Prevalence and predictors of benevolent childhood experiences among a representative sample of young people


Link to publication record in Ulster University Research Portal

Published in:
British Journal of Psychology

Publication Status:
Published online: 09/11/2022

DOI:
10.1111/bjop.12607

Document Version
Publisher's PDF, also known as Version of record

General rights
Copyright for the publications made accessible via Ulster University's Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The Research Portal is Ulster University's institutional repository that provides access to Ulster's research outputs. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact pure-support@ulster.ac.uk.
Prevalence and predictors of benevolent childhood experiences among a representative sample of young people

Enya Redican | Orla McBride | Lisa Bunting
Jamie Murphy | Mark Shevlin

Abstract
Emerging research evidence suggests that benevolent childhood experiences (BCEs) may partly explain more favourable mental health outcomes among individuals affected by adverse childhood experiences (ACEs). However, much of this research has focused on adult populations. Consequently, this study sought to provide the first rigorous assessment of the prevalence and predictors of BCEs using a nationally representative sample of young people from Northern Ireland (NI). Participants were 11–19-years-olds (N = 1293) who participated in the NI Youth Wellbeing Prevalence Survey (NI-YWS, 2020). Prevalence rates, gender differences and predictors of BCEs were investigated. Results revealed how most of the sample experienced multiple BCEs (95%, n = 1084), with females reporting higher levels of BCEs. Significant positive predictors of BCEs were female gender, parental education, living with both biological parents, and living in areas with lower deprivation, while significant negative predictors of BCEs included family being in receipt of social welfare and older age. Overall, this study highlights how BCEs are common, while the identification of factors associated with likelihood of having positive experiences during early development provides novel insights into those young people who may be at greater risk for maladaptive psychological outcomes.

KEYWORDS
adolescence, benevolent childhood experiences, childhood, resilience

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2022 The Authors. British Journal of Psychology published by John Wiley & Sons Ltd on behalf of The British Psychological Society.
INTRODUCTION

More than half of mental health disorders have their age of onset prior to eighteen years (Solmi et al., 2021), with mental health disorders representing a significant contributor to the global burden of disease (Rehm & Shield, 2019). Research suggests that adverse childhood experiences (ACEs), which include experiences of abuse, household dysfunction and neglect, account for a substantial proportion of childhood-onset (i.e., 44.6%) and adolescent-onset (i.e., 32%) mental health disorders. For instance, young people affected by ACEs are at increased risk for affective disorders (Lee et al., 2020; Negriff, 2020), substance abuse problems (Afifi et al., 2020), sleep disturbances (McPhie et al., 2014), emotional dysregulation and impaired functioning (Dvir et al., 2014), self-injurious behaviours and suicidality (Wan et al., 2019), as well as post-traumatic stress disorder (PTSD) and Complex PTSD (Sölya et al., 2020).

To date, a large focus of research pertaining to ACEs has been on the investigation of risks and deficits associated with such experiences, a necessity for the prevention, identification and treatment of high-risk youths (Zimmerman et al., 2013). However, in recent years, significant emphasis has been placed on the need to identify factors which might enhance resilience and shield young people from the potentially harmful effects of ACEs (Bartlett, 2020; Ellis et al., 2017; McEwen & Gregerson, 2019; Tedeschi & Kilmer, 2005; Zimmerman et al., 2013).

Resilience describes "the capacity of a system to adapt successfully to significant challenges that threaten the function, viability or development of the system" (Masten, 2018; p. 16). Resilience theory concerns itself with how various individual, social and contextual factors equip a young person with the capacity to flourish irrespective of challenging life circumstances (Zimmerman et al., 2013). Referred to as promotive factors, these resilience enhancing factors can be assets (i.e., reside within the individual) or resources (i.e., external to the individual) (Fergus & Zimmerman, 2005; Zimmerman et al., 2013). Benevolent childhood experiences (BCEs)—also commonly referred to as ‘counter-ACEs’, (Crandall, Broadbent, et al., 2019) positive childhood experiences (Bethell et al., 2019) and advantageous childhood experiences—are one such resilience enhancing factor that have gained considerable attention recently (e.g., Merrick et al., 2019; Narayan et al., 2018). BCEs describe positive experiences during early development, which cultivate perceptions of safety, security, connectedness and predictability (Narayan et al., 2018). The Benevolent Childhood Experiences or BCE scale (Narayan et al., 2018) is the first validated measure specifically designed to assess BCEs. The BCE scale assesses BCEs at different levels; the individual-level (i.e., assets), the family-level, the peer-level and the neighbourhood/community-level (i.e., resources). The inclusion of BCEs across multiple facets of a young person’s developmental environment was influenced by ecological systems and ecological-transactional perspectives (Bronfenbrenner, 1977; Cicchetti & Lynch, 1993), both of which emphasize that a young person’s development is shaped by the interaction and transaction among multiple systems within their proximal environment including family, school and the wider community.

