Effect of Adverse Childhood Experiences On Adult Desire to Parent

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Abstract

One of the most important choices for any adult is whether to procreate. Research has shown that childhood experiences and the desire to have children are all somehow interconnected. Some who had a difficult childhood may want to give their child the life they never had others with the same adversity believe they would never want to bring a child into this world. Not immediately evident is what distinguishes these two responses. Research has linked childhood experiences to development of a general optimistic or pessimistic outlook. This study will evaluate the degree to which these concepts may be interrelated. It is hypothesized that: 1) Adults with little/no adversity in childhood will desire to have children, independent of their levels of optimism/pessimism; and 2) Adults who experienced childhood adversity will only desire children if they are high in levels of general optimism. Participants over 18, recruited by email and direct contact, completed the Life Orientation Test (to determine level of optimism/pessimism) and the Childhood Family Experience Scale (with a few additional statements created by the researcher, to determine childhood experiences and adversities). The Personal Information Questionnaire was used to divide participants into one of three groups relating to each Desire to have Children: Parent, Older Non–Parent, and Younger Non–Parent. These results collected in spring 2017, were evaluated by correlations between the primary variables and using the analysis of variance. The first hypothesis will be supported if adults who had not experienced childhood adversity show a correlation to desire for children—independent of their level of optimism/pessimism. The second will be supported if those who experienced significant childhood adversity show significantly higher levels of optimism want children, and vice versa for those who do not.

Keywords: Desire to Parent, Adversity in Childhood, Optimism–Pessimism

1. Literature Review

One of the most important decisions human adults must make is whether or not to have children. This question is exclusive to human kind because though plant and animal biology involve the act of procreation, it is instead a psychologically voluntary act. With this essential question, this study analyzes the conscious processes and experiences that may affect an individual's decision by targeting the influences that help a human being make this choice. Specifically, the ideology that children are the future connects procreation to the utopian view of the future. this study seeks to determine a possible correlation between an optimistic or pessimistic view of the world — in association with level of childhood adversity — and desire to have children.

First, it is important to understand how the terms "pessimism" and "optimism" are generally defined. In a study about mood and personality, the working definition of optimism has been defined as a general positive outlook, while pessimism utilizes a more negative perspective.[7] The dimensions of mood were defined as either having a positive or negative affect — affect being one's overall perspective.

This study focused on personality traits of extroversion and neuroticism.[7] One hypothesis was concerned with the

idea of optimism and pessimism being more correctly envisioned along a bipolar axis rather than two independent dimensions. A correlation between optimism, positive affect, and extraversion was also hypothesized. This is important for this study as it gives is the working definition for our pessimism-optimism measurement. Further examining that hypothesis, researchers expected to find a positive correlation between pessimism, negative affect, and neuroticism.

Participants were 778 male volunteers from a navy recruit group undergoing basic training who were used for understanding the correlation between positive/negative affect and pessimism/optimism. The data were collected in group settings with questions being read out loud, participants responding in their own booklets. Optimistic, pessimistic, neurotic, and extroversion levels were deduced from the first week's session with affect assessed with four weeks of data using the Life Orientation Test and Hopelessness Scale. Participants were given the NEO Five–Factor Inventory to analyze their neuroticism and extraversion levels. To measure affect, the Positive and Negative Affect Schedule was used.

Analysis of the data led researchers to further endorse the idea of a bipolar optimistic–pessimistic axis. Statistically significant correlations found between pessimism, neuroticism, and negative affect showed hypothesized relationships were supported.

Another study focused on the relationship between dispositional optimism and the two dimensions of dispositional hope: agency and pathways.[2] Dispositional optimism was looked at through the bi–dimensional model of optimism, and further defined as the usual baseline view that positive things will happen. Dispositional hope defined as a way of thinking based on goals and determination to reach them. "that is based on a reciprocally derived sense of successful agency (goal–directed determination) and pathways (planning of ways to meet goals)." The researchers hypothesized that hope and optimism would be strongly correlated but not the same.

Undergraduates were from public and private universities in the metropolitan area (due to missing data only 341 of 351 participants could be utilized. The 8–item Life Orientation Test (LOT) scored dispositional optimism, and 12–item Adult Hope Scale (AHS) dispositional hope.

