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## ACCURACY OF ONLY CHILDREN STEREOTYPE

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#### Abstract

Both expert and folk psychologists believe that only children are spoiled, selfish, lonely, and socially estranged. In this study we demonstrate that the stereotypical personality profile of a typical only child differs consistently from the stereotypical profile of those who have other siblings on 23 out of the 30 NEO-PI-R subscales. These differences between stereotypical personality profiles do not reflect self-descriptions because the self-rated personality profiles made by only children coincide almost perfectly with the self-rated personality profiles of those who have brothers or sisters. The multiple children stereotype reflects rather accurately both the mean normative and the socially desirable personality profile.


Keywords: Personality; Stereotypes; Only Children; Accuracy

## Introduction

It is a strongly held belief that children without siblings are spoiled, selfish, lonely, and socially estranged. Psychoanalytically oriented theorists have speculated about family influence on personality development, insisting that the absence of siblings is detrimental to social adjustment and development of character (Adler, 1964). The frequently quoted Stanley Hall's remark that "being an only child is disease in itself" (cited in Campbell, 1934; Fenton, 1928) aptly illustrates psychologists’ concern about children raised without the benefit of siblings. Likewise, lay persons generally believe that parents of only children are inclined to overindulge and pamper of their offspring which results in producing unhappy, selfish and disturbed individuals. Many studies have shown that people think of only children as selfcentered and dislikeable persons (e.g. Musun-Miller, 1993). The negative stereotype of only children is pervasive and prevalent across different cultures (Mancillas, 2006), including United States (Blake, 1981), the Netherlands (Veenhoven \& Verkuyten, 1989), and China (Falbo \& Poston, 1993).

Some stereotypes are adequate or at least contain a kernel of truth in them, which immediately raises the question about the underpinnings of the stereotypes of only children. In fact, the effect of sibling status on people's personality traits has been an intensively studied topic for decades. Researchers in the field have been stimulated, for example, by the idea that parents' differential treatment of children of different birth orders or the competition among siblings for parents' attention have effects on children's personality traits (Hilton, 1967; Sulloway, 1998). However, overall impression from the relevant research is that birth-order has minimal effect on individual differences in personality traits or intelligence (Ernst \& Angst, 1983; Schooler, 1972). A similar conclusion was derived from the early literature about the personality of only children: whatever role the mere presence or absence of siblings may play in development of personality, its importance is certainly not crucial (Campbell, 1934; Falbo
\& Polit, 1986). Thus, possible differential parental treatment of children with different birth orders or only children, or competition among siblings does not seem to have a straightforward impact on people's personality traits.

In spite intensive research, there are only a few studies in which lay-people's beliefs about sibling status effects on personality, intelligence and achievement are directly compared with reality they are supposed to reflect.

The aim of this study is three-fold. First, using the Five-Factor Model of personality (FFM), it aims to establish the stereotypic personality profiles of only children and those who have brothers or sisters. Second, it is assessed how accurately these stereotypic profiles reflect selfdescriptions of people with or without siblings. Mean profiles obtained through self-ratings are used to test for the trait level differences between personality ratings made by only-born children and those who have siblings. Third, possible correlates of the stereotypes about only children and children with siblings are investigated. As previously described, the stereotype about only children is usually negative. According to stereotypes, people who have not had siblings deviate from socially healthy and well-functioning individuals. In the present study, we test this idea empirically. We investigate the similarity of the personality profiles of only children and children with siblings to the profile of the socially desirable levels on personality traits (Konstabel, Aavik, \& Allik, 2006). We expect that the stereotypic profile of persons from multiple children families is closer to socially desirable personality profile than the stereotype about only children. Knowing that socially desirable levels on personality traits are similar to the average levels (Edwards, 1957) and assuming that individuals with siblings are portrayed as closer to the "healthy normal" than only children, we also predict that personality trait profile of those who have siblings is similar to the average profile, while the stereotypical personality profile of only children is deviating from it.

