Relating Family Size and Birth Order to Emotional Intelligence

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Abstract

Learning about emotions and how to handle them is part of the process of socialization and begins with the family in the home. The amount of socialization one receives from one's family may be related to both family size (the number of children in the family) and the age ranking of oneself in comparison with one's siblings. Younger children and children in larger families may receive more socialization and more training about emotions.

The purpose of this study was to examine the relationship of Emotional Intelligence with birth order and family size. Emotional Intelligence includes the ability to perceive, understand and manage your own and others' emotions. Alexithymia, the inability to describe one's emotional experiences, may be considered the opposite of Emotional Intelligence. We hypothesize that younger siblings and people from larger families will have lower levels of Alexithymia and thus higher levels of Emotional Intelligence.

This study was administered over the Internet to 102 participants. The three subscales of the Toronto Alexithymia Scale (TAS-20; Bagby, Parker, & Taylor, 1994) measured Alexithymia and the Nuclear Birth Order Scale, which was created for this study, measured family size and birth order.

There was no relation between Emotional Intelligence and birth order. However, there was a relationship between family size and one of the TAS-20 subscales: People from larger families had higher levels of Externally-Oriented Thinking (and lower levels of Emotional Intelligence). This finding contradicts previous research (Morand, 1999), which found a positive relationship between family size and Emotional Intelligence. Our results may differ because we used self-report while he used maximum-performance.

More data is being collected. With a larger sample, we will be able to control two extraneous variables that may be reducing the power of our statistical analyses. Our study includes measures of ages of each participant's siblings and how long they lived with the respondent while the respondent was growing up. By controlling these variables, we hope to increase our power and confirm the negative relationship between Emotional Intelligence and family size, using a study design that assures a higher degree of internal validity.

Introduction

Learning about emotions and how to handle them is part of the process of socialization and begins with the family in the home. The type and extent of socialization one receives from one's family may be related to both family size and birth order. Family size can be defined as the number of children in the family in which a person grew up. Birth order can be defined as the age ranking of oneself in comparison with siblings that are either born or adopted into a family. Younger children and children in larger families may receive more socialization and more training about their own and others' emotions. Because of this, both birth order and family size might be related to Emotional Intelligence. The purpose of this study was to examine these two possible relationships.

Emotional Intelligence can be defined as the ability to perceive, understand, and manage emotions in oneself and in others. In contrast, Alexithymia is characterized by difficulty identifying and describing feelings, a tendency to focus on events and objects rather than feelings, and a lack of fantasy life (Taylor, 1994). Alexithymia is often considered to be the opposite of Emotional Intelligence, because these respondents do not understand and cannot communicate their emotions.

Morand (1999) found a positive relationship between family size and the ability to recognize emotions from facial expressions. Participants were shown seven separate faces that depicted different emotions. They had to decide which of seven emotions each face was expressing. Morand found that participants who came from larger families more often chose the correct emotions. He argued that people who are raised in larger families have higher levels of Emotional Intelligence because of the larger number of social interactions they experience in their home while growing up.

The purpose of the current study is to replicate and extend this finding. First, we want to replicate the finding that Emotional Intelligence is positively related to family size (and Alexithymia is negatively related to it).

Children who have no siblings have fewer social interactions in the home and fewer opportunities for their parents to teach them about understanding other people's emotions, and therefore are expected to have lower levels of Emotional Intelligence than children who have siblings. Second, we hypothesize that children who are born later into a family will have higher levels of Emotional Intelligence (and lower levels of Alexithymia) than those that are born earlier or those who have no siblings. Children who are born later are born into families with siblings, while children who are born first are born into families with no siblings and only gain their siblings later. Therefore, later born children spend the first few years of their lives in larger families than their older siblings do, and may have higher levels of Emotional Intelligence.

Method

Participants

Participants were recruited over the Internet, through advertisements on the American Psychological Society website and the Social Psychology Experiment website. The 102 participants (73 female, 29 male) ranged in age from 18 to 55 years, with a mean of 23.8 and a standard deviation of 7.7. The majority of the participants, 83, were from the United States and another 10 participants were from the United Kingdom.

Measures

The Toronto Alexithymia Scale (TAS-20; Bagby, Parker, & Taylor, 1994; Bagby, Taylor & Parker, 1994) consists of 20 Likert-type questions designed to measure three aspects of Alexithymia: Difficulty Identifying Feelings, Difficulty Describing Feelings, and Externally-Oriented Thinking (a tendency to focus on objects and events rather than feelings).

The Nuclear Birth Order Scale (NBOS) was created for this study to measure birth order and family size. Participants provide the age and gender of themselves and each of their siblings, and state how long they lived with each of their siblings before the age of 18.

Participants in this study also completed the Psychological Positioning Questionnaire (Lohman, Lohman, & Christensen, 1985). However, scores on this measure were not used in the statistical analyses reported here.

