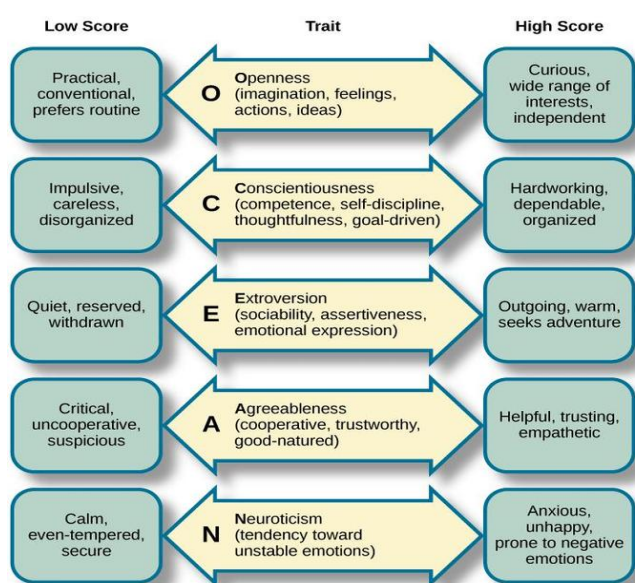


Survey on personality and voluntary childlessness, carried out online May - July 2013

- There are many things which affect why someone chooses not to have children. This survey looked at the relation of personality traits, but please note that other factors/experiences (outside the scope of this study) may be a bigger influence for many people.
- 780 people completed the survey: 91% female, mean age 34.6 (range 16-63). There were a total of 46 nationalities; 86% of respondents were from the USA, UK, Canada and Australia. Responses were collected from both childfree and non-childfree/parents, although due to the recruitment method (mostly via childfree websites and social media) the childfree made up 79% of respondents.
- Six personality traits were measured: Independence, plus what are known in psychology as the 'Big Five' traits: named Neuroticism, Extraversion, Openness to Experience, Agreeableness and Conscientiousness. A large body of research has found scores on these 'core' traits to be predictive of many choices and life outcomes. More information can be found online, e.g. http://en.wikipedia.org/wiki/Big_Five_personality_traits



- The survey comprised a personality test (the 44 item 'Big Five Inventory' plus some extra items relating to Independence), socio-demographic questions, and questions to assess intentions and preferences around having children.
- Participants were divided into two groups for main comparisons: the childfree/voluntarily childless (615 people - those who said they 'probably' (15% of total sample) or 'definitely' (64%) didn't want children), and respondents who either had children or would like to have them (136 people in total), including the involuntarily childless. 29 participants were undecided, which is only 4%: too few to be a stand-alone category, but they were included in some of the correlational analyses.
- Statistical analysis was done to compare the 'probably not' and 'definitely not' groups, and they did not differ significantly from each other in terms of socio-demographics or data patterns with the other variables (although the patterns found tended to be stronger for the 'definitely not' group). Therefore it was decided to combine them, rather than exclude the responses of all the 'probably not's'.
** Some may question whether those who 'probably' don't want children could be considered childfree. It was decided that as most respondents were under 40, and intentions can change (in both directions), someone could identify as being voluntarily childless/childfree whilst also saying 'I probably don't want children', as they perceive it's theoretically possible they may change their mind, however unlikely.*
- For brevity, this summary will mainly use "childfree" instead of "voluntarily childless", whilst noting that individuals may prefer one term over another and that not all the voluntarily childless identify as childfree. Previous academic research has used both terms, sometimes interchangeably.