Research evidence indicates that most individuals in the general population have experienced multiple BCEs (Almeida et al., 2021; Merrick et al., 2019; Narayan et al., 2018; Zhan et al., 2021). Using the BCE scale, which produces scores from 0 to 10, average BCE scores have been observed to range from 7.56 in a sample of homeless parents (Merrick et al., 2019) to 8.92 in a community sample of Portuguese adults (Almeida et al., 2021). However, there are few representative investigations of the prevalence of BCEs. Investigating BCEs utilising large representative samples is essential given that such samples can provide a more comprehensive awareness of the epidemiology of BCEs and their predictive power (Merrick & Narayan, 2020). Moreover, except for Crandall, Broadbent, et al. (2019), few studies have investigated the prevalence of BCEs among young people. Crandall, Broadbent, et al. (2019) investigated BCEs (referred to in this study as ‘counter-ACEs’) in a small sample of adolescents (n = 489) who participated in the Flourishing Families project in the US. The study found that young people reported on average eight BCEs throughout their early years (range = 0–10). However, this study was limited by using proxy items from scales which were not intentionally created for the assessment of BCEs (i.e., BCE scale).

The measure utilised by Crandall, Broadbent, et al. (2019) differed to the BCE scale through its’ use of: (1) ordered multiple response categories to assess symptom frequency (compared to the dichotomous response format adopted in the BCE scale), (2) multiple items to capture individual BCEs (e.g., fourteen
items used to measure the presence of a good friend compared to single items in the BCE scale) and (3) some items being completed by parents rather than the young person themselves.

Despite the growing literature recognizing the positive influence of BCEs (e.g., Crandall, Broadbent, et al., 2019; Doom et al., 2021; Kocatürk & Çiçek, 2021; Merrick et al., 2017; Narayan et al., 2018), there have been few empirical investigations pertaining to predictors of BCEs and little is known surrounding those factors which increase likelihood of encountering BCEs. As highlighted by Merrick and Narayan (2020), examining whether BCEs operate differently across different demographic groups (e.g., gender, age, socio-economic status) is necessary to determine the different pathways of resilience. Determining factors which enhance likelihood of positive experiences during childhood may also help identify those young people who lack such experiences and who may consequently be in need of interventions which emphasize improving the quality of their childhood experiences (Merrick & Narayan, 2020). Prior research has suggested that females are more likely to form strong and supportive relationships with parents, teachers, peers and non-parental adult figures compared to their male counterparts (Sun & Stewart, 2007), while it is well-established that males generally experience higher levels of self-esteem (Bleidorn et al., 2016; Gentile et al., 2009; Tam et al., 2011; Birndorf et al., 2005). It is possible that BCEs pertaining to relational support may be more prevalent for females and BCEs pertaining to positive self-perceptions may be more applicable to males. Conversely, younger adolescents have been shown to report higher levels of self-esteem (Bachman et al., 2011; Gardner & Lambert, 2019), and as such, BCEs pertaining to positive views of the self may be more positively endorsed by younger adolescents. Moreover, because research has demonstrated BCEs and ACEs to be negatively correlated (e.g., Doom et al., 2021; Karatzias et al., 2020; Merrick et al., 2019; Narayan et al., 2018), it may be that commonly identified predictors of ACEs are inversely associated with BCEs. For instance, positive predictors of ACEs identified within the literature include parental ACEs and parental mental health (Letourneau et al., 2019; Narayan et al., 2021), indicators of poverty (e.g., income, parental education, parental employment) (e.g., Crouch, Probst, et al., 2019; Walsh et al., 2019), older adolescence, female gender and ethnic minority status (Crouch, Radcliffe, et al., 2019).

Consequently, the current study had several aims. The first aim was to assess the prevalence of BCEs in young people residing in NI. It was hypothesized that findings would be consistent with other studies where BCEs have been shown to be highly prevalent (e.g., Almeida et al., 2021; Merrick et al., 2019; Narayan et al., 2018; Zhan et al., 2021). The second aim was to determine gender differences in BCE item endorsement. Given the absence of research in this area, no a priori hypotheses were formed. However, it was anticipated that BCEs pertaining to relational supports would be more commonly endorsed by females and those relating to self-perceptions would be endorsed most frequently by males. The final aim was to establish the child, familial and parental predictors of total BCE scores. Because research has demonstrated BCEs and ACEs to be negatively correlated (e.g., Doom et al., 2021; Karatzias et al., 2020; Merrick et al., 2019; Narayan et al., 2018), it was expected that commonly identified positive predictors of ACEs would be negatively associated with BCEs.

