

Research Paper

Explore The Relationship Between Birth Order and Level of Differentiation of Self

Ruchika Jain^{1*}, Scott Sibley²

ABSTRACT

Family systems theory plays a primary role in the clinical development of family therapy. This study was conducted to explore the relationship between the variables, level of differentiation of self, and birth order. The researcher wanted to understand and explore the applicability of family systems theory in collectivistic cultures like India. Data from 136 participants from India, aged 18-29 was collected. DSI(R), a self-reporting questionnaire was filled up by the participants along with their demographic details and birth order. The results inferred that there was no significant relationship between the studied variables, indicating there are other confounding variables to be considered. The limitations of restricted time, unequal representation of gender, and birth order concluded that this study cannot be generalized to the overall population. However, this is one of the first studies conducted in India with the variable of differentiation of self, which can be considered for future research with multiple other variables.

Keywords: *Differentiation of Self, Borth Order, Bowen's Theory, Collectivistic Culture*

The term “family” is a dynamic concept and can be defined in multiple ways. According to the textbook “Marriage and Families” (Olson, DeFrain & Skigrand, 2013), a family is two or more people who share intimacy, resources and are committed to each other, in the process of decision-making and sharing responsibilities. What we think of as a family has changed dramatically in recent decades. Systemic Therapy studies the interactions and relationships within families and the systems that influence them. There has been an ample amount of research done on the dynamics of families, parents, and couple relationships. However, the area least explored is sibling relationships, which according to the researchers are often long-lasting ones. Siblings could be called the first friends, companions, or admirers of an individual in his/her initial years of growing up. They act like role models to each other and play a significant role in the psychosocial development of self and others. A sibling subsystem is a separate unit within the family that comes with its features and dynamics. Their order of birth, age, and gender are significant factors in their psychological and personality development.

¹Counselling Psychologist, M.S, Graduate, Department of Family and Consumer Sciences, Northern Illinois University

²Associate Professor, Department of Family and Consumer Sciences, Northern Illinois University

*Corresponding Author

Received: March 26, 2026; Revision Received: September 22, 2026; Accepted: September 28, 2026

© 2026, Jain, R. & Sibley, S.; licensee IJIP. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (www.creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

Murray Bowen's family systems theory has played a significant role in the clinical development of family therapy (Jenkins et al., 2005). One of the concepts that stands out in understanding sibling relationships is the differentiation of self. Differentiation of self (DoS) is the ability to separate one's feelings from thinking and to remain capable of making decisions (Cepukiene, 2021). It is a concept that helps us understand a person's behavior in the context of their personal and familial life. It is essential to study this concept as DoS is a transferable attribute of family and in the problems to understand anxieties of the family system being passed on from one generation to another (multigenerational transmission process) (Mehri et al., 2011). In a sibling relationship, as they share the same household and parents, it is interesting to know how each of them tries to be a different person. The DoS is well established by adolescence and remains the same thereafter (Narayanan & Sriram, 2022). Factors like the family of origin, differentiation level of parents, environmental factors, gender, and birth order are potential moderators to determine the level of differentiation of a growing child (Peleg, 2014). Biological birth positions have been linked to certain personality types by Bowen, who held that emotional processes within the family are impacted by the sibling positions of the individual (Kerr & Bowen, 1988).

Adler and Bowen in their theories focus on the birth order of the sibling and the role they play in the family (Fujiwara et al., 2021).

Alfred Adler explains how the biological order of when the child is born in the family affects the functioning of the family system. His theory posits positive and negative outcomes based on the different positions of the siblings (Horner et al., 2012). The child's development is also impacted by the birth order because of the interactions with siblings of varied ages and stages of development (Sarvey, 2019). First, middle, and last-born children have different parts to play in the family. This role is consciously or unconsciously learned by the child, taking part in the process of identity formation and differentiation.

Research from A-CHILD studies studied the association between birth order and mental health concerns in siblings. The research showed that the lastborns are less likely to have fewer mental health problems and more prosocial behavior and resilience. This was explained by the fact that they have older siblings as role models, mitigating their mental health concerns. They act as a protective factor for the younger ones providing them with care, security, and comfort. On the other hand, the birth of younger siblings feels like being 'dethroned' for the firstborns (Fujiwara et al., 2021). The middle child experiences the lowest level of happiness. Amongst the siblings, they receive less parental attention and feel a lack of uniqueness. An interesting finding of the theme DoS was that differentiation of self and social comparisons are causes and effects of each other. Both phenomena help and interfere with the process of differentiation.

Studies have also found that family patterns and the emotional distance between the members also impact anxiety traits in children (Dolz-del-Castellar & Oliver, 2021). Their degree of differentiation is directly proportional to their parents' level of differentiation.

Families with multiple children tend to have varied attachment styles and bond with each child, resulting in a dissimilar process of differentiation. Youth reported experiencing more disfavored treatment with siblings and felt unfair reporting greater feelings of jealousy and poorer adjustments. This is indicative of a lower level of differentiation, and the jealous sibling is not able to separate himself or herself from the other sibling. Children at the end of

Explore The Relationship Between Birth Order and Level of Differentiation of Self

the birth order are the least exposed to intellectual conversations and get the least number of resources provided by their parents (Sarvey, 2019).

