ANXIETY AND PERSONALITY TRAITS AMONG NORMAL BIRTH AND CAESAREAN BIRTH STUDENTS

A Synopsis
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**Introduction**

It is said that modern times is the age of anxiety. Due to extreme competitiveness and struggle to succeed, anxiety has become a common symptom which is found in almost every individual in the world and especially in students and youth of today. Anxiety can be defined as a ‘state of arousal’ caused by threat to wellbeing Spielberger (1960). ‘State’ means a condition involving the entire organism. ‘Arousal’ means a condition of tensions, unrest, or uneasiness or a readiness to act the respond.

The study by Hejazi (2018) has shown that some of the psychological and personality characteristics are very influential in human beings’ selection and decision-making. These psychological characteristics can be related to choosing the type of delivery. They aimed to compare personality characteristics (honesty-humility (H), emotionality (E), extraversion (X), agreeableness (A), conscientiousness (C), openness, to experience (O), and anxiety (overt and covert) in pregnant women according to the type of delivery (natural or cesarean). In their descriptive and casual-comparative study, 90 pregnant women who had referred to health centers in Tarom city in 2015, filled two personality inventory Questionnaire NEO-FFI and Speilberger, ‘State-Trait Anxiety Inventory(STAI).

The results showed that pregnant women’s preferences for the two type of delivery (normal and caesarean section) were significantly different in overt anxiety and personality traits, such as neuroticism, extraversion, openness, to experience, and conscientiousness. The study reflected the importance of psychological issues in the preferred type of delivery and suggested that to reduce the number of caesarean sections, anxiety and personality characteristics in pregnant women must be considered. Caesarean section, otherwise called C - section, or on the other hand Caesarean delivery, is the utilization of surgery to deliver babies. A caesarean section is frequently important when a vaginal delivery would put the infant or mother at danger. This may include obstructed labor, Twin pregnancy, Hypertension in the mother, breech birth pain, or issues with the placenta or umbilical cord. A caesarean delivery might be performed based on the state of the mother’s pelvis or history of a previous C - section.

There has always been some uncertainty among women and care providers about what defines ‘Normal childbirth’. Words like normal and natural are often interchanged and there is a wide range of
situations and experiences that can be considered ‘Normal’ childbirth. In the broadest definition, normal childbirth includes a labor that begins spontaneously, usually between 37 and 42 weeks of pregnancy. Natural birth also includes skin-to-skin holding later delivery, and breast-feeding within the 1 hour later delivery. Unless there is a valid medical cause to intervene in the delivery process, all women with low riskiness gestation are stimulated to pursue natural childbirth.

In natural childbirth, the infant is born head-first, through the vagina, at term, in the attendance of a health care professional who ensures that the mother and infant are healthy. No medical interventions are provided throughout labor and delivery. In normal childbirth, the baby is born head-first, through the vagina, at term. A health care professional ensures the goodness of the infant and mother, and few medical interventions may occur to support or help the delivery. Examples of interventions include rupture of membranes, helping labor progress with medication (e.g., oxytocin), and using medications or epidural for pain relief. Despite considerable debate and research over many years, the concept of “normality” in labor and delivery is not standardized or universal. Recent decades have seen a rapid expansion in the development and use of a range of practices designed to start, augment, accelerate, regulate, or monitor the physiological process of labor with the aim of improving outcomes for mothers and babies. The world health organization estimates that between 70% and 80% of women entering labor are at low risk. The statement above begins the preamble of care in normal birth: a report of a technical working group, published by the World Health Organization WHO.

**Justification**

Motherhood is the most beautiful mystical experience for a woman. A mother carries a baby in her womb for nine months without knowing the consequences of the birth. It has been seen that when mother is pregnant, then anxiety, fear, stress etc. are found in her. Her personality characteristics and the emotional states during her pregnancy are passed on to her child. Many psychological studies have taken up to study the personality traits and other emotional states of the mothers. But, there are very limited studies comparing normal birth and caesarean birth children.