**METHODS**

**Participants**

The sample comprised of young people aged 11–19 years who participated in the Northern Ireland Youth Wellbeing Prevalence Survey (NI-YWS, 2020; Bunting et al., 2020). Procedural details of the NI-YWS are described in detail elsewhere (Bunting et al., 2022). In brief, young people aged 2–19 years were randomly recruited from the NI population using a postcode database of all residential households in NI. Of the 21,730 addresses that were sampled, 79% were deemed ineligible (i.e., households without a young person aged 2–19 years) for participation with 67% of those who were deemed eligible participating. This resulted in a total of 3,074 completed interviews, with parents of 2–10 year olds completing mental health measures on their child’s behalf and 11–19 year olds completing their own surveys. The safeguard-
ing protocol for the NI-YWS required that a parent or responsible adult be present in the room along with the interviewer and young people (only those aged ≤15 years). The BCE scale was administered to 11–19 year olds who hence are the focus of this study \((n = 1,299)\), with six participants excluded due to not reporting gender.

The analytic sample comprised 1293 participants. The mean age of the sample was 15.15 years \((SD = 2.85)\). There were slightly more males than female participants \((male = 51.2\% \ (n = 662); female = 48.8\% \ (n = 631))\). The majority of the sample \((95.5\%; \ n = 1,236)\) identified as being white, while 4.4\% \((n = 57)\) identified as other. More than a third of respondents were members of families in receipt of social welfare benefits \((35.9\%; \ n = 464)\) and not living with both biological parents \((36.0\%; \ n = 466)\).

**Measures**

**Benevolent Child Experiences (BCEs)**

The BCE scale (Narayan et al., 2018) is a 10-item self-report measure, which assesses favourable childhood experiences characterised by safety and security (e.g., ‘at least one caregiver with whom you felt safe’, ‘beliefs that gave you comfort’), pleasurable and predictable quality of life (e.g., ‘opportunities to have a good time’, ‘predictable home routine’), positive self-perceptions (e.g., ‘like yourself or feel comfortable with yourself’) and support external to the family (e.g., ‘good neighbours’, ‘at least one teacher that cared’, ‘adult who could provide support or advice’). For the present study, responses on the BCE scale were summed to create a total BCE score. Prior research has provided mixed findings surrounding the internal reliability of the BCE scale with Cronbach’s alpha ranging from .69 (Almeida et al., 2021) to .79 (Karatzias et al., 2020). Composite reliability (CR) estimates indicated that the BCE scale had high levels of internal reliability in the current sample \((CR = 0.94)\).

**Predictors**

The following predictor variables were included: child gender (male = 0, female = 1), age (in years), special educational needs \((no = 0, yes = 1)\), any experience of living away from home \((no = 0, yes = 1)\), current living arrangements (currently not living with both biological parents = 0, currently living with both biological parents = 1), family in receipt of social welfare payments \((not in receipt = 0, in receipt of income or disability benefits = 1)\), parental education \((completed up to 5 year post-primary education = 0, more than 5 year post-primary education = 1)\), number of young people living in the household \((1–10)\) and area level deprivation deciles \((1–10, with lower scores indicating higher levels of deprivation)\). Area level deprivation was assessed in the YWS-NI using the 2017 Northern Ireland Deprivation Measure (NIMDM; Northern Ireland Statistics and Research Agency, 2017). The NIMDM assesses deprivation for each of the 890 super output areas (SOAs) in NI based on seven deprivation domains: income; employment; health and disability; education; skills and training; access to services; living environment; and crime and disorder. Rankings for each of the domains are weighted and combined to produce an overall ranking of deprivation ranging from 1 (most deprived) to 890 (least deprived). For the purposes of the current study, deprivation was ranked in deciles ranging from 1 (high levels of deprivation) to 10 (low levels of deprivation). Any experience of living away from home was positively endorsed if a young person responded ‘yes’ to any of the following experiences: living in a children’s home, living with non-relatives foster parents, living with kinship carers (i.e. family members or friends) with social worker involvement, living with kindship carers without social worker involvement and other experiences of living away from home.

Parent mental health was assessed using the 12-item General Health Questionnaire (GHQ-12: Goldberg & Williams, 1988), which is used for measuring psychological distress using a 4-point scale.
ranging from 0 (‘better than usual’) to 3 (‘much less than usual’). The reliability of the GHQ-12 in the current study was excellent ($\alpha = .91$). Higher scores on the GHQ-12 indicated greater psychological distress. Parent ACEs were also assessed using the 10-item Adverse Childhood Experiences questionnaire (ACE; Felitti et al., 1998). Items are scored dichotomously, with participants responding either yes (1) or no (0). Scores on each of the individual ACEs were summed with higher values indicative of greater levels of ACEs exposure. The GHQ-12 and ACE questionnaires were completed by any parent who agreed to engage with the research questions.