Comparison of personality scores between groups

| Trait (mean score out of 5) | Childfree group | Have/would like children group |
|-----------------------------|-----------------|--------------------------------|
| Independence* | 3.73 | 3.31 |
| Agreeableness* | 3.41 | 3.69 |
| Extraversion* | 3.03 | 3.19 |
| Openness to Experience | 3.84 | 3.75 |
| Neuroticism | 3.11 | 2.98 |
| Conscientiousness | 3.66 | 3.66 |

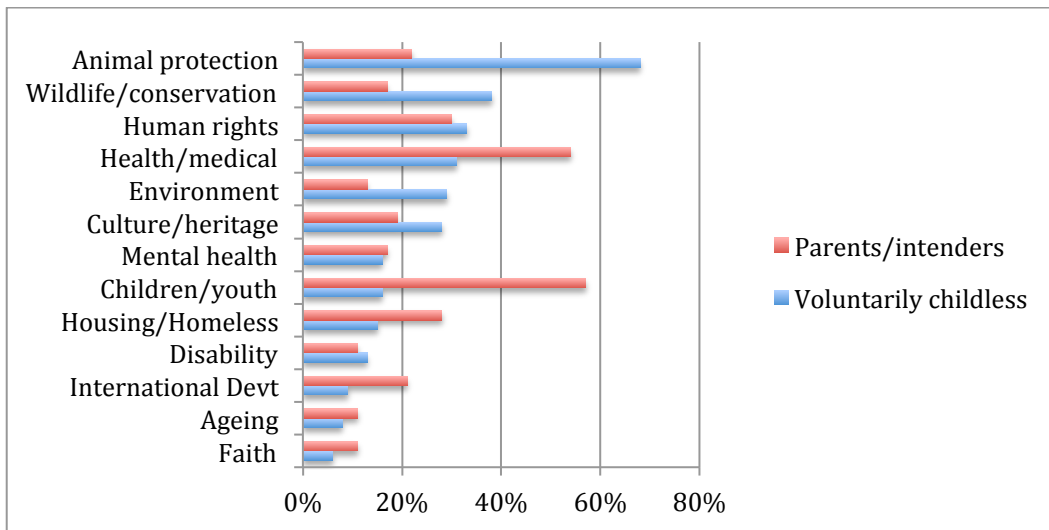
* statistically significant difference in mean scores

- Overall, statistically significant results were: **the childfree group scored 8% higher in Independence, 6% lower in Agreeableness and 3% lower in Extraversion.** They were also slightly higher in Neuroticism and Openness to Experience, but this was not statistically significant.
- Participants with no children (the childfree, the undecided, and those who would like children) were asked to rate their level of desire for parenthood on a scale of -5 to + 5. There were some statistically significant correlations: **the higher people scored in Agreeableness, the higher their level of desire for children tended to be; the higher their score in Independence, the lower the level of desire for children tended to be.**
- Parents and those who probably/definitely intended to have children were asked how many children they would ideally have in their lifetime (for parents this was worded as *"if you could go back in time to before you had children and choose the ideal number to have..."*). Agreeableness was the only trait which showed a statistically significant correlation: **those higher in Agreeableness were more likely to want a greater number of children.**
- 61% of the parents in this survey said they had always wanted children. 21% were previously unsure, 14% previously hadn't wanted them, but then changed their mind, and 4% hadn't wanted them.**
- 38% of the parents reported that at least one of their children had been unplanned.** While not statistically significant, those scoring higher in Conscientiousness were slightly less likely to have unplanned children.

Socio-demographic patterns

- Siblings: 18% of the childfree respondents had no siblings, compared to 10% of those participants who had/would like children** – a statistically significant difference. There were no significant differences between the groups in birth order. Although not statistically significant, **there was a trend for the childfree to come from smaller families:** only 40% had more than one sibling (vs 52% of the other group).
- Religion:** There were statistically significant results regarding religion. **Childfree respondents were less likely to be religious**, with 48% saying they were not religious at all, compared with 23% of those who had/would like children. Respondents who definitely didn't want children were the least religious overall. **Ideal number of children desired, and overall ratings of desire for parenthood, were both positively correlated with religiosity.**
- Politics:** Both the childfree and non-childfree groups, as a whole, were slightly skewed towards the politically liberal. However, there was a statistically significant difference in mean scores, with **the childfree scoring higher in liberality**, and 61% of the childfree rated themselves as extremely or fairly liberal, compared with 48% of those who had/would like children.
- Pets:** There was a statistically significant result when it came to pets. **74% of the childfree respondents had pets, compared to 59% of the have/would like children group.** There were no differences in the type of pets they had – contrary to popular stereotype, the childfree respondents were not more likely to have cats!
- Charity support: 86% of childfree and 69% of non-childfree respondents regularly or occasionally supported charities** (e.g. through donating or volunteering). This was a statistically