In current times, anxiety is one burning topic, which is a very serious problem among adults and the youngsters alike. Anxiety becoming rampant in today’s youth, it is about time that medical practitioners, psychologists, social workers and others awakens to this problem and find the
psychological reasons for it. On these lines, the investigator became curious to explore whether there is
difference in anxiety among normal birth students and caesarean birth students. This may provide a
better perspective to help the students considerably. Furthermore, there are a very limited studies
comparing the personality traits among normal birth and Caesarean birth students also. Mostly,
research studies have concentrated only on mothers.
Therefore, the present study would investigate the difference in the anxiety and personality traits of
students of normal birth and caesarean birth. Hence, the present research would be an exploratory
investigation.

CONCEPTUAL FRAMEWORK

- Age: students between 18-25 years would be selected
- Educational level: intermediate, under graduate and post graduate students would be selected from Education Institute and collage university
**Review of Related Literature**

A study was conducted to compare the intelligence quotient (IQ) of school aged children delivered by caesarean section and vaginal delivery in Mashhad, Iran. The caesarean delivery group had significantly higher IQ test scores. Maternal and paternal educational levels were related to children’s IQ scores. After adjusting to maternal and paternal education, maternal age, there was no significant difference found between IQ scores of caesarean delivery and natural vaginal delivery groups. Based on the findings, the association between caesarean deliveries with better cognitive development in children cannot be supported Kadeem and Khadivzadeh (2010).

Lisa (2015) in the study found that about 9.5% of C-section babies develop asthma, compared with 7.9% for vaginal births. Fatness develops in 19.4% of baby’s delivered by Caesarean section, compared with just 15.8% for vaginal births.

Chen and Tan (2019) in their review found that increasing popularity of caesarean birth has taken form of a social anxiety in many countries. This paper reviewed the literature on the effects of caesarean section on children’s psychological health. The outcomes showed that caesarean birth may have adverse impact on kids’ sensory perception, sensory unification capability, and neuropsychiatric development. Be that as it may, there remain deficiencies in extant study techniques, study content, subject groupings, and explanation of research outcomes. Future research should improve research methods, broaden the research content, and refine the grouping of children born by Caesarean section.

Hantoushzadeh, Shariat, Moradi, Nikobakhat and Sabzevari (2020) wanted to examine the influence of personality characteristics on the choice of the delivery techniques based on HEXACO personality model. 210 pregnant women in few health centers in Tehran volunteered to participate in this research. To identify their personality amplitude, the pregnant women first filled out HEXACO personality forms. 104 women selected caesarean and 106 other women preferred normal delivery. The result of the multivariate analysis of variance showed that there is a significant difference between the two groups of women for six personality factors in HEXACO. The linear combination of personality traits of pregnant lady has a significant impact on the choice of delivery technique. Character differences of pregnant ladies can be considered in psychological interventions and antenatal counseling to overcome psychological resistance to vaginal delivery.
Yet, another study found that anxiety during pregnancy and childbirth can increase risk of complications and interventions for both mother and infant. Characteristics of neuroticism and extraversion are however predictive of health results in different fields potentially through organic, psychological and social systems. The aim of the research was thus to examine the relationship between trait personality and child birth experience (Johnston, and Brown 2013) Seven hundred and fifty-five mothers with an infant aged 0-6 month completed a self-report questionnaire including the ten item Personality Measure and descriptions of birth experience including mode of birth (vaginal vs. caesarean section) and complications (failure to progress, fetal distress, post-partum hemorrhage, assisted birth and severe tear). Results found that character traits were significantly connected with birth experience. Specifically, mothers scoring low in extraversion and emotional stability were significantly more likely to have a caesarean section and experience a number of complications during labor and birth including a helped birth, fetal misery, inability to advance and an extreme tear. Hence, it was concluded that the character traits of extraversion and emotional dependability seem to facilitate likelihood of natural birth potential clarifications for this include organic (physiological reactivity, pain thresholds, oxytocin and dopamine release) and psychological (coping mechanisms, social support, self-efficacy) factors.