With the introduction of divorce, remarriage, stepparents, step-siblings, and half- siblings, the understanding of a traditional family has changed. Most of the studies conducted focus on the Western culture, and there is a lack of research on collectivistic culture families.

India is a developing country and Indians are independent yet bound by familial morals and values and still live with their parents and older generations. Older siblings, extended families, and grandparents have a significant role to play in their life. The purpose of this study is to explore how the birth order of a child in such a dynamic family impacts his/her process of differentiation from the family of origin, conducted with a population from India. The dependent variable is the level of differentiation of self and the independent variable is the biological birth order of the child.

REVIEW OF LITERATURE

The GlobalData statistics of November 2022 state that China, India, Indonesia, the United States, Bangladesh, Japan, and Mexico are countries with a higher number of households with children in 2021. The complexity of family dynamics helps us understand how multiple factors within family boundaries, like parental relationship, age, gender, and physical proximity, play a role in understanding an individual in the context of their siblings and their other relationships.

The Bowen Centre for the Study of the Family describes that families are strongly interconnected and are affected by each other's thoughts, feelings, and behavior (The Bowen Center, n.d). A change in one member's functioning is predicted and followed by reciprocal changes in another member's behavior. Dr. Muray Bowen explained this theory and formulated eight interlocking concepts. The concepts are Triangles, Differentiation of self, Nuclear Family Emotional System, Family Projection Process, Multigenerational Transmission Process, Emotional Cutoff, Sibling Position, and Societal Emotional Process (Gilbert, 2004). Of all the eight concepts, seven are focused on describing the aspects of the family; however, DoS is attentive to the depth of an individual (Gilbert, 2004).

Differentiation of Self (Dependent Variable)

Differentiation of Self is the ability to set apart one's feelings from thinking and being able to make decisions outside the family of origin. It is also defined as the ability to maintain balance between emotional and intellectual functioning and between the degree of intimacy and autonomy in the relationship (Castellar B & Oliver, 2021). The ones who cannot form that separate identity, struggle with the enmeshed bond or are emotionally cut off. To be different from each other, siblings identify themselves as unique.

As explained by Bowen, the process of differentiation of a child begins and can be understood by how the process was conducted by his parents and generations before them. Factors like the family of origin, differentiation level of parents, environmental factors, gender, and birth order are potential moderators to determine the level of differentiation of a child (Peleg, 2014).

With respect to gender, men were reported to have a higher level of differentiation than women (Castellar B & Oliver, 2021). Females were observed to have higher emotional reactivity as compared to men (Peleg, 2014). Culture plays a huge role in determining the

Explore The Relationship Between Birth Order and Level of Differentiation of Self

psychological development of the child (Fujiwara et al., 2021). A study examined cross-cultural differences in the relationship between self-esteem, depressed mood, and DoS, with a sample of Korean and European American college students (Chung & Gale, 2006). The study explored cultural differences between collectivistic Korean culture and individualistic European culture, finding that differentiation was valued more in individualistic contexts. Korean students were more emotionally reactive, fused, and less assertive than European Americans.

Birth Order (Independent Variable)

It is a joyous and stressful event for a child to have another one born in the house. Alfred Adler, a renowned psychiatrist, stressed the need to understand individuals within their social context. His theory on birth order explains that the biological order in which a child is born shapes his personality and overall development (Brennan, 2021). Birth order is defined as the sequence or the position in which the child is born in the family. Adler's theory posits that different positions in a family may be correlated to both positive and negative life outcomes (Horner et al, 2012). Walter Toman identifies eight types of sibling positions and claims that if there are multiple children in the family, they would fall under one of the eight types (Toman, 1976). A sibling can simultaneously have several sibling relationships of the same or different types.

After the birth of the second child, the amount of attention and love provided is divided. There is a differential treatment by parents for their children. The firstborn being the elder one would start feeling threatened and dethroned (Fukuya et al., 2021). Just as the oldest child becomes upset by the arrival of the second child, the second born gets upset about the third one, and so on (Toman, 1976). They would start to develop conduct and behavioral problems as a response to stress. They also feel pressured to become a role model and/or parentified figures for their younger siblings. Parental differential treatment can cause jealousy, comparison, and emotional issues. On the other hand, the presence of an older sibling reduces the chances of the last born experiencing mental health problems and exhibiting more prosocial behaviors and resilience (Fukuya et al., 2021).

Middle-born have the lowest level of happiness, explained by the presence of a younger and an older sibling. The older and the first ones are the ones who experience the transition of sharing their parents' attention after the birth of the second child (Wong et al., 2010).

Adler and Bowen in their theories explained how the order of the siblings plays a role in their growth, development, and process of differentiation. A study conducted in India, concluded that 53.6% of adolescent boys and 37.3% of adolescent girls developed emotional maturity based on their birth order (Anand, Kunwar, & Kumar, 2014).

A newborn is not aware of his position at the time of birth, and at the age of maturity would want to act differently, but because of the social and ethical constructs, it might get difficult for him to rebel against their position. To be unique and different from their siblings, younger or older, they constantly compete and fight for attention, validation, and recognition. It has also been concluded that the lastborn children have a higher risk of mental health concerns and suicidal ideations as they would have the least contact with their parents (Fujiwara et al, 2021).