significant difference. **There were also some differences between the groups in type of cause supported.** The percentage of each group regularly supporting various causes is shown below.



- **The three most popular causes supported by the childfree respondents were animal protection, wildlife/conservation, and human rights.** The three most popular causes supported by parents or those who wanted children were children/youth, health/medical, and human rights.
- Statistically significant differences: **overall, childfree respondents were more likely than the non-childfree to support issues concerning the natural world (animal protection, wildlife and the environment), and culture/heritage-related causes. Respondents who had/wanted children were more likely to support the issues of children/youth, health, homelessness, and international development.**

Early articulators

- 59% of respondents who probably/definitely didn't want children said they were in their teens or younger when they realized this.
- **These 'early articulators' – as the research literature terms them – had significantly higher mean scores in Openness to Experience and Independence than the rest of the childfree:** 3.91 vs 3.76 (for Openness), and 3.79 vs 3.64 (for Independence). There were no differences between them on the other traits, including Agreeableness and Extraversion (which were traits which did differ between the childfree and non-childfree participants).
- There were no differences between early articulators and the rest of the childfree respondents in birth order, number of siblings, religiosity, political orientation or pet ownership.
- When it came to charity support there were some statistically significant differences: **early articulators were more likely than the other childfree respondents to support the causes of animal protection, the environment, wildlife/conservation and culture; and less likely to support children/youth-focused charities.**
- **Early articulators may be over-represented in this study compared to the voluntarily childless population in general.** Research by Veevers (1980)¹ and Lunneborg (1999)² estimated them to be approx. one third of the voluntarily childless, whereas Scott (2009)³ found early articulators comprised two thirds of her sample, but noted that as respondents were self-selected (as in this survey) this was likely to be an over-representation.

Motivations for voluntary childlessness

Those who said they definitely or probably didn't want children, or were undecided, were asked to rate a range of motivations for not having children, on a scale of 0 to 10. A table ranking the given motivations in order of mean score can be found at the end of this report.

- **The top rated motivation was the effect children have on one's freedom and independence** (two thirds of respondents rated it 10/10), which reinforces the importance of Independence as the most influential personality trait.
- **However there was wide variability and every reason was rated 10/10 by some respondents and 0/10 by others.** So whilst some reasons were very popular with most participants, this underscores the diversity in motivational factors for what is a very personal decision.
- Respondents were also asked to list their top four most important reasons, with the option to add one's own if not covered (only 4% did this). **Whilst lack of parental instinct and not enjoying being around children did not rank in the top eight motivations overall, they were very important – ranking in the individual top four – for around a third of respondents.**
- A text box enabled people to comment further and 29% (186) did so. The comments were extremely varied. About a quarter said that they'd just never had the urge or desire for children. Some didn't like children. Many stated it would be wrong to have children if you don't have a strong desire for them, or that given their reservations it would be better to regret not having them than to regret having them. Some loved children but preferred to be an aunt/uncle, or to be involved with children in other ways like volunteering/teaching, and some said they would prefer to devote their time to helping animals. A substantial number were concerned about overpopulation and the state of the environment and felt it would therefore be selfish to bring another person into the world for one's own fulfillment. A few took a philosophical and/or anti-natalist stance, reasoning that existence in itself entails suffering.