**Statistical analysis**

All analyses were conducted using SPSS Version 27. First, descriptive statistics were calculated to determine the prevalence of total BCEs and then, endorsement of individual BCEs for the overall sample and by gender were estimated. Second, chi-square tests of independence were computed between each BCE item and gender to determine significant differences in BCE prevalence according to gender. Third, mean BCEs scores were examined and compared across the various categorical child, familial and parental factors using independent samples t-tests. To control for the heightened risk of a type 1 error with multiple testing, a Bonferroni correction was applied. A new alpha level of .006 was used to indicate statistical significance (.05/9). Eta squared ($\eta^2$) values were calculated to determine the magnitude of differences between the various groups and were interpreted utilising Cohen’s (1988) effect size conventions ($\leq .05 = $ small difference, $0.06–.13 = $ moderate, $\geq .14 = $ large difference). For the continuous predictors (i.e., age, parent mental health, parent ACEs), correlations between the individual predictors and total BCE score were examined. Cohen (1988) conventions were used to interpret effect sizes (.10 = small effect, .30 = moderate effect, .50 = large effect). Data for parent mental health and parent ACEs were missing for a significant proportion of 16–19 year olds (parent mental health: $n = 288$; parental ACEs: $n = 257$) largely due to parents choosing not to participate. Missing data for other variables was negligible (.5%–9.0%). The Multiple Imputation procedure in SPSS was used to generate five imputed data sets based on the iterative Markov Chain Monte Carlo (MCMC) method. Missing values were estimated for all variables, and all variables were also used as predictors. The model constraints specified the minimum and maximum imputed values to be the same as the possible range of scores for each variable. The 5 imputed data sets were used to generate descriptive statistics and estimate a linear regression model based on pooled estimates. Multiple imputation is an efficient method of handling missing data and superior to standard methods such as listwise or pairwise deletion (Schafer & Graham, 2002). Following this, all predictors were entered into the model simultaneously to determine the association between each of the predictors (child, familial, parental) and total BCE score, while adjusting for all other covariates. These analyses provided unstandardized ($B$) regression coefficients, but because SPSS does not produce pooled standardized regression coefficients ($\hat{B}$) these were obtained by standardising all variables and using these as predictors in a regression model.

**RESULTS**

**Prevalence of BCEs**

The average total BCE score of participants was 7.64 ($SD = 2.62$, Range = 0–10, median = 8.00), with the most endorsed BCEs being the presence of at least one good friend (93.2%, $n = 1097$), opportunities for a good time (86.9%, $n = 1023$) and a predictable home environment (78.5%, $n = 924$). Most of the sample reported at least one BCE (96.9%, $n = 1141$), with a large proportion of the sample reporting two or more BCEs ($2 = 1.7\%$, $3–5 = 6.3\%$, $5–7 = 23.6\%$, $\geq10 = 63.4\%$).
Gender differences in BCE item endorsement

As presented in Table 1, chi-square tests of independence indicated significant gender and age-related differences in BCE item endorsement. Specifically, females were more likely to report the presence of a caregiver who made them feel safe, a supportive adult outside the family caregiving context, enjoyment at school and comforting beliefs. Conversely, males were more likely to endorse the item pertaining to positive self-perceptions.

Differences in total BCE scores across child, familial and parental factors

Results from the independent samples t-tests across the various child, familial and parental factors are provided in Table 2. Results indicated significantly higher levels of BCE exposure for those whose families were not in receipt of social welfare, for those who were living with both biological parents, for those with employed parents, and for those with a parent who completed at least five years post-primary education. BCE total scores did not differ significantly for parent mental health problems, parent ACEs, child SEN, for ethnicity and for any experiences of living away from home.

Association between total BCE scores and continuous factors

On average, there were two young people living in each household ($SD = .92$, Range $= 1–7$), with the number of young people in the household being weakly associated with total BCE scores ($r = .08$, $p = .009$). Average scores of parents on the GHQ-12 was 2.30 ($SD = 3.28$, Range $= 0–12$) and these scores were not significantly associated with total BCE scores ($r = -.01$, $p = .67$). The average scores of parents on the ACEs measure was 1.30 ($SD = 1.92$, Range $= 0–9$) and were not significantly associated with total BCE scores ($r = -.001$, $p = .97$).

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Endorsement of BCEs items by gender and age group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Sample $(N = 1177)$</td>
</tr>
<tr>
<td>At least one caregiver with whom you felt safe</td>
<td>861 (73.2%)</td>
</tr>
<tr>
<td>At least one good friend</td>
<td>1097 (93.2%)</td>
</tr>
<tr>
<td>Beliefs that gave you comfort</td>
<td>670 (56.9%)</td>
</tr>
<tr>
<td>Enjoyment at school</td>
<td>838 (71.2%)</td>
</tr>
<tr>
<td>At least one teacher that cared</td>
<td>945 (80.3%)</td>
</tr>
<tr>
<td>Good neighbours</td>
<td>891 (75.7%)</td>
</tr>
<tr>
<td>An adult who could provide you with support or advice</td>
<td>853 (72.5%)</td>
</tr>
<tr>
<td>Opportunities to have a good time</td>
<td>1023 (86.9%)</td>
</tr>
<tr>
<td>Like yourself or feel comfortable with yourself</td>
<td>885 (75.2%)</td>
</tr>
<tr>
<td>Predictable home environment, like regular meals and a regular bedtime</td>
<td>924 (78.5%)</td>
</tr>
</tbody>
</table>

Note: All chi-squared tests df = 1.