## Methods

Participants. Two hundred participants ( 158 women and 42 men with the mean age $25.4 \pm 5.3$ years) were asked to think of an only child or child from multiple children family and describe his or her personality traits. Twenty four of the participants were only children themselves and 176 had at least one brother or sister. Participants were reached through personal contacts (friends, acquaintances, colleagues and their acquaintances etc.) of the second author.

The sample providing self-report data consisted of 725 Estonians and Estonian Russians who were applying for admission of the Faculty of Social Sciences at the University of Tartu (563 women and 162 men ). The applicants' mean age was $19.5 \pm 5.9$ years. Nearly $75 \%$ of the participants were between 19 and 20 years of age and $92 \%$ of them were aged between 19 and 24. From those 725 participants 81 were single children.

Measures. An Estonian version of the National Character Survey (NCS; Terracciano et al., 2005) was modified to assess perceived character of a person who has been an only child in his or her family or a person who has been raised in a family with many children. The NCS consists of 30 bipolar items intended to parallel the facets of the NEO-PI-R. Exactly half of the participants $(N=100)$ were asked to think about an individual who did not have brothers or sisters and rate his or her personality traits in comparison with those who had grown up in families with more than one children. The second half of participants $(N=100)$ was instructed to think about an individual who has been raised in a family with many children and contrast his or her personality traits with those who were only children in the family. The NCSs were completed online at a specially developed web-site that participants were asked to visit.

Personality self-ratings were obtained using the Estonian version of the Revised NEOPersonality Inventory (NEO-PI-R; Costa \& McCrae, 1992; Kallasmaa, Allik, Realo, \& McCrae, 2000), a 240-item measure of the Five Factor Model. Psychometric properties of the

Estonian version are comparable to those of the original English version (Kallasmaa et al., 2000).

For the reference we used two sets of already published data:

The mean profile of the Estonian Normative Sample (Kallasmaa et al., 2000) was computed on the basis of the mean values of 710 participants who provided their self-ratings to establish norms for the Estonian version of the NEO-PI-R.

NEO-PI-R Social Desirability Profile (Konstabel et al., 2006). The social desirability profile for the NEO-PI-R was obtained on the basis of ratings of social desirability of each of the 240 NEO-PI-R items. The ratings for the items of each of the 30 facet scales were averaged, producing a desirability score for every facet scale.

## Results

Existence and accuracy of the stereotypes

The instruction to describe personality traits of an only child produced a profile which was different from the respective stereotype profile of a child with siblings (Table 1, Columns 2 to 4). One-way ANOVA revealed that the mean values on 23 out of 30 subscales were significantly different. Expectedly, individuals raised with other children were perceived to be more altruistic, tender-minded, modest, warm, and compliant. As in previous research, our participants characterized only children as more neurotic, lonely, selfish, and obstinate compared to children raised with siblings. Being ( $N=24$ ) or not being $(N=176)$ an only child did not seem to affect these beliefs. The profile of a typical single child was not a negative replica of the personality profile of those who were raised in multiple children families ( $r=$ $.25, p=.18)$.

Columns 5 to 7 of Table 1 show self-rated personality profiles of applicants grouped on the basis of their sibling status. The mean profile of only children $(N=81)$ was very similar to the mean profile of those ( $N=644$ ) who had at least one brother or sister. One-way ANOVA revealed only one statistically significant difference: compared to only children, participants from multiple children families were more open to new ideas ( $F_{1,720}=6.05, p<.05$ ). By shape, these two profiles were almost identical ( $r=.99, p<.001$ ) to each other and to the mean profile of the Estonian normative data $(r=.97$ and $r=.96$ respectively for only children and children with siblings, both $p<.001$ ) reported by Kallasmaa et al. (2000).