Relation of motivations for childlessness and personality traits

Statistical analysis revealed patterns in the motivation ratings; these could then be clustered to form 'factors' that had statistically significant correlation patterns with the various personality traits. Five main 'factors' emerged from this analysis:

- The eight highest-ranked motivations (see table) formed the first 'factor', and were not correlated with any particular personality traits, indicating that they had **broad appeal** across respondents, whatever their personality.
- The second factor comprised more '**intrinsic**' reasons (e.g., to do with one's character), such as lacking parental instinct, not enjoying being around children, or feeling one had an unsuitable personality for parenthood. Higher ratings for intrinsic reasons were associated with higher scores in Independence and Neuroticism, and lower scores in Extraversion and Agreeableness.
- The third factor represented **ideological concerns** about reproducing, such as overpopulation, the environment, and the desire to find self-fulfillment or contribute to society in other ways. People who scored more highly in Openness to Experience were more likely to give higher ratings to these types of motivations.
- The fourth factor represented **worries/risks of childbearing or parenting**, and was associated with higher scores in Neuroticism, and had negative correlations with Extraversion, Conscientiousness and, to a lesser extent, Independence.
- The fifth factor represented concerns which seemed to be **of particular relevance to women**, such as (in particular) the impact of children on career, and also regarding unequal sharing of childcare, and physical risks/effects of childbirth. Higher ratings for these concerns were correlated with Conscientiousness.

General summary

In this study, each of the six personality traits examined appears to have some influence on childbearing motivation, revealed both through the score comparisons and the factor correlations. The patterns associated with voluntary childlessness were:

- **Higher Independence, lower Agreeableness:** these were the most influential traits overall.
- **Lower Extraversion:** a weaker association than the above two, however childfree respondents tended to be less extraverted.
- **Higher Openness to Experience:** particularly relevant for early articulators, and for those identifying with ideological reasons for not having children.
- Whilst the childfree were not significantly different in Neuroticism or Conscientiousness overall, scoring higher on these may also have an effect, for example through worries about parenthood or career, more diligent contraceptive use, or the likelihood that conscientious people will consider the decision more carefully if unsure.

It is likely that the traits would have a greater influence in combination. For example someone who is relatively high in Independence *and* low in Agreeableness *and* low in Extraversion is probably more likely to be childfree than someone who is high in Independence but also high in Extraversion and/or Agreeableness.

The most influential trait overall in this study was Independence, and desiring to retain one's freedom and independence (usually impacted hugely by parenthood) was the most highly rated motivation, echoing previous studies. ^{3 4 5 6 7} Whilst childfree people are often stereotyped as being 'selfish', it is likely to be independence, not selfishness, that is one of the main driving factors for most. The majority of the childfree surveyed here devoted time or money to charitable causes, and were significantly more likely to do so than the non-childfree respondents.

This study was in line with previous research which also found Agreeableness (and similar traits) to be an influence on childbearing. ^{7 8 9 10 11} However this does *not* imply the childfree are disagreeable or uncaring, just that they tended overall towards slightly (6%) lower scores than the non-childfree, in this study (which itself may not be a representative sample). For example, other studies have found women tend towards higher Agreeableness scores than men, and residents of the Western, Mid-Western and Southern US states tend towards higher agreeableness scores than residents of the other US regions.

Whilst 'early articulators' were more Independent than the rest of the childfree respondents, they were not different in Agreeableness or Extraversion. However, they did score higher on Openness to Experience. They seem to have somewhat different personality tendencies to the other childfree participants and are not just a more 'extreme' version, for want of a better expression. People high in Openness tend to be less traditional / more open-minded / more likely to seek out new experiences and knowledge.

In previous research on parenting styles and personality, what the researchers termed a 'warm and structured' parenting style was associated with lower levels of Neuroticism and higher levels of Extraversion, Agreeableness, Conscientiousness and Openness. Conversely, parents low in Agreeableness and high in Neuroticism were more prone to experience frustration and conflict with their children.¹² **These findings may support the perception by some childfree people that their temperament may be less suited to parenting.**

The finding that the childfree - particularly early articulators – are more likely to support animal protection and environmental issues was interesting and fits with anecdotal reports. This may be related to the trait of Openness: early articulators scored more highly in this, and past research found this trait is positively correlated with connection to nature and empathic concern for animal welfare, and also with concern about human overpopulation. Interestingly, a 2013 survey of vegans¹³ found that 39% of 6,000+ vegans surveyed said that they were childfree and planning to stay that way: over five times higher than the childfree rate found in the general population.