Differentiation of Self and Birth Order

According to the psychosocial development theory of Erik Erikson, identity formation at the age of adolescence is an important developmental stage. This age is also influenced by sibling relationships and acts as a framework for adulthood (Wong et al., 2010). The sibling process of identity development talks about how identifying or differentiating with the sibling helps in creating an identity for self (Wong et al., 2010).

The concept of differentiation was developed in the context of white, middle-class European-American families in the United States of America. Most of the studies conducted focus on the Western culture, and there is a lack of research on collectivistic culture families. The existing theory and research studies suggest that the family of origin plays a moderating role in the psycho-socio and emotional development of a young adult (Skowron, Stanley & Shapiro, 2009).

Cultural Context of India

The family structure in India is a pivotal area of analysis, not only because of its highest population in the world (2023 census), but also because of its multicultural effects, combined with its unique ethnicity and social preference (Chakravorty et al, 2021). Families in India have been characterized by strong intergenerational bonds, where children still go through the same process of development, but also physically live with their aged parents post their marriage. These socio-cultural factors were not taken into consideration by Bowen (Narayanan & Sriram, 2022).

In the field of sociology, India has been identified as a case of working “joint family system”. Many of the past sociology books expressed that the patriarchal joint family system in India is the ‘traditional’ form of family in the country (Uberoi, 2004). Veena Das, in her Handbook of Indian Sociology, describes that even if modern India is adopting a nuclear household residence, households still live under the same roof as a close-knit family or neighboring houses. This culture is alien to western families and researchers (Brennan, 2021). India stands at an index of 48 on the individualism-collectivism dimension, in the range of 1 (collectivistic) and 100 (individualistic), whereas China scores 20 and the United States at 91 (Mitra & Arnett, 2021).

Research Gap

The individualistic cultural norm differs from that of collectivistic culture. Only a handful of research has been conducted to examine Bowens’s theory from a cross-cultural lens and to understand its validity considering participants from different countries (Chung & Gale, 2006). Another study listed one of their future aspects to understanding birth order and its application to an international context (Horner et al, 2012). India is considered a developing country, and it has been suggestive that the effect of the family size and birth order is slightly higher for developing countries and the effect is larger for smaller families (Anderson & Gunes, 2023).

This study aims to explore the relationship between the birth order of an adult and his level of differentiation in the family structure of India, where many households in India still provide a roof to multiple generations. The grandparents, siblings, and extended families are more involved in each other’s lives than in Western countries. Being surrounded by such a strong social familial environment can help them be aware of themselves, or be highly enmeshed, either way affecting their differentiation process.

METHODOLOGY

In the process of exploring the difference between the differentiation of self and birth order, correlational research which is a non-experimental study design, was used. The study aimed to explore the difference in the level of DoS and an individual's biological birth order in the family. The data collection was done by sending out a Qualtrics survey to the people in India.

Quantitative Data

The collection of quantitative data was conducted by asking the participants to fill out a DoS-questionnaire via a Qualtrics survey. The participants of this study qualified for the inclusion criteria. A consent form was signed by the participants before they began to answer the questions.

The scores of each participant in the study were accounted for in an Excel sheet and results using SPSS software were generated.

Participants

The target population of the study were adults between the age of 18-29, across urban and semi-urban areas, and were reached out through advertisements on social media (Facebook, Instagram, and WhatsApp) and via email. Convenience and snowball sampling methods were used. The sample size of the study was 136 participants. The total number of responses received by the researcher was 167 responses, however, 31 responses were incomplete. According to Bujang & Baharum (2016), a minimum of 80 samples is needed to be able to detect at least 0.2 difference of units in correlation coefficients. To be able to detect at least 0.4 correlation coefficient required a minimum sample size of 46.

Inclusion Criteria

The participants could be of all genders.

The participants should be born and raised up in India, holding Indian citizenship. Participants should be of age between 18-29.

Jefferey Jenson Arnett (2000) coined the term “emerging adulthood” describing a new period of life-span development. According to his concept, emerging adults can be defined as the age of identity exploration, where the youth is determining what they want to become in the future. This is also the age of transition from school to college, a change in location, and moving away to make a career (Munsey, 2006). The five features explained by Arnett in the theory of emerging adulthood were based on research involving participants between the ages of 18 and 29 (Arnett, 2004).

With the population of 1.42 billion, India also has the largest number of millennials and Gen Z, counting 600 million people between the age of 18-35 (Rathore, 2023). The country is driven by the youth population is the reason the age bracket of 18-29 was considered for this study.

Exclusion Criteria

Participants are born and brought up in other countries apart from India and do not hold Indian citizenship.

Hypothesis

H1: There is a relationship between the level of differentiation of self and the birth order of an individual.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

Operational Definition

The dependent variable differentiation of self is defined as “the ability to separate one’s feelings from thinking and to remain capable of making decisions under stress as well as the ability to make decisions” (Cepukiene, 2020). The scale of differentiation was developed to understand the differences among people (Kerr & Bowen, 1998).

