individual attention which accentuates their self-esteem, they have a good parent-child relationship, and choose influential and authoritative careers as compared to the later borns and large size families where the parental affection and attention divides and affects their intellectual capacities, depression and anxiety levels, a weak parent-child relationship, and choice of innovative and creative careers. The confluence model suggests that the overall intellectual level of the home may be more "childlike" and not mature, in large families than in small ones. Further, the attachment theory (Bowlby) believed that children's self esteem is reliant on their perceptions of how their parents and significant others, view and treat them. Children who perceive themselves as the non-favored child may experience feelings of inferiority, anger, depression and incompetence. The aforementioned theories have been proposed in the west and there are definitely certain gaps in the west and the Indian societal structure in terms of economic advancement, growth, familial structure, industrialization, etc. To scrutinize whether the age old birth order theories are still applicable in the current Indian social structure or its time to change with changing times, the current study attempts to examine and evaluate the extent to which the proposed hypothesis in various theories are applicable and adaptable.

Extensive empirical researches done in the area of intelligence or IQ on the various birth orders have revealed majorly favorable results. Almost fifty percent of the researches show that family size and birth order positively affect intelligence; around twenty five percent have a negative effect, whereas almost twenty percent have found no relationship amongst them. A long history of research based primarily on bivariate relationships between IQ and family size has found the association to be inverse and suggested that children in smaller families have more cognitive abilities because they spend more time interacting with their parents. Birth order researches have revealed that first borns and only children display higher IQs than later borns. Further, in terms of the mental health conditions, Depression has been well researched upon both in India as well as the west and nearly forty percent of the researches have revealed significant and positive affects in consonance with birth order and family size. Barely ten percent researches found no relationship between
An increase in family size would dilute the resources amongst the siblings, thereby making the later borns fall prey to depressive tendencies. Further, first children had the most depressive symptoms followed by only borns, last-borns, and finally middle children. Firstborns may be more likely to be depressed due to excessive responsibility placed on him/her by parents and a laterborn may be more likely to be depressed due to being ignored by an occupied parent. **Anxiety** is a field which has majorly been studied upon in the west, and a few reaches in the east and almost forty percent researches claimed to have significantly affected by family size and birth order; while barely ten percent studies found no relationship. Studies have found a strong correlation between large sized families and middle born patients with the pattern of anxiety symptoms. Research also concluded that first-borns did experience more anxiety than later-borns. **Self esteem** is another area which has been majorly studied in the west and showed mixed findings. While there has been a preponderance of positive findings (almost thirty percent), hardly seven percent claimed to have found no relationship amongst birth order, family size and self esteem. Researches have found that there is a significant difference in self esteem of college students with respect to their ordinal position. Researches on **parent-child relationship** have been carried out widely in the west i.e. from 1979 to 2011 though it still needs to catch up with the same awareness and popularity here in India. Almost forty five percent of the researches showed significant differences amongst family size, birth order and parent-child relationship, hardly five percent negative effects showed up. Evidence for a “neglected middleborn effect” appears only in a within-family design for siblings. Firstborns were more likely to report very good sibling relationships and preferred a sibling over a friend. Finally, **Career choice patterns** have been researched across the globe since 1974 till 2012; widespread researches have been carried out in the west. Positive research findings in context to career choice patterns, family size, and birth order have been in abundance (almost forty percent), barely eight percent showed no association between them. Depending on the birth position, there are special roles within families, leading to different adaptation patterns and different personalities, for instance, first borns tend to take up science, or engineering; middle-borns work in nursing, and firefighting; youngest borns go into
art, and designing. Most of the birth order research has been carried out in the west, it now needs to be seen how well do they fit in the Indian scenario which is going through a transformation phase in terms of family size and attitudinal changes. Further, the researches in the areas of intelligence, mental health conditions, parent-child relationship, and career choice patterns have been multi-directional so far. It shall be interesting to explore their direction with respect to the current Indian social structure.

Birth order theorists claim that the findings of the same are at times spurious because of a wide variety of biases that produce many varied and conflicting birth order ‘effects’. The most common confounders controlled by family size and birth order studies across the globe include factors such as the negative association of family size with socio-economic characteristics of the parents, the possibility that large families are more prevalent among genetically less able couples, the prevalence fallacy, absence of controls for sibsize, period effects, parental background differences by birth order, parental background differences by sibsize, differences in child-spacing, selection bias, gender, etc. Likewise, the present study has also attempted to remove some of these research errors and explored the effect of less confounded family size and birth order on various psychological outcomes. controlled the majority such confounders which could provide disingenuous results, for e.g. age, gender, socio-economic status, family structure (intact nuclear families), parental educational background, and child spacing.

### 3.2 OBJECTIVES OF THE STUDY:

The present research aims:

- To explore the prevalence of the three family sizes (small, medium, and large size family) in the tri city of Chandigarh, panchkula, and Mohali.
- To explore the prevalence of four birth orders (only, first, second, and third borns) in the tri city of Chandigarh, panchkula, and Mohali.
➢ **Intelligence:**

*Family size:*

- To investigate whether intelligence of college students would differ across the three family sizes (small, medium and large size families).