## Correlates of stereotypic personality profiles

Next we computed correlations between stereotypic and three self-rated NEO-PI-R mean profiles, obtained from the applicant sample (separately for only children and children with siblings) and the Estonian normative sample (Table 2). Although both only and not-only children stereotypes were positively correlated with the mean levels of self-ratings, the latter was considerably more similar to all of the three profiles of the self-rated NEO-PI-R traits. It is remarkable that all of these correlations were in the same range (.77-.79). The stereotypic portray of children with siblings was as similar to the self-rated personality of only children as to the personality of those who in fact had siblings. Moreover, randomly chosen people (normative data), irrespective of their sibling status, tended to rate their personality traits very similarly.

Even more noteworthy is the correlation between multiple children stereotype and the NEO-PI-R Social Desirability Profile ( $r=.87, p<.001$ ). This indicates that the perception of a typical individual who has been raised together with brothers and sisters is very close to what is regarded socially desirable and could receive approval from other people. In contrast, the only children stereotype was not related to the profile social desirability ratings ( $r=.15, p=$ .413).

We considered the possibility that the profile correlations were inflated by the overall keying of facets of Neuroticism in the socially undesirable direction and facets of the other four factors in the desirable direction. When facets of Neuroticism were reversed, all correlations were slightly lower but the pattern of relationships remained unchanged.

## Discussion

Ratings about only children demonstrated that they were believed to be emotionally unstable, cold, hostile, uncaring, obstinate, and arrogant. In turn, individuals who were raised together with brothers and/or sisters were perceived as more straightforward, altruistic, gregarious, happy and liberal. Although a considerable agreement was reached in these opinions, the beliefs did not reflect self-descriptions of only children: personality traits of only children, measured by the NEO-PI-R self-report form, did not differ from the personality traits of those who had siblings.

It is worth to point out that the participants who provided self-ratings were relatively young. Thus, in this sample the possible effect of being an only child, for example due to a certain kind of parental treatment, should have been especially noticeable because most of the individuals had recently come from or were still in their family environments. Since there was nearly no trait-level difference between only and not-only children, this adds some weight to the conclusion that the presence or absences of siblings has no considerable effect on
personality traits. On the other hand, the conclusion is limited to self-report data. In future research the findings should be replicated in observer ratings.

However, the fact that stereotypes often do not reflect actual group differences does not necessarily mean that they lack any cognitive or social functions. Stereotypes, consensually held perceptions of typical only children among them, may serve functions that are beneficial for maintenance of human society. From evolutionary perspective the fear of childlessness and the desire for a second child as an insurance against childlessness may play an adaptive role (Solomon, Clarey, \& Westoff, 1982). Passing one's genes to next generations is a central purpose of the human species and the number of children one has is clearly related to the probability of achieving this goal. Both individuals and the society as a whole are interested in creating mechanisms for motivating people to have more than one child. The need to have children is also recognized by culture and is expressed in beliefs and values. Therefore, we hypothesize that stereotypes as social constructions that can affect the ways people behave (Bargh, Chen, \& Burrows, 1996) may be one sort of these mechanisms. Our results showed that children from multiple children families were generally perceived to have socially more desirable and typical personality traits than only children. It is possible that the function of the socially less desirable stereotype about only children is to encourage people not to have such less positively portrayed children. In other words, beliefs that only children are lonely, selfish and maladjusted may serve the role of a motivator for having more children (Falbo, 1982). There are some indirect evidences consistent with this hypothesis: most commonly stated reason in the United States for having a second child is to prevent the first from remaining the only child (Solomon et al., 1982). In the same way, approximately $40 \%$ of Estonian women in the age from 18 to 45 mentioned that they wish to have a second child in order to provide company for the first one. Among the single child parents who planned to have a second child in the next two years, the same motive was mentioned by $70.2 \%$ of women (Marksoo, Oja, \&

Kutsar, 2001). However, the idea about the functions of the only children stereotype is a hypothesis that needs further empirical support.

Stereotypes as cultural phenomena may vary considerably across socio-historical contexts. Therefore, it is important to note that the findings of the present study are limited to the Estonian sample and therefore need replication in other cultural settings.

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Table 1.