*p < .05; **p < .001.
Regression results

A standard multiple linear regression was conducted to determine those predictors which significantly predicted BCEs while statistically adjusting for all other predictors (see Table 3). Significant negative predictors of total BCEs included being a member of a family in receipt of social welfare payments and older age while being female, living with both biological parents, having at least one parent with ‘A-levels or above,’ and living in less deprived areas were significant positive predictors of BCE.

TABLE 2 Groups differences in average levels of BCEs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>N</th>
<th>M</th>
<th>SD*</th>
<th>t</th>
<th>n^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>662</td>
<td>7.36</td>
<td>2.61</td>
<td>-2.753*</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>631</td>
<td>7.78</td>
<td>2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family in receipt of social welfare</td>
<td>No</td>
<td>829</td>
<td>7.87</td>
<td>2.52</td>
<td>5.051**</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>646</td>
<td>7.01</td>
<td>2.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living with both biological parents</td>
<td>No</td>
<td>465</td>
<td>6.99</td>
<td>2.80</td>
<td>-5.296**</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>828</td>
<td>7.89</td>
<td>.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>White</td>
<td>1236</td>
<td>7.53</td>
<td>2.60</td>
<td>-1.13</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Non-white</td>
<td>57</td>
<td>7.57</td>
<td>2.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special educational needs</td>
<td>Yes</td>
<td>189</td>
<td>7.07</td>
<td>2.47</td>
<td>2.368</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1104</td>
<td>7.65</td>
<td>2.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household employment</td>
<td>Unemployed</td>
<td>188</td>
<td>6.70</td>
<td>2.63</td>
<td>-3.886**</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Employed</td>
<td>1104</td>
<td>7.71</td>
<td>2.56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parental Education</td>
<td>Completed more than 5 year post-primary education</td>
<td>824</td>
<td>7.93</td>
<td>2.35</td>
<td>-6.14**</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>Completed up to 5 year post-primary education (i.e., statutory requirement)</td>
<td>469</td>
<td>6.93</td>
<td>2.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any experiences of living away from home</td>
<td>Yes</td>
<td>44</td>
<td>6.90</td>
<td>2.52</td>
<td>1.608</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>1249</td>
<td>7.59</td>
<td>2.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*aMultiple imputation does not provide standard deviations for the pooled estimates, and hence, these estimates have been derived by averaging the R-squared and adjusted $R^2$ across the various imputations.

*p < .05.

**p < .001.

Regression results

A standard multiple linear regression was conducted to determine those predictors which significantly predicted BCEs while statistically adjusting for all other predictors (see Table 3). Significant negative predictors of total BCEs included being a member of a family in receipt of social welfare payments and older age while being female, living with both biological parents, having at least one parent with ‘A-levels or above,’ and living in less deprived areas were significant positive predictors of BCE.

DISCUSSION

The current study had three primary aims: to (1) estimate the prevalence of BCE exposures, (2) investigate gender differences in BCE item endorsement and (3) investigate socio-demographic predictors of total BCE scores in a large nationally representative sample of Northern Ireland youth.

Consistent with prior studies conducted on adult samples (e.g., Bethell et al., 2019; Narayan et al., 2018; Merrick et al., 2017; Merrick & Narayan, 2020; Karatzias et al., 2020; Zhan et al., 2021; Crandall, Broadbent, et al., 2019) and a sample of young people (Crandall, Broadbent, et al., 2019), average levels of BCE exposures were high in the current study. Similar to prior research (Merrick & Narayan, 2020; Narayan et al., 2018; Zhan et al., 2021), the most endorsed BCEs in the present study were the presence of ‘at least one good friend’, ‘opportunities to have a good time’, and ‘predictable home routine’. Levels of endorsement of several BCEs were lower when compared to existing research utilizing adult respondent data. For instance, the BCE item pertaining to the presence of ‘at least one caregiver with whom you felt safe’ was positively endorsed by 73.2% of the current sample compared to 88.5%–94% of adults who reported such experiences in prior studies (Merrick et al., 2019; Narayan...
et al., 2018; Zhan et al., 2021). Because the BCE scale was designed to assess BCEs occurring during the first eighteen years of life (Narayan et al., 2018), it may be that some BCEs have not yet been experienced by these young people. Moreover, because the intended audience of the BCE is adults, it is possible that some items may not be easily interpretable for the demographic of the current sample. As an example, the rate of endorsement for the BCE item ‘beliefs that gave you comfort’ was significantly lower in the current study (i.e., 56.9%) compared to prior studies where endorsement rates ranged from 69% to 77.9% (Merrick et al., 2019; Narayan et al., 2018; Zhan et al., 2021). This was reflected in the level of missing data on the BCE items for 11–15-years-olds compared to 16–19-years-olds (10.9% vs. 6.9%). That being said, it is well-established that adult retrospective recall of childhood experiences is often fraught with bias (Reuben et al., 2016), and hence, it is likely that the inclusion of a representative sample of young people reporting on their positive childhood experiences (both past and current) provides a more accurate reflection of the true extent of BCEs.