To assess how similar hope and optimism were, the researchers used confirmatory factor analysis to determine the degree of goodness–of–fit with both data analyzed together. Using the eight scored LOT items as well as the eight scored AHS, the researchers calculated the goodness–of–fit through four models: one–factor model (all items reflect one dimension; "Future Orientation"), four–factor model (Optimism, Pessimism, Agency, and Pathways are correlated dimensional facets of responses), higher–order model where "Future Orientation" is a function of the previously mentioned four factors, and the higher–order model where Optimism and Hope are correlated second factors, "two correlated second–order factors (Optimism and Hope)," with optimism being the basis of Optimism versus Pessimism and hope being the basis for Agency and Pathways. It was found that the four–factor model fit the data the best.

This research showed hope and optimism have 64% variance; therefore, they have far more in common than different, yet the differences are undeniable. Research shows that the choice to use hope and optimism as the same or different is generally up to the researchers using them as factors and what they intend to do with them. The study proposed that researchers focused on future physical and emotional predictions would most likely use hope and optimism as correlated but separate variables. Additionally, those who want to assess things in larger populations, the researchers suggest one to use hope and optimism as a singular concept.

Early optimism and its effect on adult subjective well–being are also studied.[3] Subjective well–being is described as an individual's subjective evaluation of their own life in terms of life satisfaction, positive affect, and negative affect. This study focused on the unipolar optimism dimension rather than bipolar.

Participants in this study were taken from a longitudinal program conducted from 1965 to 1998. In this study a cohort of 10–year–old children have been study throughout their lives. For this study's purpose 248 women were studied from the age 13 (1965) to age 43 (1998) were used. At the age of 13, optimism levels, behavior ratings, school satisfaction perceived workload, peer relationships, and anxiety for school work. The education level of the parents, family income, childhood upbringing conditions (divorce, marriage, change of custody), and intelligence were also collected. At the age of 43, data is collected again of global life satisfaction (measured four by items), and positive and negative affect using the Positive Affect and Negative Affect Schedule. Optimism was once again tested, this time using the Optimism scale.

The data showed that girls at age 13 with more optimistic attitudes toward their future were more satisfied with their lives and had a more positive affect and less negative affect at 43. This shows that there is a direct positive correlation between adolescent optimism and adult optimism; Attitude to the Future at age 13 was also positively correlated with Global Life Satisfaction at age 43. A strong positive relationship was found concerning the direct effect of optimism on positive affect. This study helps to illustrate the connection between adolescent optimism and adulthood optimism levels.

Another study hypothesized that adult attachment styles, recollections of childhood attachment variables, and

dispositional optimism/pessimism were positively correlated.[5] Participants in this study were 423 adults from Finland (278 women and 145 men). Participant questionnaires were taken from women in a maternity ward in 1998, after healthy births. The variables of this study were: depositional optimism–pessimism, adult attachment, and attachment–related childhood recollections. Dispositional optimism and pessimism were measured using the Life Orientation Test – Revised. Adult attachment was assessed using the Adult Attachment Scale. Attachment–related childhood recollections were determined through three measures: The Love Inconsistency Scale, The Parental Bonding Instrument, and The Family Environment Scale.

Bivariate correlation calculations were used to test any association between the three adult attachment dimensions, early childhood recollection variables ("care, overprotection, love [consistently], and family cohesion/conflict"), and the level of dispositional optimism/pessimism for each participant. Confirmatory factor analysis was implemented to test any latent factors in generalized attachment insecurity in relationships. Structural equation modeling was then put in place to determine if there was an association between this latent attachment construct and dispositional optimism/pessimism. a significant correlation was found between adult attachment styles and attachment–related childhood recollection (except for anxiety and family cohesion recollection).