Means and standard deviations of stereotypically perceived and self-rated personality traits of only and non-only children.

|  | Stereotype |  |  | Self-Ratings |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (SD) |  | $F_{1,197-198}$ | Mean (SD) |  | $F_{1,718-723}$ |
|  | Only Child | Non-Only Child |  | Only Child | Non-Only Child |  |
| N1: Anxiety | 2.80 ( 0.96 ) | 2.45 ( 0.80 ) | 7.84 ** | 15.04 ( 5.38 ) | 15.94 ( 5.57 ) | 1.90 |
| N2: Angry-Hostility | 3.19 ( 0.98) | 2.50 ( 0.92 ) | 26.42 *** | 12.00 ( 4.64 ) | 12.70 ( 5.39$)$ | 1.22 |
| N3: Depression | 2.64 ( 0.87 ) | 2.33 ( 0.70) | 7.73 ** | 13.81 ( 6.11 ) | 13.50 ( 6.25 ) | 0.19 |
| N4: Self-Consciousness | 2.63 (0.95) | 2.06 ( 0.81 ) | 20.76 *** | 14.47 ( 4.78 ) | 14.95 ( 5.28 ) | 0.61 |
| N5: Impulsiveness | 3.37 ( 0.97 ) | 2.95 (0.82) | 10.91 ** | 16.47 ( 4.59 ) | 16.93 ( 4.98 ) | 0.63 |
| N6: Vulnerability | 2.97 ( 0.83 ) | 2.24 (0.75) | 42.37 *** | 9.04 ( 4.46 ) | 9.20 (4.36) | 0.10 |
| E1: Warmth | 3.02 ( 0.91 ) | 3.98 ( 0.85 ) | 59.28 *** | 23.86 ( 4.71 ) | 24.00 ( 5.04 ) | 0.05 |
| E2: Gregariousness | 3.21 (1.02) | 3.91 (0.85) | 27.75 *** | 21.28 ( 5.73 ) | 20.98 ( 5.97$)$ | 0.18 |
| E3: Assertiveness | 3.75 ( 0.95 ) | 3.29 ( 0.86 ) | 12.98 *** | 19.00 ( 5.66 ) | 19.00 ( 5.82 ) | 0.00 |
| E4: Activity | 3.58 ( 0.78 ) | 3.62 (0.75) | 0.14 | 19.57 ( 6.02 ) | 20.46 ( 6.24 ) | 1.44 |
| E5: Excitement-Seeking | 3.45 ( 0.85 ) | 3.23 (0.76) | 3.73 | 21.39 ( 4.89 ) | 21.47 ( 4.72 ) | 0.02 |
| E6: Positive Emotions | 3.38 ( 0.71 ) | 3.71 (0.70) | 10.98 ** | 22.95 ( 6.13 ) | 23.45 ( 5.95 ) | 0.50 |
| O1: Fantasy | 3.19 ( 1.10 ) | 2.89 (0.95) | 4.26 * | 22.41 (5.64) | 22.22 ( 5.49 ) | 0.09 |
| O2: Aesthetics | 3.26 ( 0.81 ) | 3.32 ( 0.93 ) | 0.24 | 21.75 ( 5.68 ) | 22.56 ( 5.58 ) | 1.51 |
| O3: Feelings | 3.13 ( 0.91 ) | 3.67 ( 0.87 ) | 18.57 *** | 23.45 ( 4.55 ) | 23.93 ( 4.29 ) | 0.88 |
| O4: Actions | 3.25 ( 0.87 ) | 3.31 (0.93) | 0.22 | 16.88 ( 4.49 ) | 17.88 ( 4.76 ) | 3.25 |
| O5: Ideas | 3.16 ( 0.86 ) | 3.51 ( 0.80 ) | 8.89 ** | 20.07 (5.55) | 21.67 ( 5.47 ) | 6.05* |
| O6: Values | 2.97 ( 0.83 ) | 3.59 ( 0.90 ) | 25.52 *** | 20.06 ( 3.55 ) | 20.66 ( 3.76 ) | 1.82 |
| A1: Trust | 3.12 ( 1.00 ) | 3.12 (0.77) | 0.00 | 20.07 ( 4.20 ) | 20.50 ( 4.85 ) | 0.58 |
| A2: Straightforwardness | 3.10 ( 0.86 ) | 3.68 ( 0.86 ) | 22.69 *** | 17.63 ( 5.85 ) | 17.84 ( 5.66 ) | 0.10 |
| A3: Altruism | 2.60 ( 0.90 ) | 3.92 (0.93) | 104.32 *** | 22.20 ( 4.24 ) | 22.04 ( 4.32$)$ | 0.10 |
| A4: Compliance | 2.22 ( 0.85 ) | 3.17 ( 0.94 ) | 56.10 *** | 15.02 ( 4.78 ) | 15.27 ( 4.60 ) | 0.21 |
| A5: Modesty | 2.42 (0.77) | 3.27 (0.75) | 62.70 *** | 15.83 ( 4.86 ) | 16.75 ( 5.69 ) | 1.96 |
| A6: Tender-Mindedness | 2.89 (0.78) | 3.91 (0.85) | 78.04 *** | 21.43 ( 3.92 ) | 21.97 ( 3.75 ) | 1.45 |
| C1: Competence | 3.50 ( 0.85 ) | 3.73 (0.74) | 4.20 * | 20.16 ( 3.87 ) | 19.86 ( 4.25 ) | 0.36 |
| C2: Order | 3.00 ( 0.98 ) | 3.21 (0.95) | 2.37 | 19.09 ( 4.94 ) | 19.09 ( 5.28 ) | 0.00 |
| C3: Dutifulness | 3.17 ( 0.94 ) | 3.60 ( 0.82 ) | 11.88 ** | 22.94 ( 4.14 ) | 22.14 ( 4.37$)$ | 2.44 |
| C4: Achievement Striving | 3.59 ( 0.82) | 3.49 ( 0.80) | 0.77 | 20.22 ( 4.79 ) | 19.73 ( 5.41 ) | 0.60 |
| C5: Self-Discipline | 3.08 ( 0.77 ) | 3.51 ( 0.66 ) | 17.88*** | 20.64 ( 5.25 ) | 20.77 ( 5.09 ) | 0.05 |
| C6: Deliberation | 2.76 ( 0.84 ) | 3.57 ( 0.71) | 53.79*** | 18.07 (5.31) | 16.84 ( 5.51 ) | 3.64 |