*Birth order:*

- To explore whether the levels of intelligence would differ across the four birth orders (only, first, second, and third borns).

➢ **Mental health conditions:**

*Family size*

- To examine whether the mental health conditions (levels of depression, self-esteem, trait anxiety, and state anxiety) of college students would differ across the three family sizes (small, medium, and large size families).

*Birth Order*

- To inspect whether the mental health conditions (levels of depression, self-esteem, trait anxiety, and state anxiety) would differ across the four birth orders (only, first, second and third borns).

➢ **Parent-child relationship:**

*Family size:*

- To investigate whether perception of the college students’ relationship with their parents (in terms of protecting, rejecting, and loving) would differ across the three family sizes (small, medium and large size families).

*Birth order:*

- To search whether perception of the college students’ relationship with their parents (in terms of protecting, rejecting, and loving) would differ across the four birth orders (only, first, second, and third borns).
Career choice patterns

Family size:

- To scrutinize whether the preference of college students for taking up various occupational fields (i.e. Administrative, Enterprising, Defence, Sports, Creative, Performing, Medical, Technical, Expressive, Computational, Humanitarian, Educational) would differ across the three family sizes (small, medium, and large size family).

Birth order:

- To probe and assess whether the preference of college students for taking up various occupational fields (i.e. Administrative, Enterprising, Defence, Sports, Creative, Performing, Medical, Technical, Expressive, Computational, Humanitarian, Educational) would differ across the four birth orders (only, first, second, and third borns).

3.3 HYPOTHESES:

Based on the research questions derived from the review of literature, the hypotheses are as ahead. It is expected that:

Intelligence:

Family size:

H1 Intelligence of college students in small size families would be higher than the other two family sizes.

H2 Intelligence of college students in large size families would be lower than the other two family sizes.

Birth order:

H3 Intelligence of the only and first borns would be higher than the later borns.
H4 Intelligence of the last borns would be lower than the early borns.

➢ **Mental health conditions:**

➢ **Depression**

- *Family size*

H5 Depression of college students in large size families would be higher than the other two family sizes.

H6 Depression of college students in the medium size families would be lower than the other two family sizes.

- **Birth Order**

H7 Depression of the only and first borns would be higher than the later borns.

H8 Depression of the middle borns would be lower than the early and later borns.

➢ **Trait anxiety**

*Family size*

H9 Trait anxiety of college students in large size families would be higher than the other two family sizes.

H10 Trait anxiety of college students in small size families would be lower than the other two family sizes.

- **Birth order:**

H11 Trait anxiety of the early borns would be lower than the other birth orders.

H12 Trait anxiety of the later borns would be higher than the other birth orders.
- **State anxiety**

  - **Family size:**

    **H13** State anxiety of college students in small size families would be higher than the other two family sizes.

    **H14** State anxiety of college students in large size families would be lower than the other two family sizes.

  - **Birth order:**

    **H15** State anxiety of the only and first borns would be higher than the later borns.

    **H16** State anxiety of the middle borns would be lower than the last borns.

- **Self esteem**

  - **Family size:**

    **H17** Self esteem of college students in small size families would be higher than the other two family sizes.

    **H18** Self esteem of college students in large size families would be lower than the other two family sizes.

  - **Birth order:**

    **H19** Self esteem of the only and first borns would be higher than the later borns.

    **H20** Self esteem of the middle and last borns would be lower than the early borns.

- **Parent-child relationship:**

  - **Family size:**

    **H21** The perception of relationship with parents of college students in small size families would be high on protecting and loving; and low on rejecting than the other two family sizes.
H22 The perception of relationship with parents of college students in large size families would low on protecting and loving; and high on rejecting than the medium size family.

- **Birth order:**

H23 Only, first, and last borns would perceive their relationship with their parents as high on protecting, and loving; and low on rejecting than the middle borns.

H24 Later borns would perceive their relationship with their parents as low on protecting, and loving; and high on rejecting than the only and first borns.

- **Career choice patterns**

- **Family size:**

H25 The preference of college students in small size families would be higher for administrative, enterprising, medical and technical careers than the other two family sizes.

H26 The preference of college students in medium size families would be higher for humanitarian, educational, and expressive, and computational careers than the other two family sizes.

H27 The preference of college students in large size families would be higher for creative, performing, defence, and sports careers than the other two family sizes.

- **Birth order:**

H28 Preference of only and first- borns would be higher for administrative, enterprising, medical and technical careers than the middle and last- borns.

H29 Preference of middle- borns would be higher for humanitarian, educational, and expressive, and computational careers than the only, first, and last- borns.
**H30** Preference of last-borns would be higher for creative, performing, defence, and sports careers than the only, first and middle-borns.

**H31** The interaction effects between family sizes x birth orders would be explored for all the aforementioned variables.