This study found that relationship centered models and current attachment in relationships are necessary in understanding dispositional optimism/pessimism. Therefore, an attachment–centered perspective is an important measure in attempting to understand pessimistic and optimistic personality traits. This finding furthered the notion of a connection between childhood experiences, optimism/pessimism levels, and future decision making. The effects of parent neglect and apathy on trait variability and the Big Five personality traits of the adult were studied to linking optimism–pessimism levels to childhood experiences.[10] The Big Five personality traits were rated in three social areas: with parents, with friends, and with colleagues to test trait variability. Researchers' anticipated parental neglect and antipathy would correlate negatively with Conscientiousness, Agreeableness, Openness, and Extraversion (all of which are theoretically linked to the trait of optimism), as well as a positive correlation with Neuroticism (a trait linked to the trait of pessimism).

Student participants in this study were recruited through a research–based pool recruitment web program, with 12 volunteers recruited in the community. All participants were required to be fluent or native English speakers, in regular contact with a parent, and working. Questionnaires were administered online and insured anonymity. Participants who completed self–report samples included 240 undergraduates and 313 community members, with 509 female and 144 male. The CECA–Q (antipathy and neglect scales) was used to determine recalled neglect and parental apathy. The Ten–Item Personality Inventory–3C was utilized to determine self–assessed personality traits. Scores were also used to determine the participants' Big Five personality trait levels.

Zero–order correlational tests were computed between the parental antipathy and neglect scores, and the Big Five personality levels for each participant. Concerning the "with parents" category's personality sets, two medium–sized correlations were found: Positive correlation between Neuroticism and Parental Antipathy (r=.35); and, Agreeableness with parents with a negative correlation to Parental Antipathy (r= −.30). Significant correlations were also found in the Big Five personality trait levels and parental neglect/antipathy when interacting with friends; Positive correlations between Neuroticism and Antipathy, and negative correlations between Extraversion and Neglect, and Conscientiousness and Antipathy.

The hypothesis of parental neglect and antipathy having a negative correlation with the Big Five personality traits was supported by the evidence found in this study. Adults' indication of experiencing parental antipathy and neglect in childhood showed introversion, aggression/irritability, low amounts of openness. No significant differences were found between the populations, excluding heightened parental antipathy scores reported by students.

Another study investigated a possible relationship between childhood issues, parent–child relationships, and their effect on dispositional optimism in the adult.[6] Also, different combinations of childhood issues and relationships were hypothesized to correlate with different levels of optimism in the adult. Confounding factors were assessed using appropriate measures and given their own scores to be included in the study (people not reporting health issues were said to be in "good somatic health," depression was assessed using the Beck Depression Inventory with scores of 19 and more being used to indicated depressive moods, major negative events were classified by occurrence within the last 6 months as: 0; 1–2; 3 or more events).

Participants included 19,970 (11,811 women, and 8,159 men) working–aged individuals who responded to a larger study set up by the Health and Social Support in Finland. Confounding factors of education, living situation (alone or with partner/others), recent life events, bodily and mental health were adjusted in the analysis. Methods of measurement included: The Life Orientation Test–Revised, modified Survey of Living Conditions, and two questions asking the type of relationship each participant had with both their maternal and paternal parents/guardian.

Multivariable linear regression analysis found that childhood adversities were positively correlated with a decrease in optimism. Additionally, a positive parent–child relationship was associated with higher optimism. A positive

parent–child relationship was also found to have a positive impact on optimism even with the addition of adverse childhood events.

To understand the long–term connection between socioeconomic factors in childhood and adulthood, a study focused on the idea that dispositional optimism and dispositional pessimism were correlated with socioeconomic factors measured during childhood (aged 3–6) and early adulthood (aged 24–27).[4] It was hypothesized that, due to adverse experiences with monetary stress at a young age, lack of trust and pessimism would be fostered. Therefore, those with low socioeconomic status at a young age are more likely to have a pessimistic affect and vice versa. The buffering effect of adult socioeconomic status was also assessed.

Participants who had data from the age of 3–6 and had supplemental data at the age of 24–27 were used. Due to attrition, the sample size varied (689 -586 for women and 276 -237 for men). In childhood SES was analyzed using four categories: parent education level, occupational class, those who were unemployed, students, or homemakers were labeled under their most recent job (if no prior they were excluded). Outcome SES was classified by its trajectory. Dispositional optimism and pessimism were evaluated using the Life Orientation Test–Revised.