Arfaie, Nahidi, Simbar and Bakhtiari (2017) aimed to explore components and dimensions of this kind of anxiety. This qualitative study (conventional content analysis) was conducted with mothers who referred to health care centers from May to December, 2015. In order to collect data, purposive sampling and face-to-face semi-structured in-depth interviews were used. Twenty-eight pregnant women from different social backgrounds, educational levels and ethnicities aged 18-41 years old participated in this study and after analysis, fear of childbirth was classified into four categories including the process of delivery (fear of pain, prolonged labor, loss of control, being left alone during delivery, fear of her own incompetency), time of delivery (fear of preterm labor, dread of unknown delivery time, dread of late arrival to hospital), delivery complication (dread of bleeding, dread of death, postpartum depression, worry delivery accidents, genitalia injuries and fetal health difficult) and health care quality (hospital facilities, lack of trust in maternity staff and lack of trust in obstetricians). The results suggested that supporting, reassuring and educating pregnant mothers and giving
information about delivery room, labor and strategies for coping with fear of pain and childbirth are critical. Changes in maternity care strategies are suggested to promote positive attitudes toward natural delivery.

Raksha, Anjali and Kirna (2017) did research on primigravida mothers, who conceived for the 1st time. In this context, they need additional care and special attention, acceptance of their behavior, sincere praise and incentive and protection which will ease them during delivery. Tension and stress resulting from pregnancy crisis and delivery increase when the mother is hospitalized, which is associated with stressful situation and factors that affect pain perception during delivery ultimately leading to increased anxiety. The reason of this investigation was to explore the factors causing worry among primigravida planned for natural vaginal delivery and caesarean section. Objective of the study was to assess the level of anxiety among primigravida planned for normal vaginal delivery and caesarean section. Second, to compare the anxiety level among primigravida planned for normal vaginal delivery and caesarean section. Third, to assess the factors causing worry among primigravida planned for natural vaginal delivery and caesarean section. An exploratory research was conducted to assess the factors causing concern between primigravida strategic for natural vaginal delivery and c-section admitted at Mata Ksushalya Hospital, Patiala, Punjab where, forty primigravida women were taken twenty each for natural vaginal delivery and caesarean section in a nonrandomized purposive sampling method was utilized. Willing participants were asked to fill out the self-structured questionnaires. Results of the study revealed that majority of the normal vaginal delivery and caesarean section were experiencing moderate anxiety. While on difference, the level was found to be highest in case of caesarean section. Whereas the mean score in normal vaginal delivery was 20.35. The anxiety was caused due to different factors both in normal vaginal delivery and caesarean section. Out of the 20 factor that we took into consideration, in normal vaginal delivery 95% case experienced anxiety due to “stressful life events” and “body changes”. On the other hand, 75% case of c-section experienced concern due to “history of concern attacks” and “dread of sexual life getting effected.

The literature survey thus revealed that many studies have focused on mothers giving birth to cesarean and normal children, but hardly any studies have concentrated to comprehend the difference between
cesarean and normal children. This led to the formation of the present study to shift the focus from mothers to children.

**METHOD**

**Definitions of the terms used**-

- **Anxiety**
  Apprehensive uneasiness or anxiety usually over an impending or anticipated ill: a state of being nervous (McNamara, 1966)

- **Personality**
  Personality is such a complex concept that there really is no one specific explanation within the field of psychology. In common, personality is a unique set of traits within a person that work to influence their beliefs, motivations, emotions, behaviors and even their environment.

- **Caesarean section**
  A caesarean section (also referred to as C-section) is the birth of a fetus accomplished by performing a surgical incision through the maternal abdomen and uterus. It is one of the oldest surgical procedures known throughout history.

- **Vaginal delivery (Normal delivery)**
  A technique of childbirth where medical interference is limited and the mother regularly exercises rest and breathing methods to control pain and ease delivery in natural childbirth, the mother is awake during delivery, often without common anaesthesia, has actively “trained” in the birthing course and is attended by her partner (or significant other) at the period of delivery.

**OBJECTIVES**

- To study the difference in the level of anxiety among normal birth and caesarean birth students.
- To study the level of anxiety among male and female normal birth and caesarean birth students respectively.
- To study the difference in personality traits among normal birth and caesarean birth students.
• To study the personality traits among male and female normal birth and caesarean birth students respectively.

• To study the interactional effect between childbirth (normal birth and caesarean birth) and gender.

HYPOTHESES

• There would be no significant difference in the level of anxiety between normal birth and caesarean birth students.

