Anxiety: Revealing The Effects Of Birth Order

Abstract

The purpose of this study was to see if there is a relationship between birth order and anxiety. I hypothesized that firstborns would have higher levels of anxiety on the DASS anxiety scale compared to later borns. Participants of the study were male and female undergraduate students in the PSYC 203 class at Queen's University. Each student filled out a questionnaire, one of the scales was Depression, Anxiety, and Stress Scale (DASS). My study focused on the Anxiety subscale. Results of this study showed no significant differences between levels of anxiety between first and later borns. It is important to continue research on birth order to understand why there is a lot of variation between different researchers and because it is an indicator of the type of relationship between parent and child.

Effects of Birth Order on Anxiety

There have been many studies conducted on the effects of birth order on individuals' levels of anxiety. After reading different journals I found there were conflicting results with some researchers stating that firstborns had higher levels of anxiety, while other researchers stating that there was no difference between first and later-born children. (Schachter, 1959; Weller, 1962; Nisbett, 1968). Some researchers believe the youngest children in the family tend to feel less anxiety about achievement and parental expectations compared to first-born children (Laing, 1994). Mothers are generally more anxious and demanding with firstborns while being more relaxed and comfortable with later-born children. Parents place more pressure on first-born children. The addition of a second child intensifies the pressure, and the first-born struggles to regain the attention of his/her parents (Laing, 1994). Differential treatment by parents may cause first-born children to apply the high standards expected of them to their behavior. These higher expectations may result in first-born children becoming more critical of themselves thus having greater anxiety in certain situations. Later-born children are then less critical of themselves and more relaxed. First-born children were seen to strive to please their parents (Laing, 1994).

Schachter found that firstborns were more anxious or frightened when faced with the prospect of pain (Schachter, 1959). While Weller doing a study measuring pre- and post-experimental anxiety using an adjective checklist did not find any differences between first and second-born females in aroused anxiety (Weller, 1962). Weller's study was an exact replication of Schachter's work. This showed conflicting results because an exact replication found different results. Nisbett found that firstborns reacted with more anxiety to the prospect of physical pain than do later borns (Nisbett, 1968). Other researchers looked at children's fear when in a dental situation related to birth order. These researchers found that first-born children were more fearful than later-born children before getting the dental work done (Defee & Himelstein, 1969). This finding was consistent with Schachter's findings. Another researcher looked at birth order and anxiety among New York residents. This study found significant results that first-born individuals would be more anxious than later borns in stressful situations (Zucker et al., 1968). Although I have found studies finding differences, Jacoby administered an anxiety measure on undergraduate students and he did not find any significant differences between first and later-

born subjects (Jacoby, 1968).

The purpose of this paper is to investigate the differences between first-born and later-born children's levels of anxiety from the DASS Anxiety scale. I am examining and testing in comparison to first and later-born students, that first-born student would have higher levels of anxiety compared to later-born students.

Participants

In this study, 149 (n=149) Queens University students enrolled in PSYC 203 labs were asked by a TA to fill out a questionnaire, there were 16 males and 132 females and 1 preferred not to say. The age range was from 19-22 with the majority of participants aged 19 and 20.

Measures

The scale is known as the Depression, Anxiety, and Stress Scale (DASS) was created by Syd Lovibond and Peter Lovibond in 1995. The scale consists of 42 items and participants are asked how well a specific statement applied to them in the past week. The DASS scale is subdivided into 3 subscales (Depression, Anxiety, and Stress). Participants score was rated on a 4-point severity scale referring to their experience of symptoms over the past week. 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). The scores on the scale range from normal to 20. The Anxiety scale assesses situational anxiety, subjective experience of anxious effect, etc. Examples of questions asked are "I found myself in situations that made me so anxious I was most relieved when they ended" and "I had difficulty in swallowing" (Lovibond & Lovibond, 1995).

Procedure

Students came to PSYC 203 class in Humphrey room 219 at 2:30pm, our TA (James Hillman) asked everyone in the lab to open a document and fill out an online questionnaire. The questionnaire took ten to fifteen minutes to complete. All the data was collected from each lab session and combined into one large data set.

Results

All participants were Queens University students enrolled in PSYC 203. A total of 149 participants completed a questionnaire that measured the score of Anxiety from the DASS Anxiety scale. I used an independent t-test to see if there were any significant differences between the DASS anxiety score between first and later-born individuals. First-born individuals with a DASS anxiety score ($M= 6.67$, $SD=6.47$) were not significantly different than later-born individuals with a DASS anxiety score ($M=6.86$, $SD=7.13$), $t(139)= -.160$, $p=.87$. I created a figure looking at the mean differences of the DASS Anxiety for individuals of first and later-born individuals (See Figure 1).

Discussion

After conducting the statistical test, I was able to see there was no statistical difference between

first and later-born individuals for scores on the DASS anxiety scale. The results did not support the hypothesis that first-born children have higher levels of anxiety compared to later-born children. I could conclude that there is no statistically significant difference between the two conditions. Although results were not significant, there has been past research supporting my hypothesis but also research falsifying my hypothesis. I think more studies need to be conducted on different groups of individuals. This study using Queen's University students primarily had female participants, this could have an effect on the results. First-born University students may already have lived up to their parent's expectations and do not feel the need to be anxious in certain situations. The firstborn may not feel anxious regardless of any type of pressure because they have learned how to cope better being in University.

Birth order is relevant because it is an indicator of a type of relationship between parent and child and can be used to look at levels of anxiety. For future studies, it may be important to study the relationship itself to get a better sense of the differences in birth order if any. It is suggested that birth order together with other factors, which can include the sex of subsequent siblings or the number of years between siblings, could be an important variable (Weller, 1962). A limitation to this study is I did not consider only children, this could have an effect on the results. It is seen that only children are often maladaptive perfectionists, they typically feel anxious, and emotionally drained before a new task has begun. They may be unable to use effective coping skills affecting how much anxiety they have (Gnilka et al., 2012). It may also be important in the future to examine the effects of psychological birth order. This could be important as the perceived birth order could differ from chronological order due to the differences in the family dynamics having an effect on the individual's levels of anxiety (Stewart & Campbell, 2001). If there is a large enough gap, the child may act as they are an only child.

Overall, I think we should continue to research birth order and its effects on anxiety levels and other mental illnesses. I think this can help different professionals begin early interventions on children if we do more research on the effects of birth order.

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