Univariate analysis of covariance was used to determine if childhood SES could be a factor in determining adult dispositional optimism/pessimism independent of adulthood levels. It was found that adult SES had an impact on the level of dispositional optimism of an individual; low SES in both childhood and adulthood showed were also linked to lower levels of optimism. Childhood socioeconomic status has a significant relationship with adult disposition even when adjusting for adult SES. Those with a downward mobile trajectory tended to report more optimism than those with upward mobility. Significant relationships were found between employment history of parents; they were buffered by the adult's employment history. The results of this study showed the important role childhood socioeconomic positioning plays in the creation of either pessimistic or optimistic affects in adulthood. In an empirical study focused on motives for choosing not to have children.[9] This study was done through the Weber's typology of social action lens.

Twenty–three childless participants (9 men and 14 women) were used in this study, recruited through knowing the author, references, and voluntary members from "The Childfree Network." Participants were only used if they were a member of a long–term heterosexual relationship (5 years or more), over 30, not involved with the care of a child in any way, and physically able to have children. Participant ages ranged from 31 to 56, and included six married couples; two couples cohabitating; five wives; one husband; and one single woman. Face–to–face semi–structured recorded interviews were held lasting around 45 to 90 minutes within each participant's home and conducted with each partner separately (except for one couple). Each interview was coded for: "stigma perception," "deviance management technique," "motive: disinterest in children," and "alternative identities." During the interviews, certain questions were asked of all participants (in accordance with the themes examined); however, the interview was also led by the responses of the individuals which helped the researcher further identify themes. A tape–recorded focus group was also set up with 7 participants from the initial 23. It lasted approximately two hours and allowed for the researcher to understand childless motivations.

Desire for childlessness was shown to be a product of a variety of childhood experiences, as well as parental perceptions and the feeling that they did not have the proper personality traits to properly be a parent. Female participants tended to cite perception of mothers' lack of identity due to motherhood, and sought childlessness to combat that perception. Other reasons included not desiring children despite happy childhood/family–orientation, seeing the parenthood struggle of others, and fearing replicating their childhood experiences.

Women reported that their parental perceptions were affected more by their childhood experience than men. Personality traits which were incongruent with parenthood were sensitivity, high anxiety, neuroticism, perfectionism, and introversion. As prior research has shown, the personality traits of neuroticism (linked to perfectionism and sensitivity), lowered Openness to Experience (anxiety), and higher levels of introversion are statistically significantly linked to heightened pessimism levels and vice versa for optimism.[10]

Another study focused on the hypotheses that: 1) "The voluntary childless will be significantly lower in Extraversion" [a high level of this trait tied to optimism], and 2) "The voluntary childless will be significantly lower in Agreeableness" [a low level of this trait was also tied to pessimism].[1]

Participants in this study, 780 individuals (706 females, 74 males), were recruited to complete an online questionnaire. Personality was measured using the self–report Big Five Inventory. Mean scores of each trait were calculated with participants missing more than one question disqualified. The Big Five Personality traits were compared between the group of those wanting children (136) and the group not wanting children (615).

No significant demographic differences were found between the groups. The voluntary childless had a mean of 3.41 ± 0.61 in Agreeableness, a significant difference from those who wanted children with a mean agreeableness score of 3.69 ± 0.56. A significant difference was also found in Extraversion with a 3.03 ± 0.83 mean for the voluntary childless group, and a 3.19 ± 0.72 mean for the group that wanted children. There was no significant difference in

Openness to Experience, Neuroticism, or Conscientiousness between the voluntary childless group and those who wanted children.

Both hypotheses were supported by the research. With heightened levels of Agreeableness and Extraversion tied to the desire to have children, this evidence can be key in connecting Optimism and Pessimism levels to the decision to have children or remain childless. The prior research's conclusions on the positive correlation between optimism and the personality traits of Agreeableness and Extraversion.

The qualitative lens was used to understand what motivates people to want to have children or not and if societal shifts have led to general shifts in family formation.[8] Two competing hypotheses were made: 1. Though some aspects of personal life norms have changed, the core values of interdependency, trust, security and care, stay the same in regards to the desire to have children; 2. Personal life norms have changed to such an extent that fleeting relationships, preoccupation with personal needs, and new approaches to commitment influence family values.