Despite the overall patterns, there was a big range of scores within the subgroups. Many childfree respondents scored highly in Agreeableness or Extraversion, or low in Independence; conversely many of the non-childfree scored in the opposite direction. **It is a very individual decision, with different influences for everyone, and the breadth of ratings given to the various motivations for childlessness illustrates this.**

It has been estimated that around 40–60% of the variance in the Big Five personality traits is genetically determined.^{14 15} **Whilst childbearing motivation is affected by a complex mix of factors, the apparent influence of heritable personality characteristics indicates some degree of biological origin**, an observation also made by Miller (1992).⁷ Therefore one might expect each individual to have some innate predisposition towards or away from parenthood.

This innate tendency could account for how some childfree say they have just ‘always known’ they didn’t want children, even from a young age, and before they likely have a true appreciation of the attractions and freedoms of adult life or the responsibilities of parenthood. These intentions appear relatively firm despite the young age; research indicates early articulators are the least likely of the childless to change their minds.^{16 17} **However, any innate propensity will be influenced during the life course by other (often stronger) factors** such as social and family background, romantic partners, physical/mental health, education, economic factors, availability of contraception, and societal/cultural norms. So, it is important to remember that whilst this study focused on personality, it is just one factor in the childbearing decision.

As respondents were self-selecting, the results of this survey are not necessarily representative of all those who choose not to have children. However it is one of the largest surveys of childfree people to date, and possibly the first to look at personality factors in relation to different motivations for remaining childless. There is a lack of formal investigation into this issue compared with other life decisions, and many possibilities for future research. For example it would be interesting to do cross-cultural comparisons, and also to obtain larger samples of non-childfree/males for comparison both within and across groups.

If you are interested in taking the ‘Big Five’ personality test yourself, there several websites where you can do this, and see how you score relative to others who have taken the test, e.g.:

- <http://www.outofservice.com/bigfive/>
- <http://www.personalityassessor.com/bigfive/>

NB these are independent websites which provide Big Five tests but are not directly associated with this research project in any way.

An abbreviated version of the study was published in the *Journal of Population Research* (March 2015; Volume 32, No. 1, p45). Unfortunately due to space limitations of the journal some of the results had to be omitted from the article.

If anyone would like a copy of the journal article, which includes an extensive reference list of previous research, please contact Margaret.avison.11@alumni.ucl.ac.uk.

A massive thanks to all who completed the survey! Also a big thanks to Laura Scott and Laura Carroll, for their helpful comments and for publicizing the survey through social media, helping to reach so many people.

Margaret Avison

Research by M. Avison & Prof A. Furnham; University College London, UK; August 2013

Mean ratings of motivations for voluntarily childlessness, in descending order of rating

| Reason | Mean Score/10 |
|--|----------------------|
| <i>Having a child would restrict my freedom/independence</i> | 9.01 |
| <i>The task of raising a child just does not hold a lot of interest for me</i> | 8.80 |
| <i>Having a child would restrict my lifestyle</i> | 8.72 |