The independent variable is birth order, which is defined as the biological order in which a child is born. The firstborn or a single child would be one in their order of birth. The second born would be two, and henceforward.

Procedure

The participants were approached by the researcher. Informed consent from the adult participants was taken before the data was collected. Each participant was given a code number while doing the analysis. The participants were allowed to leave the study at any point of time of the research. The confidentiality of their identity was maintained throughout. No identifying details of the participants were used in the data analysis.

Instruments

Differentiation of Self Inventory (Revised).

The revised version of this inventory was developed following the DSI by Skowron and Friedlander (1998). The differentiation of Self Inventory (revised) scale consists of 46 items that assess four dimensions of differentiation. The dimensions are Emotional Reactivity (ER), - “I” Position (IP), Emotional Cut-off (EC), and Fusion with Others (FO). The questions are answered on a 6-point Likert scale ranging from, 1= Not at all true for me to 6= Very true for me. ER and IP have 11 questions each, and EC and FO have 12 questions. All the questions on the questionnaire are mandatory to answer.

The questions from the questionnaire are like “I have difficulty expressing my feelings to people I care for”, “I am overly sensitive to criticism”, and “I am fairly self- accepting.” The internal consistency DSI-R full scale = .92, FO = .86, ER = .89, IP = .81, EC= .84

The instrument was administered in the English language. Most of the urban/semi- urban schools in India have English as a mandatory language and it is also the language of teaching in the larger part of education institutes.

Birth Order.

Birth order was administered by asking the participants about their biological order of birth in the family. The first born would be “1”, the second born would be “2”, the third born as “3” and so on. The survey is restricting the birth order to 5.

The scale would be 0= Single Child

1= First born

2= Second born

3= Third born

4= Fourth born

5= Fifth born

Demographic Details.

The participants were also asked to fill in their basic demographic details.

Name

Age

Gender- categorized as male, female, and other.

State/ Province of residence- India consists of 28 states and 8 union territories. Birth Order

Explore The Relationship Between Birth Order and Level of Differentiation of Self

Number of biological siblings (including the participant)

Statistical Analysis

The collected data was stored in an Excel sheet and was analyzed using the software SPSS. A parametric test was performed for normally distributed data and a non-parametric test was performed for the others, to generate results as the sample size was greater than 30.

RESULTS

The data collected from 167 participants were exported to an Excel sheet and cleaned. The complete survey scores by 136 participants were used for analysis as the other 31 participant data was incomplete or had missing values. Table 1 shows the total value of N = 136 participants. There were 80 females, 55 males, and 1 participant who preferred not to say their gender. Out of 136 participants, 9 participants were single children, 8 were third born, 51 were second born, and 68 (50% of the sample population) were first born. The descriptive statistics also indicate that 67.6 % of the sample population (92 participants) have a family of two siblings and only 0.7% (1 participant) have a family of four and five siblings. The mode value for the age of the population is 26 years from the age range of 18 to 29 years. 32 participants of 136 were 26 years of age.

The first born and single child participants were categorized as first born. Second born and third born participants in two children and three-children families respectively, were categorized as last born. Second born participants in three sibling families were categorized as middle borns. Table 2 shows that 77 participants were first born, 54 were last born and 5 middle born.

Table 1 Frequency Table

		Frequency	Percent
Gender	Male	80	58.8%
	Female	55	40.4%
	Prefer not to say	1	0.7%
Birth Order	Single Child	9	6.6%
	First Born	68	50%
	Second Born	51	37.5%
	Third Born	8	5.9%
Age	18	1	0.7%
	19	1	0.7%
	20	2	1.5%
	21	7	5.1%
	22	7	5.1%
	23	10	7.4%
	24	19	14%
	25	23	16.9%
	26	32	23.5%
	27	21	15.4%
	28	6	4.4%
	29	7	5.1%
Total Siblings	0	6	4.4%
	1	16	11.8%
	2	92	67.6%

Explore The Relationship Between Birth Order and Level of Differentiation of Self

3	20	14.7%
4	1	0.7%
5	1	0.7%

Table 2 Frequency Table of Birth Order

	Frequency	Percent
1 (First Borns)	77	56.6%
2 (Last Borns)	54	39.7%
3 (Middle Borns)	5	3.7%

Table 3 describes that the mean value of the Differentiation level of Self is 3.4, with a minimum of 2.13 and a maximum of 4.804. The variable Differentiation of self is divided into four subscales- Emotional Reactivity, Fusion with Others, “I” Position, and Emotional Cutoff. Each subscale was analyzed individually as well. The mean value of Emotion Reactivity is 2.88, Fusion of Others is 3.0, Emotional Cut-off is 4.0 and that of “I” Position is 3.88.

Table 3 Descriptive Statistics of Dependent Variables

	N	Minimum	Maximum	Mean	Std. D
DSI	136	2.13	4.804	3.449	0.534
Emotional Reactivity	136	1.09	5.00	2.883	0.837
Fusion with Others	136	1.50	5.166	3.006	0.688
Emotional Cutoff	136	1.916	5.833	4.003	0.785
‘I’ Position	136	1.909	5.09	3.888	0.654

Table 4 shows the case summary for the dependent variable (DoS) and the birth order categories. The mean of DoS for first born, middle born, and last born was similar, explaining no significant difference between each other. The mean values for ER, FO, IP, and EC were also not significantly varied for first born, middle borns, and last borns.