Participants were utilized from a prior 2001–2005 study of 47 university employees who could have children but had not (18 men and 29 women). The age range was 19 (the age most people have their first child) to under 45 (decrease in successful pregnancy odds beyond this age).[1] Semi-planned Interviews -with a time limit of two hours- were conducted. Participants were first told to speak their thoughts about having children as they grew up, and prompted regularly to share stories of their experiences with anything from work to relationships. Next, they were asked to judge the influence a variety of factors had on their fertility wants. A year after these interviews, a questionnaire on any changes they may have gone through in their fertility status was sent out (40/47 responded).

Participants in this study all supported the idea of commitment, connectedness, and relatedness to a partner to be main values when it came to family formation. No conclusive data were found as they were qualitative studies; however, it is important to understand the idea that a variety of childhood backgrounds can play key roles in the development of heightened optimism or pessimism levels and the participant's connected reasoning's for having or not having children.

With this prior research in mind, the researcher hypothesized that: 1) Regardless of optimism/pessimism levels, participants with low adversity in childhood will desire children; 2) The desire for children will be a function of pessimism or optimism when the participant has encountered a moderate to high level of adversity in childhood. With this complied information, the links between childhood, optimism–pessimism level, and the desire for children can be theorized.

2. Method

2.1. Participants

Participants were solicited by an email invitation by the researcher and through postings on the researcher's Facebook and on the blog Tumblr. Participants were selected for this study due to convenience. The exact number of those contacted is unknown as the posts were shared by many people. There were 656 responses received, with 594 completed and viable for this study (67 men, 511 women, & 16 other) of a variety of ages from 18 to 75+ years of age, with both non–parents and parents included. Participants were compensated for their time by allowing them to view the results through email request once the study was completed.

2.2. Materials

The email sent out to invite potential participants briefly described the study's focus and anonymous and voluntary nature; posts to Facebook and posts on the blog Tumblr also contained this information. A Letter of Introduction was presented at the survey site This was utilized as an introduction to the survey so participants will understand everything regarding the study. Through this letter, potential participants become fully aware that participation is completely voluntary, anonymous, and that they are free to withdrawal from the study at any time. The Personal Information Questionnaire was created by the researcher and used to identify the demographics of participants, as well as sort them into the proper Desire for Children Questionnaire version, Desire for Children Ranking Scale version, and childhood adversity score by asking their parenting status and self–perceived ability to have children currently or in the future. To evaluate past or future plans for children, three versions of the Desire to Parent Questionnaire were developed by the researcher: Younger Non–Parent version to evaluate explicit desire for children, the Desire to Parent Ranking Scale was implemented with three versions: Parents, Younger Non–Parents, and Older Non–Parents. Non-parents were sorted into the younger and older versions due to their self-identified ability to have children at their current age.

The Life Orientation Test was used to gather information on the participant optimism/pessimism scores. The Childhood Family Environment Scale, revised by the researcher through the addition of the final three questions and absence of four filler questions, was utilized to gather information on the participants' childhood adversities and environment. The Childhood Rating Scale was utilized to understand adult perception of their childhood adversity.

A Thank You Letter was presented at the end of the study to thank participants and let them know how to obtain the results once the study was completed. If any individual experienced stress or other negative psychological effects as a result of participation in this study, this letter also encouraged the person to seek professional assistance.

2.3. Procedure

The participants followed a provided link to the online survey. They were greeted with the Letter of Introduction. The participants were then given clear instruction to complete the items. The questionnaires were predicted to take about 10 minutes. Next, each participant was lead through the same process of completing the: Personal Information Questionnaire, Desire to Parent Questionnaire and Scale, Life Orientation, Childhood Family Environment Scale, and the Childhood Adversity Ranking Scale. Upon completion of the materials, participants were thanked through the Thank You Letter for their time and provided information on how to obtain study results in May 2017. Online participation was selected to further ensure the anonymity of participants as well as for convenience.

