that reflected their sociability, high self-concept, independence, friendliness, and peer-orientation (Fullerton et al., 1989; Sulloway, 1996; Paulhus et al., 1999). First-born, however, would probably patronize company websites or retail stores projecting an image of high achievement, social prominence, and conservatism (Sulloway, 1995; Sulloway, 1996; Davis, 1997; Rohde et al., 2003; Hertwig et al., 2007; Simonton, 2008). For the firm to be successful, the other elements of the marketing mix (i.e., price, promotion, and product) would have to reinforce this differential place image relative to birth order.

If the company website or retail store had a poor product assortment, did not carry a desired brand, or ran out of the wanted item, it should have on-line customer service representatives or salespeople available, who are capable of handling the affiliative needs of first-born under such stress-producing conditions (Jobert, 1990). Also, if possible, these personnel should be, or at least appear to be, "older" than first-born customers, who prefer to affiliate with others older than themselves when anxious (Salmon and Daily, 1998). This need would not be as great with later-born customers. In addition, customer service representatives and salespersons should be trained in procedures for effectively dealing with assertiveness and/or aggression, as first-born are likely to exhibit these behaviors when anxious (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003). The buyers of private brand products would more than likely be later-born. Since first-born are status-seekers and risk averse (Sulloway, 1995; Sulloway, 1996; Davis, 1997; Paulhus et al., 1999; Rohde et al., 2003; Hertwig et al., 2007; Simonton, 2008; Courtiol et al., 2009), they probably would not purchase private brand items, as these would be perceived as being lower in status and quality than national brands.

The last stage of the consumer decision process deals with post-purchase dissonance. Although present in differing degrees in almost all purchases, dissonance will vary in magnitude, depending upon the customer's birth order. The lack of a high self-concept (Rowe et al., 1992; Sulloway, 1996; Mock and Parker, 1998) would be apt to propel first-born into a highly dissonant (or anxious) state, which, in turn, would trigger their affiliative needs (Jobert, 1990; Salmon and Daly, 1988). At this point, it is somewhat crucial first-born find positive confirmation for their purchase. First-born will be very receptive to such messages. Their need for affiliation and acceptance are substantial; if not satisfied, first-born may discard the product brand and/or firm. It would be better if

this affirmation were communicated by a personal source (e.g., salesperson who serviced this customer) in a face-to-face atmosphere (Kirchner, 1971; Sulloway, 1996; Saad et al., 2005). However, if not possible, the store should at least provide real-time, on-line conferencing access to the salesperson. In either case, it is preferable the store's source be, or at least appear to be, "older" than first-born customers, who tend to affiliate with others older than themselves when anxious (Salmon and Daly, 1998). Again, company personnel should be trained in techniques for effectively handling assertive and/or aggressive behavior from first-born customers (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003), which is likely to occur if they do not receive prompt, personal, and sufficient confirmation of their purchase.

On the other hand, later-born probably would experience little, if any, post-purchase dissonance. Having made the purchase decision somewhat independently and at a higher risk level (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009), they would be less apt to avidly seek affirmation of their purchase. Although later-born might ask for acceptance from another (e.g., a peer), this confirmation would likely not be critical for dissonance reduction.

2.2. Adopter categories and product life cycle. In this Section, birth order will be related to an integrated model comprising adopter categories and product life cycle (PLC). Before doing so, the major points of each concept will be summarized.

The PLC represents the unit sales for a product, extending from the time it is first placed on the market until it is later removed. Most academicians suggest four PLC stages (e.g., Evans and Berman, 2009); however, the author will assume five phases – introduction, growth, maturity, saturation, and decline. In the *introduction* phase, unit sales are very low since consumers are unaware of the new product. As advertising acquaints consumers with the new item, and they buy it, unit sales will increase. When unit sales increase rapidly, the product has attained the *growth* phase. Once sales volume increases but at a decreasing rate, the product is in the *maturity* phase. After the product has reached most of the mass market, unit sales will reach a plateau and begin to taper off slightly. This is the *saturation* phase. When sales volume starts to decrease rapidly, the product is in the *decline* phase.

Regarding the adoption process, individuals differ significantly in their desire and willingness to try something brand new. Some people purchase innovations immediately, others a bit later, and some much later, if at all. Rogers (1962) hypothesized there were five groups in terms of relative earliness of adopting an innovation: innovators, early adopters, early majority, late majority, and laggards. He also characterized the ideational values of these five categories, which are summarized in Table 3.