Table 4 Case Summaries

		DoS	ER	FO	IP	EC
First Born	N	77	77	77	77	77
	Mean	3.403	2.771	2.97	3.776	4.067
	Std. D	0.582	0.863	0.751	0.69	0.828
Last Born	N	54	54	54	54	54
	Mean	3.504	2.991	3.061	4.047	3.921
	Std. D	0.446	0.748	0.589	0.55	0.742
Middle Born	N	5	5	5	5	5
	Mean	3.546	3.454	2.966	3.89	3.9
	Std. D	0.684	1.11	0.76	0.879	0.55

After conducting a normality test with variables Differentiation level of Self, Emotional Reactivity, Fusion with Others, Emotional Cut-off, “I” Position, and Birth Order, it was concluded from Table 5 that all the variables apart from “I” Position were normally distributed. This further indicates that a parametric test was conducted for all variables and a non-parametric test for “I” Position and birth order.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

Table 5 Normal Distribution Table

Shapiro-Wilk		
	df	Sig.
Emotional Reactivity	136	.401
Fusion with others	136	.150
“I” Position	136	.003
Emotional Cutoff	136	.307
Birth Order	136	<.001
DSI	136	.830

After conducting the One Way ANOVA test to understand the relationship between DoS, Emotional Reactivity, ‘I’ Position, and Emotional Cutoff, Table 6 shows that the significant p-value score is greater for all four variables with Birth order as the independent variable.

The significant p-value of $0.630 > 0.05$, indicates that there is no relationship between the level of differentiation of self and birth order. Similarly, p values of 0.173, 0.921, and 0.484 > 0.05 for variables Emotional Reactivity, Fusion with Others, and Emotional Cutoff indicate that there is no significant relationship between these variables and birth order. The result means that the null hypothesis is accepted.

As the variable “I” Position was normally distributed, a non-parametric Kruskal Wallis Test was conducted. In table 7, the Asymp. significant value $0.212 > 0.05$ indicates that variable “I” Position is not significantly different, and there is no relationship between it and Birth Order.

Table 6 ANOVA Scores

		df	Sig.
DSI	Between Groups	3	0.630
	Within Groups	132	
	Total	135	
Emotional Reactivity	Between Groups	3	0.173
	Within Groups	132	
	Total	135	
Fusion with Others	Between Groups	3	0.921
	Within Groups	132	
	Total	135	
Emotional Cutoff	Between Groups	3	0.485
	Within Groups	132	
	Total	135	

Table 7 Kruskal-Wallis Test

	df	Asymp. Sig
“I” Position	3	0.212

DISCUSSION

Murray Bowen’s central concept, Differentiation of Self (DoS) has been one of the most acknowledged constructs in the field of family therapy and research (Calatrava et al., 2022). In his model, the concept of Differentiation of Self was explained using intrapsychic and interpersonal traits. A family system breaks into the interactions between parents and

Explore The Relationship Between Birth Order and Level of Differentiation of Self

children, amongst siblings, and among the parents. An unexplored, yet emerging area in research is the variable of birth order and its interactions with the development of DoS amongst youth in a collectivistic culture. This study is primarily piloted in India, for a population of age 18-29 years.

This study was conducted to examine the differences in the relationship between levels DoS and Birth Order. The overall level of DoS is divided into four subscales, Emotional Reactivity (ER), "I" Position (IP), Emotional Cutoff (EC), and Fusion with Others (FO). The highest score of 5 on the Emotional Reactivity scale explains that less reactive individuals can have a calmer response in stressful situations. As this scale is negatively scored, a high value on ER is directly proportional to a high differentiation of self. The participant with a score of 5 on ER has a DoS of 4.369. Scoring 5.8 out of 6 in the Emotional Cutoff means that an individual would not withdraw from a stressful situation to escape, avoid, or ignore the situation (Skowron & Lander, 1998). Similar to ER, a high score of EC means a more differentiated self. The scale of Fusion with Others is added to understand if individuals can express their ideas, beliefs, and values that may or may not match with their significant others and/or family. A high score on FO reflects a lower probability of fusing with others, hence a highly differentiated self (Drake, 2011).

Collectivistic cultures have a higher chance of fusion as families of multiple generations stay together under the same roof. On the contrary, the siblings want to differentiate themselves to be unique, and it is higher for older siblings than the younger ones (Wong et al., 2010). The last scale IP is a step ahead of FO where individuals can present their views and hold their positions rather than be overwhelmed by the response (Drake, 2011).

While calculating the individual mean of the DoS score and all the categories of birth order, it was found that the mean score of their level of differentiation of self was quite similar, which explains why there is no significant difference in the DoS scores and birth order. It was interesting to find that the mean score of ER for first born was 2.77, which is lower than the mean for last borns (2.99) and middle borns (3.45). This indicates that middle borns and last borns learn to develop a better emotional reactivity than first borns.