Adverse childhood experiences have been observed to frequently cluster and co-occur (e.g., Finkelhor et al., 2007, 2009; Kessler et al., 2010), and findings from the current study indicate that most young have experienced multiple BCEs. These findings align with ecological systems and ecological-transactional perspectives (Bronfenbrenner, 1977; Cicchetti & Lynch, 1993), both of which emphasize that childhood development occurs within the context of multiple interconnecting and co-dependent environmental systems including individual, family, school, peers and neighbourhoods. Although it is promising that most young people in the current sample have experienced multiple BCEs, there remains a small proportion (i.e., 3.1%) who reported having no such experiences. Given that research has consistently documented how individuals with limited BCEs experience more unfavourable outcomes across the lifespan (e.g., Crandall, Miller, et al., 2019; Crandall, Broadbent, et al., 2019; Doom et al., 2021; Narayan et al., 2018), early identification of those high-risk young people is essential to provide opportunities for positive experiences which may help offset the potential negative health and psychological trajectories associated with few BCEs.

The current study also sought to examine gender differences in endorsement of BCEs. Despite being small in magnitude, findings from the current study highlighted consistent gender differences in BCE

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Multiple regression analysis on total BCE score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>$R^2$</td>
</tr>
<tr>
<td>Family in receipt of social welfare (yes)</td>
<td>−.371</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>.424</td>
</tr>
<tr>
<td>Parent mental health (total score)</td>
<td>.025</td>
</tr>
<tr>
<td>Ethnicity (identified as white)</td>
<td>.082</td>
</tr>
<tr>
<td>Parent employment (at least 1 parent in employment)</td>
<td>.154</td>
</tr>
<tr>
<td>Special Educational Needs (SEN) (yes)</td>
<td>−.268</td>
</tr>
<tr>
<td>Parent ACEs (total score)</td>
<td>.047</td>
</tr>
<tr>
<td>Parent Education (more than statutory minimum)</td>
<td>.538</td>
</tr>
<tr>
<td>Current living arrangements (living with both biological parents)</td>
<td>.484</td>
</tr>
<tr>
<td>Number of children in household</td>
<td>.100</td>
</tr>
<tr>
<td>Age (in years)</td>
<td>−.071</td>
</tr>
<tr>
<td>Any experiences of living away from home</td>
<td>−.361</td>
</tr>
<tr>
<td>Area level deprivation (lower levels of deprivation)</td>
<td>.087</td>
</tr>
</tbody>
</table>

Note: Multiple imputation (MI) does not provide $R^2$ and adjusted $R^2$ estimates. These estimates have been derived by averaging the $R^2$ and adjusted $R^2$ across the various imputations.

Abbreviations: adj$R^2$, adjusted $R^2$; $B$, unstandardized beta value; $p$, significance level; $R^2$, R-squared; $SE$, standard error of $B$; $t$, t-statistic; $\beta$, standardised beta value.
Involving young people (Ford, 1970; Miller et al., 2015). Younger adolescents may have been less willing to perceive to be more socially acceptable to others (Krumpal, 2013), is commonly observed in research examining adolescent self-esteem and continuously evolving story of their life, does not develop until late adolescence and early adulthood (McAdams & McLean, 2013). Because the BCE scale asks young people about their early experiences and competencies or have sufficient experience to enable them to critically evaluate their early experiences can thus be considered a reflective task, it is possible that younger adolescents may not yet possess the competencies or have sufficient experience to enable them to critically evaluate their early experiences and thus, it may be more likely to report positively on such experiences compared to older adolescents. Alternatively, social desirability bias, the tendency of survey respondents to provide responses which they perceive to be more socially acceptable to others (Krumpal, 2013), is commonly observed in research involving young people (Ford, 1970; Miller et al., 2015). Younger adolescents may have been less willing to disclose the absence of positive childhood experiences out of fear of such information being disclosed to primary caregivers or fearing that caregivers will be viewed in a negative light whereas older adolescents may be more forthcoming. As part of the interview precautions taken in the NI-YWS, parents were required to be present in the room with younger participants or the door of the room was required to be