Table 3. Characteristics of Rogers' five adopter categories

Adopter category	Major value and other characteristics
Innovators	Major: Venturesomeness Other: ♦ Risk-takers ♦ Innovation enthusiasts ♦ Younger, better educated than other groups ♦ Have many contacts outside their group ♦ Rely on impersonal and scientific information sources, rather than salespeople
Early adopters	Major: Respect Other: ♦ Opinion leaders ♦ Formally elected leaders of organizations ♦ Adopt new ideas early but, with discretion ♦ Rely on salespeople and mass media for information ♦ Have fewer contacts outside their group than innovators ♦ More creative and younger than later groups
Early majority	Major: Deliberateness Other: ♦ Informal leaders ♦ Pragmatists ♦ Adopt new ideas before average person does ♦ Have great deal of contact with mass media, opinion leaders, and salespeople
Late majority	Major: Skepticism Other: ♦ Followers ♦ Conservative ♦ Risk averse, cautious ♦ Do not adopt innovations until majority of others have ♦ Rely on late adopters for info instead of mass media and salespeople
Laggards	Major: Tradition Other: ♦ Prefer status quo ♦ Older, less educated, poorer than other groups ♦ Isolated physically or psychologically ♦ Suspicious of innovations until they become traditions ♦ Main source of information is other laggards

Source: Adapted from Rogers (1962); Kotler and Keller (2009); and Perreault et al. (2009).

The adoption process can be "represented as following a normal … distribution (Rogers, 1962, pp. 156-157) when plotted over time. After a slow start, an increasing number of people adopt the innovation, the number reaches a peak, and then it diminishes as fewer individuals remain in the nonadopter category" (Kotler, 1972, p. 508).

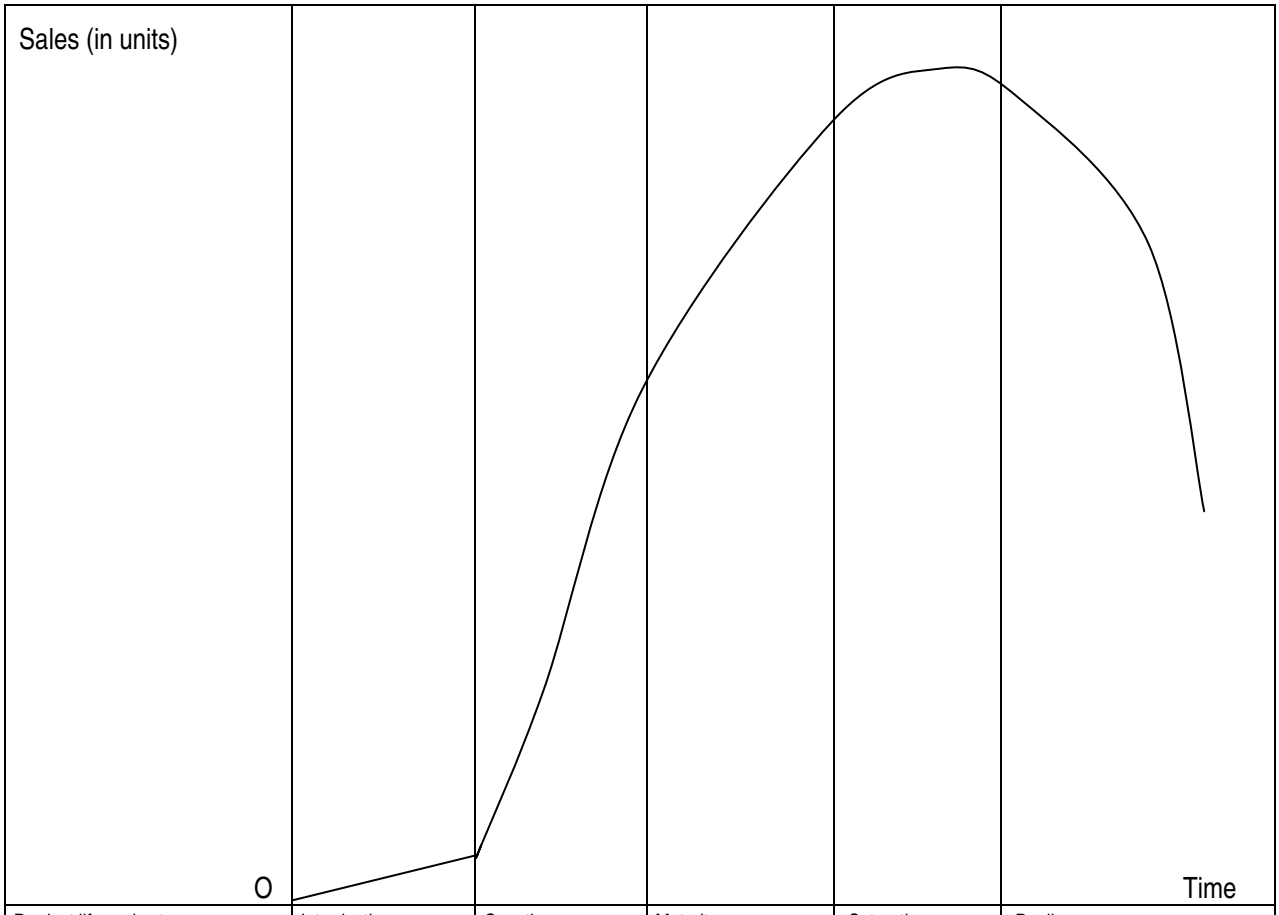
The above quote and the fact the PLC may also be approximated by a bell-shaped curve (Perreault et al., 2009) provide the theoretical rationale for integrating adopter categories and PLC stages (Figure 1). On the basis of risk orientation and degree of self-reliance, the attributes of Rogers' five adopter classes seem to indicate the assignment of birth order group for each PLC stage shown in Table 4.