Comparing the mean score of a study conducted to examine cross-cultural differences in the relationship of self-differentiation and this current study, it was found that the mean score of DoS for European American undergraduate students was 3.86 (Chung & Gale, 2006) and for this current study is 3.449. The result coincides with the conclusion that even though Bowen considered the level of DoS to be consistent through various racial backgrounds, studies from Western studies reported a higher level of differentiation as compared to collectivistic cultures (Narayan & Sriram, 2022). The study conducted by Narayan and Sriram (2022) calculated the DoS score of 783 young Indian participants of Maharashtra State with a mean DoS score of 3.4, which is the same score this study calculated. There were similarities in the scores of EC, ER, FO, and IP as well in both studies. The differentiating factor in this study was that the participants were from across the country aged 18-29 years.

The current study with the existing previous studies still holds the same conclusion that the level of differentiation is low in collectivistic societies as compared to individualistic, ones but has higher relatedness (Narayan & Sriram, 2022; Chung & Gale, 2009).

Table 2 shows that the participants of the study have the highest mean score for Emotional Cutoff and the lowest mean score for Emotional Reactivity. It explains that the youth in

Explore The Relationship Between Birth Order and Level of Differentiation of Self

India can be aware and acknowledge when they are in a stressful situation, and deal with stronger emotions. They would not tend to withdraw or cut off from the situation. However, a low mean score on the Emotional Reactivity scale indicates that their way of managing emotions could be sometimes reacting to it with a response that may not always be calm (Drake, 2011). Though the p-value was not significantly different with the birth order of the participants, it is interesting to notice that the ANOVA scores of Fusion with Others in Table 4 have the highest significant value of 0.921 as compared to other subscales of DoS. Fusion with Others is a component where the individual is able to express their ideas and beliefs apart from what is expressed by their significant other and/or family of origin. This explains further that irrespective of the birth order of the individual, living in a collectivistic culture, they can possess and express their values to others.

A study conducted to understand the impact of birth order on emotional maturity and general well-being concluded that there is a significant difference between single child, last born, and first born and emotional maturity and general well-being (Joy & Mathew, 2019). Emotional maturity is defined by the researchers as a state that can manage and handle emotions as well as evaluate a situation before impulsively reacting. This definition is similar to emotional reactivity but with critical thinking. Through the results of this study, it can be inferred that an individual's critical thinking ability is also important apart from their level of differentiation, therefore DoS itself might not be significant in its relationship with birth order. Another factor playing a role in the development of a differentiated self could be parenting styles and sibling interactions. The influence of the actions of parents is beyond the individual's level of control, and the combination of parenting practices and multiple children in the family impacts childhood personality (Sarvey, 2019). Another study conducted in 2021 (Dolz-del-Castellar & Oliver, 2021) inferred that family functioning predicted 19% of DoS which consists of birth order as one of the factors apart from family's emotional reliability and boundaries.

Conducting some tests with other demographics in the study it was interesting to find out that gender has a significant difference with the variable DoS. This result explains how a collectivistic culture also follows gender roles. In a patriarchal society like India, males exercise power and freedom in personal and professional aspects as compared to females (Chaurasia & Mahapatro, 2016). Females are more emotionally reactive than males (Peleg, 2014; Chaurasia & Meerambika, 2016) and more culturally sensitive. The level of DoS, hence also depends on the way the individual, based on their gender was treated, as childhood experiences shape their cognitive and emotional development.

The review of existing literature on the variables of the study gives us an understanding that multiple factors like gender, parents' level of DoS, and interactions with siblings are important and should be considered to completely understand the concept of DoS for various cultures and age groups

Strengths and Limitations

Understanding from the existing literature on the topic of differentiation of self and birth order, this study stands out to be one of its kind and the first few studies conducted with the population of India. The researcher was able to collect data from over 100 emerging adults from India and gather information about their birth order and level of differentiation. This study opens the possibilities for further research conducted in the field of family systems through the lens of Bowen's Theory. This study attempted to understand and apply the theory in a collectivistic culture setting to make it more accessible and culture sensitive.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

One of the major limitations experienced by the research was conducting a study in India while living in the United States. It restricted the data collection process to only a virtual medium. The researcher did not get an opportunity to visit places or institutions to talk about her research and have potential participants. Thus, the generalizability of findings is limited. The study was conducted in the span of 10 months which is a limited time to gather more data and participants. This pilot study can be expanded in the future to generate more relevant and accurate results.

The survey for the study had one questionnaire to answer with 46 questions which would take approximately 20 minutes to complete. In reality, the total number of responses received by the researcher was 167 responses, however, 31 responses were incomplete. Upon talking to some participants and gaining feedback they mentioned that they lost interest after answering 20-25 questions and did not want to continue. Some participants took a break and came back to the study to complete it.

India is a large country with various cultures, ethnicities, and family backgrounds. Over 50% of the population is below 30 years of age (Express News Service, 2022) which means the sample population size of the study is not a true representation of the country. This indicates that the results cannot be generalized, and further multiple studies need to be conducted to get a clear understanding of the relationship between birth order and the level of DoS of Indian youth.