Unsurprisingly, after accounting for other demographic, parental and familial factors, gender remained a significant predictor of the total number of BCEs experienced by young people in the current study. Additional predictors of total number of BCEs included age, family receiving social welfare, living with both parents, area-level deprivation and parent education. Regarding age, results demonstrated that older adolescents were more likely to report higher total number of BCEs. This finding is interesting given that the BCE scale requires participants to recall on experiences that occurred throughout their upbringing, and thus, it would appear intuitive that older adolescents may report more BCEs given the additional years they have to encounter BCEs. There are several potential explanations for these age-related differences in BCE endorsement. First, it is possible that recency effects may play a role in this such that adolescents are more inclined to recollect on more recent experiences (Bernsten & Rubin, 2002), while current emotional states can lead to negative biased recollection of childhood experiences (Colman et al., 2016). Late adolescence is characterized by many life challenges such as changes in relationships, exploration of new roles and identity formation (Zarrett & Eccles, 2006), some of which may negatively influence perceptions of earlier childhood experiences. Second, research suggests that narrative identity, an individual’s personal and continuously evolving story of their life, does not develop until late adolescence and early adulthood (McAdams & McLean, 2013). Because the BCE scale asks young people about their early experiences and can thus be considered a reflective task, it is possible that younger adolescents may not yet possess the competencies or have sufficient experience to enable them to critically evaluate their early experiences and thus, may be more likely to report positively on such experiences compared to older adolescents. Alternatively, social desirability bias, the tendency of survey respondents to provide responses which they perceive to be more socially acceptable to others (Krumpal, 2013), is commonly observed in research involving young people (Ford, 1970; Miller et al., 2015). Younger adolescents may have been less willing to disclose the absence of positive childhood experiences out of fear of such information being disclosed to primary caregivers or fearing that caregivers will be viewed in a negative light whereas older adolescents may be more forthcoming. As part of the interview precautions taken in the NI-YWS, parents were required to be present in the room with younger participants or the door of the room was required to be

Endorsement. Consistent with prior research (Blyth & Foster-Clark, 1987), the current findings highlighted how females were more likely to report the presence of parental and non-parental adults who promoted feelings of security and support during early development. This is likely explained by how females often strive for emotional connectedness with others (Lee, 2005; Lombardi et al., 2019), while males typically seek autonomy and individuality (Cross & Madson, 1997). Consequently, females may be more likely to form strong and supportive relationships with others. Moreover, young females experience higher levels of parental monitoring (Nilsson, 2017), are likely to spend a greater proportion of time with their caregivers than their male counterparts (Worthen, 2011) and experience more positive parental characterized by nurturance, responsiveness and support (Vyas & Bano, 2016), all of which may influence perceptions of support. Consistent with prior research illustrating how females typically experience greater spiritual well-being and positive spiritual beliefs (Bryant, 2007; Lee et al., 2019), results from the current study demonstrated how females were also more likely to report experiencing comforting beliefs. The only BCE, which was endorsed by males to a statistically significantly greater extent than females was positive views of the self, a finding unsurprising given the robust literature base illustrating how males have higher levels of self-esteem than females (Birndorf et al., 2005; Bleidorn et al., 2016; Gentile et al., 2009; Tam et al., 2011). This may be a product of the female gender stereotype where greater emphasis is placed on female appearance and body image than is for males (Helfert & Warschburger, 2013), and the greater internalized pressure that females experience to conform with socio-cultural body image ideals than males (Lawler & Nixon, 2011). Other potential explanations for these gender differences in BCE endorsement include personality. Specifically, research has shown that females tend to have higher levels of neuroticism, agreeableness and extraversion than males (e.g., Costa Jr et al., 2001; Weisberg et al., 2011). These personality traits have been identified as salient risk factors for dissatisfaction with the self (Allen & Robson, 2020), as well as being associated with higher levels of perceived social support (Baranıczuk, 2019). Hence, this may explain why endorsement of positive views of the self was higher for males while BCEs characterised by themes of security and support were more heavily endorsed by female participants.

Unsurprisingly, after accounting for other demographic, parental and familial factors, gender remained a significant predictor of the total number of BCEs experienced by young people in the current study. Additional predictors of total number of BCEs included age, family receiving social welfare, living with both parents, area-level deprivation and parent education. Regarding age, results demonstrated that older adolescents were less likely to report higher total number of BCEs. This finding is interesting given that the BCE scale requires participants to recall on experiences that occurred throughout their upbringing, and thus, it would appear intuitive that older adolescents may report more BCEs given the additional years they have to encounter BCEs. There are several potential explanations for these age-related differences in BCE endorsement. First, it is possible that recency effects may play a role in this such that adolescents are more inclined to recollect on more recent experiences (Bernsten & Rubin, 2002), while current emotional states can lead to negative biased recollection of childhood experiences (Colman et al., 2016). Late adolescence is characterized by many life challenges such as changes in relationships, exploration of new roles and identity formation (Zarrett & Eccles, 2006), some of which may negatively influence perceptions of earlier childhood experiences. Second, research suggests that narrative identity, an individual’s personal and continuously evolving story of their life, does not develop until late adolescence and early adulthood (McAdams & McLean, 2013). Because the BCE scale asks young people about their early experiences and can thus be considered a reflective task, it is possible that younger adolescents may not yet possess the competencies or have sufficient experience to enable them to critically evaluate their early experiences and thus, may be more likely to report positively on such experiences compared to older adolescents. Alternatively, social desirability bias, the tendency of survey respondents to provide responses which they perceive to be more socially acceptable to others (Krumpal, 2013), is commonly observed in research involving young people (Ford, 1970; Miller et al., 2015). Younger adolescents may have been less willing to disclose the absence of positive childhood experiences out of fear of such information being disclosed to primary caregivers or fearing that caregivers will be viewed in a negative light whereas older adolescents may be more forthcoming. As part of the interview precautions taken in the NI-YWS, parents were required to be present in the room with younger participants or the door of the room was required to be
left open should the adult leave the room. This may have prevented a young person from disclosing the absence of BCEs. Further research is required to provide explanations for these age-related differences in endorsement of BCEs. Nevertheless, the finding that older adolescents experienced fewer BCEs was not unanticipated given the initial hypothesis that positive predictors of ACEs (i.e., older adolescence) would represent negative predictors of BCEs.