Table 4. Assignment of birth order group to adopter category by PLC stage

PLC stage	Adopter category	Birth order group
Introduction	Innovators	Later-born
Growth	Early adopters	Later-born
Maturity	Early majority	Later-born (possibly first-born)
Saturation	Late majority	First-born
Decline	Laggards	First-born (possibly later-born)

Further examination of the literature, however, reveals anxiety/stress, desire for leadership, and affiliative needs are equally important discriminating variables in this categorization of birth order groups in terms of purchasing behavior.

In the absence of anxiety or under less stressful conditions, first-born might be leaders or initiators of action, and therefore, innovators. The explanation for this conclusion lies in first-born's higher achievement and status needs (Sulloway, 1995; Sulloway, 1996; Davis, 1997; Rohde et al., 2003; Hertwig et al., 2007; Simonton, 2008). Contrary to Rogers' characterization of innovators (Table 3), first-born are not apt to be risk-takers (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009). However, later-born tend to take extreme risks (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009), so they could be innovators, even under stressful situations. For different reasons, therefore, both first-born and later-born could be innovators, and purchase a new product during its introduction stage.



Product life cycle stage		Introduction	Growth	Maturity	Saturation	Decline
Adopter category		Innovators	Early adopters	Early majority	Late majority	Laggards
Likely purchase behavior by birth order group	On basis of Tables 3 and 4	Later-born	Later-born	Later-born (possibly first-born)	First-born	First-born (possibly later-born)
	On basis of additional research	If no anxiety, first-born will probably buy		With some or a lot of anxiety, first-born become affiliative. In the former case, they will probably still buy; but, in the latter case, a lot of anxiety could cause them to postpone or avoid purchase until the end of the PLC.		
		Even with stress, later-born will probably buy				A lot of stress may force later-born to turn "hermit" and postpone purchase indefinitely

Fig. 1. Integration of birth order, purchase behavior, adopter categories, and product life cycle

Regardless of birth order, similar conclusions and rationale would likely apply to the next two adopter categories: early adopters and early majority, which consist of opinion leaders and informal leaders, respectively. Research, however, seems to favor first-born under little or no stress in these two classifications. First-born have been found to be over-represented in formal leader positions (Eckstein and Driscoll, 1983; Hudson, 1990; Stewart, 1991). Although both birth positions could be present in these two adopter categories, it appears first-born would probably prevail in the purchasing process during the growth and maturity stages of the PLC. The refuting evidence is later-born tend to be more sociable, friendly, approachable, accepted by peers, cooperative, popular, and trustful than their older siblings (Fullerton et al., 1989; Sulloway, 1996; Paulhus et al., 1999; Courtiol et al., 2009), which seem to be prime qualifications for any leader, whether formally or informally selected.

Rogers' depiction of the last two adopter categories seems to coincide with individuals confronted with stressful situations, irrespective of birth order. That is, because of the affiliative tendencies of first-born under anxious conditions (Jobert, 1990; Salmon and Daly, 1998), they would be apt to postpone purchasing the new product until the saturation stage of the PLC. First-born's tendency to avoid risky ventures (Sulloway, 1996; Paulhus et al., 1999; Rohde et al., 2003; Courtiol et al., 2009) could even cause them to postpone these purchases until the decline phase; in which case, the role of a laggard is assumed. In either case, first-born have undertaken the position of an active follower. However, this last adopter category appears to be the exclusive province of later-born. Under stressful situations, later-born tend to turn inward and withdraw from society (Schachter, 1959). They often assume the role of a social isolationist or hermit (Warren, 1966). If they decide to purchase, later-born may not do so until the decline stage of the PLC. The correspondence between these attributes and Rogers' description of laggards seems to be higher for later-born than first-born.

Summary

This paper presented a conceptualization of the impact of birth order upon consumers' decision-making, buying, and post-purchase processes. Specifically, the author posited how first-born and later-born will behave in each stage of the decision process as a result of their different personality and behavior patterns. The topics of adopter categories and product life cycle were also incorporated. Marketing mix implications were interwoven throughout the discussion; hopefully, these will benefit goods manufacturers, service providers, retailers, sales managers and salespeople, advertisers and advertising agencies, product and brand managers, website developers, media planners, package designers, and social media managers, to name a few.

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