Another limitation that is a part of this study is the restricted time frame. The researcher opened the data collection process only for a few months and relied on the snowball and convenience sampling methods. This sampling technique increases the risk of sample bias and error as the selection process is not random.

Implications and Future Recommendations

Though the concept of differentiation of self and birth order has been researched extensively, there is a lack of research in the context of a collectivistic population, especially in the country of India. The current study is a preliminary perspective towards expanding the cross-cultural understanding of the concept of DoS and one of the moderators as birth order. Understanding how culture and birth order play a role in the identity development of an individual, it would enhance multicultural competency of a professional.

As the results of the study indicate that there is no significant difference in DoS and birth order, it explains that to understand and work with a client from a collectivistic culture or India, other influencing factors need to be considered (like the total number of siblings, gender, geographical location, etc). It would be helpful to generate a genogram for initial assessment sessions.

In Western countries, most young adults move out of their parental homes in the process of being independent in various aspects. The results would help clinicians understand if physical separation from parents as adults makes a significant change in their differentiation process. Results from this study would help clinicians globally gain a better understanding of their clients, their culture, values, and family system.

As a marriage and family therapist, this study broadens their cognizance with their clients. In terms of assessing clients' presenting problems, the results of the study could suggest that exploration is required about clients' family systems to understand their issues with

Explore The Relationship Between Birth Order and Level of Differentiation of Self

emotional reactivity, and their ability to maintain relationships. Families with a joint setting provided children with multiple caretakers which again could be a positive or negative impact on their level of differentiation. Questions like “the client's relationship with their parents”, “comparison with siblings and cousins”, and “people they are close to within the family”, could help MFT professionals think systematically. Effective therapeutic strategies with Asian clients need to be sensitive to their cultural and family characteristics (Noh, Helen, Chow & Nicole, 2019).

Future research could be conducted using an extensive variety of potential moderators or factors which are involved in the development of the level of differentiation. Apart from birth order, gender, relationship with parents, family structure, age gap of siblings, number of siblings, parents' level of differentiation, and geographical location could be other variables. A qualitative and/or quantitative study could be conducted in combination with these variables to understand the concept of DoS.

CONCLUSION

This study was conducted with the emerging adult population of the country of India to explore if there is a relationship between the participant's level of DoS and their birth order in their family of origin. The result of the study with 136 participants concluded that there is no significant difference between the testing variables.

This study also acts as a pilot study as there has only been a handful of studies done with a combination of these variables with the population of India. This gives the field and future researchers a foundation to explore and conduct longitudinal studies with a large population size, to make inferences about the concept of differentiation of self for Indians and other similar collectivistic cultures. Variables like gender, geographical location, intelligence quotient, and emotional quotient could be variables to consider for future research.

REFERENCES

- American Psychological Association. (n.d.) Just-world hypothesis. In *APA dictionary of psychology*. Retrieved from <https://dictionary.apa.org/just-world-hypothesis>
- Anand, A.K., Kunwar, N., & Kumar, A. (2014). Impact of different factors on Emotional Maturity of adolescents of Coed-School. *International Research Journal of Social Sciences*, 3(11), 17-19.
- Andersen, D. C. & Gunes, P.M. (2023). Birth order effects in the developed and developing World: Evidence from International Test Scores. *SSRN*. <http://dx.doi.org/10.2139/ssrn.4354408>
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from late teens through the twenties*. Oxford, England: Oxford University Press.
- Brennan, D. (2021, June 28). What to know about birth order. *WebMD*. <https://www.webmd.com/parenting/what-to-know-about-birth-order#:~:text=A%20researcher%20named%20Alfred%20Adler,in%20shaping%20a%20child's%20personality>.
- Bujang, M.A., & Baharum, N. (2016) Sample size guideline for correlation analysis. *World Journal of Social Science Research*, 3 (1). DOI: 10.22158/WJSSR.V3N1P37
- Calatrava, M., Martins, M. V., Schweer-Collins, M., Duch-Ceballos, C., & Rodríguez-González, M. (2022). Differentiation of self: A scoping review of Bowen Family Systems Theory's core construct. *Clinical Psychology Review*, 91, 1–13. <https://doi.org/10.1016/j.cpr.2021.102101>
- Chakravorty, S., Goli, S., & James, K. S. (2021). Family demography in India: Emerging patterns and its challenges. *Sage Open*, 11(2), 21582440211008178.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