• There would be no significant difference in the level of anxiety among male and female normal birth and caesarean birth students respectively.

• There would be no significant personality traits among normal birth and caesarean birth students.

• There would be no significant difference among male and female normal birth and caesarean birth students respectively.

• There would be no significant interaction effect between childbirth and gender.

VARIABLES

Independent variables

• Different childbirth
  
   Normal birth
  
   Caesarean birth

• Gender
  
   Males
  
   Females

Dependent variables

• Anxiety

• Personality traits

Relevant variables

• Age: students between 18-25 years would be selected
- Educational level: intermediate, under graduate and post graduate students would be selected from Education Institute and college university Agra.

**SAMPLE**

The sample of the study would be consisting of total 400 students, out of which 200 female students consisting of 100 caesarean birth and 100 normal birth, and 200 male students consisting of 100 caesareans and 100 normal birth. Appropriate probability sampling would be used, thereafter leading to purposive sampling to select the final sample.

<table>
<thead>
<tr>
<th>Normal birth</th>
<th>caesarean birth</th>
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<tbody>
<tr>
<td>100 male</td>
<td>100 female</td>
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<td>(200)</td>
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**Tools**

1) **Comprehensive Anxiety Test (CAT) by Bharadwaj, Sharma and Bhargava (2006), will be used to measure anxiety.**

- Description of the Test: The Comprehensive Anxiety Test (CAT) is a questionnaire designed to bring out information regarding anxiety of the individuals. Test has 90 items in which 86 relating to the symptoms of the anxiety both “covert” and “overt” and possesses the capacity to record the responses correctly.

- The coefficient of reliability has been determined by using the following two methods:
  1. The test retest method (N=100) was employed to determine the temporal stability of the test. The product moment correlation between test and retest scores has been found to be .83.
  2. By applying the split-half method (Gutman Formula), the reliability coefficient of the test has been found to be .94 (N = 100).

- The co-efficient of validity was determined by computing the correlation between scores of the present test and other tests or scales as follows:
  1. With Anxiety Dimension of Eight State Questionnaire ‘Form A’. Hindi Version by Kapoor and Bhargava. N= 50, r = .68
2. With Anxiety Dimension of Eight State Questionnaire ‘Form B’ Hindi Version by Kapoor and Bhargava N = 50, r = .74

3. With Sinhas’ Comprehensive Anxiety Test (Hindi) SCAT N = 80, r = .82

4. With Spielberger’s State and Trait Anxiety Scale-
   1. State Anxiety N = 42, r = .42
   2. Trait Anxiety N = 60, r = .48

2) HEXACO-60 scales by Ashton & Lee, (2009) will be used to measure Personality Traits

- The HEXACO-60 is a short personality inventory that assesses the 6 dimensions Honesty-Humility (H), Emotionality (E), Extraversion (X), Agreeableness (A), Conscientiousness (C), and Openness to Experience (O) of the HEXACO model of personality structure. 10 items of each of the 6 scales from the longer HEXACO Personality Inventory-Revised (HEXACO-PI-R) (Ashton & Lee, 2008; Lee & Ashton, 2004, 2006), were selected with the aim of representing the broad range of content that defines each dimension. The HEXACO-60 is used in personality assessment contexts in which administration time is limited. (All items employ a 1 to 5 response scale: 1 strongly disagree to 5 strongly agree.

- In self-report data from samples of college students and community adults, the scales showed reasonably high levels of internal consistency reliability and rather low interscale correlations. Correlations of the HEXACO-60 scales with measures of the Big Five factors were consistent with theoretical expectations, and convergent correlations between self-reports and observer reports on the HEXACO-60 scales were high, averaging above .50.

- For the Internal Consistency of the HEXACO–60, the inter-item correlations ranged from .25 to .29 in the college sample and from .21 to .28 in the community sample. The internal consistency reliability ranged from .77 to .80 in the college sample and from .73 to .80 in the community sample.

RESEARCH DESIGN

- To analyze and compare the level of anxiety among normal and caesarean birth students 2*2 factorial design would be used.

STATISTICS TO BE USED

Analysis of Variance (ANOVA) would be used to analyze the data.
REFERENCES