3. Results

To evaluate the primary hypotheses that childhood adversity will influence desire to parent, the data were analyzed by a series of Pearson Correlational analyses. Table 1 shows the relationship between the study variables for all of the participants. The significant positive relationship between the Desire to Parent Questionnaire and Desire to Parent Rating Scale ($r= +0.63$; $p= 0.0001\%$) demonstrates construct validity of the Desire to Parent Questionnaire. Also in this table, negative weak relationships were found between desire to parent and childhood adversity as follows: Desire to Parent Questionnaire and Childhood Family Environment Scale ($r= –0.08$; $p= 0.51\%$), Desire to Parent Questionnaire and Childhood Adversity Ranking Scale ($r= –0.17$; $p= 0.10\%$), and Desire to Parent Rating Scale and Childhood Adversity Ranking Scale ($r= –0.12$; $p= 0.10\%$).

Table 1. Pearson correlation values for the principle variables for entire sample (n = 596)

	DPQ	DPRS	LOT	CFES	CARS
Desire to Parent Questionnaire- (DPQ)	1.00				
Desire to Parent Rating Scale (DPRS)	+0.63****	1.00			
Life Orientation Test (LOT)	+0.08*	+0.05	1.00		
Childhood Family Environment Scale(CFES)	–0.08*	–0.05	+0.16	1.00	
Childhood Adversity Ranking Scale (CARS)	–0.17**	–0.12**	+0.03	+0.10	1.00
Alpha Levels: $* \ p < 5\%$ $** \ p < 0.1\%$ $*** \ p < 0.01\%$ $**** \ p = 0\%$					

It was a consideration that multiple adverse events in childhood might have an even greater influence on the desire to parent. The participants' data were sorted on the basis of how much childhood adversity they reported – no adversity, at least one experience, or two or more experiences. Correlations were then calculated for each set independently. These sets of statistical analyses were used to make conclusions about the hypotheses.

The first study hypothesis was that participants who had little to no adversity in childhood would want children regardless of optimism–pessimism scores. Pearson Correlations were computed for those participants who experienced none of the adversities listed on the Personal Inventory Questionnaire (see Table 2). The test results were ambiguous. The significant weak correlation found between the Life Orientation Test and the Desire to Parent Questionnaire ($r = +0.14$; $p = 2\%$) is inconsistent with the hypothesis. On the other hand, the hypothesis is supported by the lack of correlation found between the LOT and Desire to Parent Rating Scale ($r = +0.10$; $p = 87\%$).

Table 2. Pearson correlation values comparing the principle variables for participants reporting <u>no</u> incidents of childhood adversity (n = 263)

	DPQ	DPRS	LOT	CFES	CARS
Desire to Parent Questionnaire- (DPQ)	1.00				
Desire to Parent Rating Scale (DPRS)	+0.51****	1.00			
Life Orientation Test (LOT)	+0.14*	+0.10	1.00		
Childhood Family Environment Scale(CFES)	−+0.22**	−0.14*	+0.12*	1.00	
Childhood Adversity Ranking Scale (CARS)	−0.24**	−0.17**	−0.01	+0.15	1.00
Alpha Levels:	* $p < 5\%$	** $p < 0.1\%$	*** $p < 0.01\%$	**** $p = 0\%$	

The second hypothesis proposed that those who had significant childhood adversity would have a desire for children only if they had a high level of optimism, and vice versa. This hypothesis was evaluated first for those with at least one childhood adversity and then again for those with two or more adverse events.

Of those experiencing at least one incident of adversity in childhood (see Table 3) data analysis failed to support any relationship between their desire to parent and optimism–pessimism level. The Pearson Correlations between the Life Orientation Test (LOT) and Desire to Parent Questionnaire ($r = −0.06$; $p = 0.28\%$) as well as with the LOT and Desire to Parent Rating Scale ($r = +0.06$; $p = 0.27\%$) were very small and not statistically significant.