- Chaurasia, N. & Mahapatro, M. (2016). Gender differences in self-esteem among young adults of Raipur, Uttar Pradesh, India. *Austin Journal of Women's Health*, 3(1), 1018
- Chung, H. & Gale, J. (2009). Family functioning and self-differentiation: A cross-cultural examination. *Contemporary Family Therapy*, 31(1), 19-3. <https://doi.org/10.1007/s105921-0008-9040-4>.
- Dolz-del-Castellar, B., & Oliver, J. (2021). Relationship between family functioning, differentiation of self and anxiety in Spanish young adults. *Plos One*. <https://doi.org/10.1371/journal.pone.0246875>
- Drake J.R. (2011) Differentiation of self inventory – Short form: Creation and initial evidence of construct validity. *Core*. oai:mospace.umsystem.edu:10355/11137
- Duffin, E. (2022). Share of U.S. family households with children, by type 1970-2021. *Statista*. Retrieved from <https://www.statista.com/statistics/242074/percentages-of-us-family-households-with-children-by-type/#:~:text=In%202021%2C%20about%2040.02%20percent,households%20with%20their%20own%20children>
- Express News Service. (May 11, 2022). *Telling numbers: Over half of India's population is still under age 30, slight dip in last 5 years*. The Indian Express. <https://indianexpress.com/article/explained/half-indias-population-under-age-30-nfhs-explained-7910458/>
- Fukuya, Y., Fujiwara, T., Isumi, A., Doi, S., & Ochi, M. (2021). Association of birth order with mental health problems, self-esteem, resilience, and happiness among children: Results from A-CHILD study. *Frontiers in Psychiatry*, 12, 1-15. <https://doi.org/10.3389/fpsyt.2021.638088>
- Gilbert, R.M. (2004). The eight concepts of Bowens Theory
- Horner, P., Andrade, F., Delva, J., Grogan-Kaylor, A., & Castillo, M. (2012). The Relationship of birth order and gender with academic standing and substance use among youth in Latin America. *Journal of Individual Psychology*, 68(1), 19-37
- Jenkins, S., Buboltz, W.C., Schwartz, J.P., Johnson, P. (2005). Differentiation of self and psychosocial development. *Contemporary Family Therapy*, 27(2), 251–261. <https://doi.org/10.1007/s10591-005-4042-6>
- Joy, M., & Mathew, M. A. (2019). Impact of birth order on emotional maturity and general well-being of adolescents. *International Journal of Education and Psychological Research*, 7(4).
- Kerr, M. E., & Bowen, M. (1988). *Family evaluation: An approach based on Bowen's theory*. New York, NY: W. W. Norton & Company.
- Mehri, Y., Salari, S.M., Langroudi, M.S., Baharamizadeh, H. (2011). The relationship between differentiation of self and aspects of identity. *ScienceDirect*, 30, 733-737. <https://doi.org/10.1016/j.sbspro.2011.10.143>
- Messina, K. C., Kolbert, J. B., Bundick, M. J., Crothers, L. M., & Strano, D. A. (2018). The impact of counseling on Bowen's differentiation of self. *The Family Journal*, 26(2), 150-155.
- Miller, R. B., Anderson, S., & Keala, D. K. (2004). Is Bowen theory valid? A review of basic research. *Journal of Marital and Family Therapy*, 30(4), 453-466. <https://doi.org/10.1111/j.1752-0606.2004.tb01255.x>
- Mitra, D., & Arnett, J. J. (2021). Life choices of emerging adults in India. *Emerging Adulthood*, 9(3), 229–239. <https://doi.org/10.1177/2167696819851891>
- Narayanan, M., & Sriram, S. (2022). Maturation in the Indian context: An exploration of differentiation of self in Indian youth. *Research Square*. <https://doi.org/10.21203/rs.3.rs-2260439/v1>
- Olson, D. H., Defrain, J., & Skogrand, L. (2013). *Marriages and families: Intimacy, diversity, and strengths* (8th ed.). McGraw-Hill.

Explore The Relationship Between Birth Order and Level of Differentiation of Self

- Peleg, O. (2014). The relationships between stressful life events during childhood and differentiation of self and intergenerational triangulation in adulthood. *International Journal of Psychology*, 49(6), 462-470.
- Raza, S.H., Shah, Z.A. & Haq, W. (2022). Role of birth order, gender, and region in educational attainment in Pakistan. *Sci Rep* 12, 11842. <https://doi.org/10.1038/s41598-022-15700-x>
- Rohrer, J., Egloff, B., & Schmukle, S. (2015). Examining the effects of birth order on personality. *Proceedings of the National Academy of Sciences of the United States of America*. 112(46). 10.1073/pnas.1506451112.
- Sarvey, S. (2019). Birth Order: Shaping lives one sibling at a time. *Intuition: The BYU Undergraduate Journal of Psychology*, 14 (2), Article 17. <https://scholarsarchive.byu.edu/intuition/vol14/iss2/17>
- Skowron, E.A., Stanley, K.L. & Shapiro, M.D. (2009). A Longitudinal Perspective on Differentiation of Self, Interpersonal and Psychological Well-Being in Young Adulthood. *Contemp Fam Ther*, 31, 3–18. <https://doi.org/10.1007/s10591-008-9075-1>
- Soysal, F. (2016). A study on sibling relationships, life satisfaction and loneliness level of adolescents. *Journal of Education and Training Studies*, 4, 58-67.
- Toman, W. (1976). *Family constellation: its effects on personality and social behavior*, Walter Toman, Ph. D. (Third edition). Springer Pub. Co.
- Uberoi, P. (2004). The family in India. In Veena Das (Ed.), *Handbook of Indian sociology* (pp. 275-307). Oxford University Press

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Jain, R. & Sibley, S. (2026). Explore The Relationship Between Birth Order and Level of Differentiation of Self. *International Journal of Indian Psychology*, 14(3), 2784-2799. DIP:18.01.253.20261403, DOI:10.25215/1403.253