| | |
|--|------|
| <i>There are other ways to find self-fulfillment which I prefer to focus on</i> | 8.59 |
| <i>I like a peaceful home-life and children would impact upon this</i> | 8.33 |
| <i>Bringing up a child is a huge responsibility</i> | 7.86 |
| <i>I think caring for a child would cause me too much worry/stress</i> | 7.25 |
| <i>Having a child is expensive</i> | 7.24 |
| <i>Lack of maternal/paternal instinct</i> | 7.00 |
| <i>I feel I can make a better contribution to society/the world by not having children</i> | 6.67 |
| <i>Don't enjoy being around children</i> | 6.67 |
| <i>Concern about bringing a child into the world due to the current/future state of society or the environment</i> | 6.31 |
| <i>Concern that the world is overpopulated</i> | 6.07 |
| <i>I feel I would not have enough time to give to a child</i> | 5.44 |
| <i>Concern about the risk/pain involved in pregnancy/childbirth</i> | 5.32 |
| <i>Having a child might negatively affect my relationship with partner</i> | 5.25 |
| <i>Concern about the effect of children on my career</i> | 5.06 |
| <i>Don't think I would make a suitable parent due to my personality</i> | 5.04 |
| <i>Risk of having a child with mental/physical disabilities</i> | 5.02 |
| <i>Concern about the physical effects of childbirth on my body/partner's body</i> | 4.98 |
| <i>Concerned that childcare/domestic duties would be unequally shared between myself and partner</i> | 3.79 |
| <i>My spouse/partner doesn't want children</i> | 3.51 |
| <i>Possibility of passing on a genetic condition</i> | 2.90 |
| <i>Don't think I would make a suitable parent due to my upbringing</i> | 2.76 |
| <i>I feel too old to start having children</i> | 1.88 |
| <i>Have not/did not meet a suitable partner with whom to have children</i> | 1.14 |
| <i>Biological difficulties/infertility</i> | 0.94 |

¹ Veevers, J. E. (1980). *Childless by choice*. Toronto, CA: Butterworths.

² Lunneborg, P. W. (1999). *The chosen lives of childfree men*. Westport, CT: Bergin & Garvey.

³ Scott, L. (2009). *Two is enough: A couple's guide to living childless by choice*. Berkley, California: Seal Press.

⁴ Houseknecht, S. K. (1978). Voluntary childlessness. *Alternative Lifestyles*, 1(3), 379–402.

⁵ Jeffries, S., & Konnert, C. (2002). Regret and psychological well-being among voluntarily and involuntarily childless women and mothers. *The International Journal of Aging and Human Development*, 54(2), 89–106.

⁶ Magarick, R. H., & Brown, R. A. (1981). Social and emotional aspects of voluntary childlessness in vasectomized childless men. *Journal of Biosocial Science*, 13(2), 157–167.

⁷ Miller, W. B. (1992). Personality traits and developmental experiences as antecedents of childbearing motivation. *Demography*, 29(2), 265–285.

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⁹ Tavares, L. (2008). Age at first birth, education and personality. ISER WP, University of Essex, Colchester: Institute for Social and Economic Research.

¹⁰ Pinquart, M., Stotzka, C., & Silbereisen, R. K. (2008). Personality and ambivalence in decisions about becoming parents. *Social Behavior and Personality*, 36(1), 87–96.

¹¹ Newton, N. J., & Stewart, A. J. (2013). The road not taken: Women's life paths and gender-linked personality traits. *Journal of Research in Personality*, 47(4), 306–316.

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¹³ http://thevegantruth.blogspot.co.uk/2013/09/survey-of-vegans-2013-results_13.html

¹⁴ Jang, K. L., Livesley, W. J., & Vernon, P. A. (1996). Heritability of the big five personality dimensions and their facets: A twin study. *Journal of Personality*, 64(3), 577–592.

¹⁵ Loehlin, J. C., McCrae, R. R., Costa, P. T., & John, O. P. (1998). Heritabilities of common and measure-specific components of the Big Five personality factors. *Journal of Research in Personality*, 32(4), 431–453.

¹⁶ Callan, V. J. (1984). Voluntary childlessness: Early articulator and postponing couples. *Journal of Biosocial Science*, 16(04), 501–509.

¹⁷ Dariotis, J. K. (2004). Fertility intention emergence and process during late adolescence and early adulthood: voluntary childlessness as a special case. Paper presented at the Population Association of America 2004 Annual Conference, USA.