Table 3. Pearson correlation values comparing the principle variables for participants reporting <u>some</u> incidents of childhood adversity (n = 331)

	DPQ	DPRS	LOT	CFES	CARS
Desire to Parent Questionnaire- (DPQ)	1.00				
Desire to Parent Rating Scale (DPRS)	+0.70****	1.00			
Life Orientation Test (LOT)	+0.06	+0.06	1.00		
Childhood Family Environment Scale(CFES)	−0.21***	−0.15**	+0.12*	1.00	
Childhood Adversity Ranking Scale (CARS)	−0.20***	−0.19**	0.00	+0.12	1.00
Alpha Levels:	* $p < 5\%$ ** $p < 0.1\%$		*** $p < 0.01\%$	**** $p = 0\%$	

Table 4, illustrating Pearson Correlation scores for participants who experienced two or more incidents of adversity in childhood, also showed no significant relationship between their desire to parent and optimism–pessimism level. The Pearson Correlation between the LOT and Desire to Parent Questionnaire ($r = +0.01$; $p = 0.92\%$) as well as between the LOT and Desire to Parent Scale ($r = −0.03$; $p = 0.77\%$) provide the same pattern as above, demonstrating a lack of correlation between desire to parent and optimism-pessimism levels in those with higher childhood adversity.

Table 4. Pearson correlation values comparing the principle variables for participants reporting <u>multiple</u> incidents of childhood adversity (n = 101)

	DPQ	DPRS	LOT	CFES	CARS
Desire to Parent Questionnaire- (DPQ)	1.00				
Desire to Parent Rating Scale (DPRS)	+0.66****	1.00			
Life Orientation Test (LOT)	+0.01	−0.03	1.00		
Childhood Family Environment Scale(CFES)	−0.13	−0.11	+0.19*	1.00	
Childhood Adversity Ranking Scale (CARS)	−0.19*	−0.12	+0.34***	+0.228	1.00
Alpha Levels:	* $p < 5\%$ ** $p < 0.1\%$		*** $p < 0.01\%$	**** $p = 0\%$	

4. Discussion

There were two hypotheses presented to explain what influences adult desire to parent. These hypotheses were developed from the results of prior research which had consistently demonstrated connections between childhood experiences and desire to parent, as well as between optimism levels and desire to parent. This study endeavored to explore if a correlation between each of these factors can be seen; so, is a general sense of optimism about the world necessary to serve as some mitigating influence on the desire to parent when an individual has had less than an ideal childhood?

The first hypothesis stated that, regardless of optimism/pessimism levels, participants with low adversity in childhood will want to have children. In this study, the hypothesis was found to both be supported and not supported. A positive relationship was found when the Desire to Parent Questionnaire was used but not when the Desire to Parent Rating Scale was used. This difference in relationships could have a great deal to do with the direct nature of the Desire to Parent Rating Scale as opposed to the more subtle questions mentioned in the Desire to Parent Questionnaires. While the Desire to Parent Rating Scale asked the participant to rate their desire to have children from 1-10, the Questionnaire asked about related ideas (i.e. search for romantic relationships with those they believe will be a good parent, having names picked out for their future/current children.

The second hypothesis in this study theorized that desire for children in those with adversity–filled childhoods would be a function of their optimism/pessimism levels. Therefore, those who experienced an adverse childhood would want children if they are more optimistic and not want children if they are more pessimistic in outlook. This hypothesis was not supported by the analysis. Some potential factors not accounted for in this study were the potential for learned resilience and cultural aspects of perceived adversity/procreation attitudes

Results from this study were generally consistent with a few of the major findings in other studies of the adult desire to parent. A weak, overall relationship between high levels of optimism and desire to parent was found which supported Park's theory.[9] Additionally, McDonnell's study is supported by the finding that childhood adversity has a small influence on a diminishing desire to parent.[8]

A major concern for this study was the validity for the scales of childhood adversity. No correlation was found between the Childhood Family Environment Scale and Childhood Adversity Ranking Scale. Though the study was ultimately run using demographic information to infer participant adversity scores, this lack of measure validity plays a major role in the study's usability. With unclear measures of such an important concern, the interpretation of this study is uncertain. As the measure utilized for finding these scores focused on a small range of childhood adversities, findings can be considered focused on those few types of adversities rather than adversities as a whole.

There are some clear limitations to the research such as demographic concerns, method issues, and potential participant response bias.