Procedure

Participants completed this study over the Internet in a single 10-minute session. They received neither course credit nor money in return. All participants completed the NBOS and the TAS-20. Participants who reported having siblings also completed the Psychological Positioning Questionnaire.

Results

Family Size and Emotional Intelligence

The three TAS-20 scales were correlated with family size. The correlations for the Difficulty Identifying Feelings and Difficulty Describing Feelings subscales were both non-significant ($r(100) = -.02$, $p = .88$; and $r(100) = .09$, $p = .36$, respectively). However, the correlation between the TAS-20 and the Externally-Oriented Thinking scale was statistically significant ($r(100) = .22$, $p = .03$). This last correlation was not in the expected direction. Because the TAS-20 is scored so that higher scores indicate higher levels of Alexithymia, this correlation indicates that people who come from larger families have lower levels of Emotional Intelligence, contrary to previous research on this question.

Birth Order and Emotional Intelligence

To determine if birth order is related to Emotional Intelligence, we compared the oldest and youngest children in two-children families, and the oldest, middle, and youngest children in three-children families. These one-way ANOVA's were done separately within specified family sizes to avoid confounding family size with birth order. Unfortunately, neither ANOVA was significant. There was no relationship between birth order and Emotional Intelligence.

Conclusion

The purpose of this research was to examine the relationships of Emotional Intelligence to family size and birth order. Morand (1999) found a positive relationship between Emotional Intelligence and family size, which he argued could be caused by the greater number of social interactions in larger families. In contrast, we found a negative relationship between Emotional Intelligence and family size. Participants with larger families had higher levels of Alexithymia, and by implication, lower levels of Emotional Intelligence. One possible reason for the conflicting results is the types of Emotional Intelligence tests used: Morand used a maximum-performance test, while we used a self-report measure. Previous research (Barchard & Hakstian, in press) has shown that self-report and maximum-performance measures of Emotional Intelligence have little relationship. Thus, an inability to generalize results from maximum-performance to self-report tests of Emotional Intelligence should not have

surprised us. Further research is needed to clarify the relationship between birth order and Emotional Intelligence, and to examine how this relationship varies depending upon the type of Emotional Intelligent test used.

Based upon Morand's (1999) finding, we had also expected a positive relationship between birth order and Emotional Intelligence, because children who are born later into a family have one or more siblings from the moment they are born. Their average family size over their early childhood, therefore, is higher than that for children who are born earlier in the family. However, we did not find a statistically significant relationship between birth order and Emotional Intelligence for either two-children or three-children families. It might be that the difference in family size in the first few years of life between older and younger siblings is not important enough to influence one's overall Emotional Intelligence, or that a research design with much higher power is needed to detect this difference. Therefore, the lack of a significant relationship here might have been due to this lack of power, or may, again, have been due to the differences in the types of Emotional Intelligence tests used.

We are continuing to collect data in this study so that we can control for two additional sources of random error and thus obtain higher power. Fist, we will control for the sex of participants' siblings (as recommended by Watkins, 1992). In our subsequent analyses, we will only examine the data for families where all children were the same sex. Second, most birth order research does not take into account whether the respondent actually lived with their siblings while they were growing up. We think that family size and birth order should be calculated based upon those siblings that one grew up with. Therefore, when we have a larger sample size, we will restrict our analyses to respondents who spent several years in the same house as each of their siblings or we will remove siblings with whom the respondent did not live before calculating birth order and family size. Future research could increase power further by collecting data within families and using repeated measures ANOVAs or multivariate ANOVA's to compare siblings within each family size.

Two additional data analyses are also possible based upon this data set. First, we could control for the age separation of children. We do not know of any previous research that controlled for this possible confounding factor. Second, we have not yet analyzed the data from one of the measures that we collected data for. This is the Psychological Positioning Scale (Lohman et al., 1985). Psychological Positioning is the perception a person has of how much they are in competition with, ahead of, or behind their siblings. We will need to divide our sample into people who have the same family size and birth order and then compare people who have different Psychological Positions. For example, for middle children of three-children families, we will compare the Emotional Intelligence of people who feel that they are ahead of, behind, or at the same position as their siblings. When we have a much larger sample, such fine divisions will be possible.

In summary, this study found a negative relationship between Emotional Intelligence and family size: People who grew up in larger families had lower levels of Emotional Intelligence, contrary to previous research. It seems that the relationship between Emotional Intelligence and family size depends upon the type of Emotional Intelligence test used (self-report or maximum-performance). Future research should examine how the type of test used influences the relationships between family size, birth order, and Emotional Intelligence, and should use large enough samples so that participants can be divided into more homogeneous groups based upon sex and age differences between siblings, to increase power while reducing possible confounding variables.

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