Notes: *** $p<.001,{ }^{* *} p<.01, * p<.05$.

Table 2.

Correlations between NCS and NEO-PI-R profiles.

|  |  | Stereotype |  | Self-Ratings |  | $\begin{gathered} \text { Normative } \\ \text { Data }^{1} \end{gathered}$ | Social Desirability Index ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Only-Child | Non-Only Child | Only-Child | Non-Only Child |  |  |
|  | Only-Child | - | 0.25 | 0.36 | 0.36 | 0.25 | 0.15 |
| Stereotype | Non-Only Child | 0.25 | - | 0.79 | 0.78 | 0.77 | 0.87 |
|  | Only-Child | 0.36 | 0.79 | - | 0.99 | 0.97 | 0.81 |
| Self-Ratings | Non-Only Child | 0.36 | 0.78 | 0.99 | - | 0.96 | 0.78 |
| Normative Data ${ }^{1}$ |  | 0.25 | 0.77 | 0.97 | 0.96 | - | 0.84 |
| Social Desirability Index ${ }^{2}$ |  | 0.15 | 0.87 | 0.81 | 0.78 | 0.84 | - |

Notes: All correlations above .36 are significant at $p<.05 .{ }^{1}$ The NEO-PI-R mean profile of the Estonian Normative Sample (Kallasmaa et al., 2000); ${ }^{2}$ The NEO-PI-R Social Desirability Index (Konstabel et al., 2006).