Though many participants were used in this study, demographic issues remain. Participants were generally spread out in age, with the majority being in the 21–25 age group. This lack of balance found between ages can bring up more differences than ideal for a clear study. Generations tend to differ in goals, milestone timelines, and societal impacts; Therefore, this lack of uniform distribution breeds the argument that the findings of this study can be tied more to the 21–25 age group, than the sample as a whole. Additionally, not all potentially necessary information was collected. Sexual orientation could have been an important factor to gather in the data collection process as it could have played a role in parenting accessibility. Where accidental pregnancies were accounted for in the questionnaires, determination level of conception/adoption was not. Looking into sexual orientation or those with conception issues separately would have potentially lead to interesting results. . On the same note, cultural identification would have also been a great factor to consider when analyzing each participant's desires based on their societal influences. Some cultures buffer for any adverse childhood experiences by having a high priority placed on family creation within the society. This background priority could play a large factor in underscoring/buffering for any variety of adversity or optimism levels.

Gender is also a major consideration in this study, as 11% of total viable respondents identified as men. Therefore, the data are excessively female–based which limits this study to women, rather than the population as a whole. This focus on women's ideas both opens and narrows the study. With women being the ones to incubate the child and – for the most part – provide care for them, the desire for children found in women is a very interesting concern. A study mentioned the concern some women faced when deciding to have children in regard to their perception of their mother's lives.[9] One of the most common arguments cited by the women in that study who decided not to have children, was the lack of identity they saw in their mothers. In an effort to combat this loss of self in their own lives, the women decided to remain childless.[9] This way of seeing adversity in a more gendered way rather than incidental would have greatly increased this study's relevance.

Upon looking back at this study, a few potential changes stand out. In the Desire to Parent questionnaire versions, the inclusion of step–parent, foster–parent, and other forms of parenting versions would have been ideal. Also, when looking at childhood adversity scores all measures had potential limitations. For the adversity score found using the Personal Information Questionnaire, an expansion on adversity options would have been necessary. The inclusion of other forms of trauma like abuse, natural disasters, and the option for participants to write in other issues that had occurred, would have greatly expanded the study's definition of adversity. Meanwhile, research into the most impactful adversities could have been helpful in better categorizing adversity levels. When looking at the Childhood Family Environment and Childhood Adversity Rating Scales a need for clearer directions is necessary. Participants with multiple childhood families, or who experienced a period of time in non–adverse situations combined with a period in an adverse situation, could have been confused at which childhood to reflect on. Instructions to think back on the most influential parts of their childhood, and respond using those memories, would have created less conflict in participants.

As for data analysis, a few potential limitations can be noted. Though it was used to expand the reach of the study, scoring parents and non–parents in the same categories could have influenced overall scores. Participant response bias on the part of both parents and older non–parents may have skewed the results. Parents may not want to respond negatively to questions on their initial desire to have children; meanwhile, older non–parents may downplay their desire to have children in an effort to decrease cognitive dissonance.

With the decision to procreate being both a personal and global issue, research into understanding possible contributing factors to desire to parent can be enlightening to the human species as a whole. Human birth rates have fluctuated throughout most of time concerning scientists and politicians alike. Though the steady decline and incline have been studied, extensive research into childhood and/or personality factors should be done to better understand these factors on an individual level. Also, the more connections studies can make between adversity and adult factors allow for further understanding of the impacts negative childhood experiences can have on adulthood. These further connections can be detrimental in bringing childhood adversities to light.

The main theories that prompted these hypotheses may not have covered the entire scope that is necessary when understanding what factors go into this immense and complicated decision. Though they did provide connections between the three concepts of desire to parent, optimism/pessimism, and childhood adversity, it is clear that other facets of life are necessary to study in order to better understand this question.

In consideration of future research on the topic of what influences one's desire to parent, quite a few factors and suggestions can be made. Future studies could expand this topic further by focusing on a specific adverse experience (to sexual assault, physical abuse, loss of income, etc.). Additionally, due to the heavy influence perception of parent has on the child's decision to procreate in smaller studies, connecting that with pessimism scores, and adult desire to parent levels may be a next step. Other potential important variables may be: types of adversity, other personality traits, environmental circumstances, cultural impacts, and sexuality.

5. References

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