Consistent with research indicating that young people living with two biological parents experienced better outcomes than those with other household arrangements (Manning & Lamb, 2003), results from the current study demonstrated how young people living in two-biological-parent households experienced more BCEs than those who were not. Prior research has shown how children living in households without both biological parents are at increased risk of poverty (Manning & Brown, 2006; Rothwell & McEwen, 2017), with some young people living in ‘non-traditional’ households more negatively impacted by poverty and/or often experiencing more chaotic and disorganized home environments as well as less structure and predictability in their daily routines (Evans et al., 2005). Consequently, opportunities to experience BCEs pertaining to the home environment and quality of living (e.g., ‘predictable home routine,’ ‘good neighbours,’ ‘opportunities to have a good time’) may be less plentiful for those young people.

Results also demonstrated how parental educational status and family being in receipt of social welfare payments were associated with increased and decreased levels of BCEs, respectively. Parental educational attainment and social welfare are considered indicators of socio-economic status (SES; Aarø et al., 2009), with young people growing up in poverty more likely to be exposed to family violence, separation from family, instability and chaotic home environments (Evans, 2004; Kiser et al., 2010), all of which may not be conducive to a positive and supportive developmental environment. Moreover, findings from the study demonstrated how living in less deprived areas were associated with higher levels of BCEs. Research has shown how deprived neighbourhoods often have higher levels of noise disturbance, lower perceived safety, neighbourhood dissatisfaction and lack of neighbourhood attachment (Mouratidis, 2020), which may influence perceptions of safety, security and support. Moreover, area-level deprivation has been shown to increase likelihood of exposure to childhood adversities (Bellis et al., 2014; Lewer et al., 2020), and individuals with elevated levels of ACEs experience significantly fewer BCEs (Doom et al., 2021). Thus, it is likely that living in less deprived areas facilitates opportunities for more positive experiences during early development. Notably, the proportion of variance in total BCE scores explained by these child, family and parent predictors was small. This may be due to the low variability in total BCE scores in the collective sample or alternatively, it is likely that there are other predictors of BCEs that were not captured in the present study. As an example, research has shown how parental attachment is linked to perceived social support, self-esteem (Chen et al., 2017) and peer relationships in young people (Delgado et al., 2022), while cognitive ability has been linked to school enjoyment (Morris et al., 2021) and quality of peer relationships (Bellanti & Bierman, 2000). Future studies should investigate the role of a wider range of predictors such as attachment with parents and cognitive ability in explaining BCEs.

A notable strength of the current study is that it is the first of its kind to provide a rigorous assessment of the prevalence and predictors of BCEs in a representative sample of young people. However, it is important to consider these findings in light of several limitations. First, the use of cross-sectional data limits inferences regarding causality. Second, there are several caveats associated with the BCE scale utilized in the current study including that there are likely other BCEs which foster resilience that are not captured within this scale. For instance, the BCE scale contains only one item which explicitly addresses positive neighbourhood/community factors (i.e., ‘good neighbours’). Research has shown how there are numerous aspects of one’s neighbourhood that are associated with positive psychological wellbeing including social identification (Fong et al., 2019) and neighbourhood greenspace (Flouri et al., 2014). Similarly, only two items in the BCE scale capture BCEs within the school environment (i.e., ‘enjoyment at school’, ‘at least one teacher that cared’). Other aspects of the school environment linked to positive developmental outcomes include school identification (Reynolds et al., 2017) and school characteristics.
Future studies may benefit from adopting a more holistic approach to examining BCEs, especially considering that Hobfoll's Conservation of Resources Theory (COR; Hobfoll, 1989) posits that a greater accumulation of resources protects an individual against the harmful effects of resource loss. Hence, determining the full spectrum of BCEs which can enhance resilience is an important endeavour. Third, the use of dichotomous response categories in the BCE scale precludes examination of the characteristics of BCEs, which make positive outcomes more likely such as frequency of BCEs. Fourth, almost a third of the sample (i.e., 30.6%) positively endorsed all ten BCEs, which is unlikely to be the case in highly traumatized populations of young people. Thus, replication of this study in a clinical sample is an important research endeavour when the aim is to determine the prevalence and predictors of BCEs in populations marked by high levels of adversity and trauma. Finally, one of the major limitations of the present study was the requirement for parents to be present in the room when young people aged 11–15 years were reporting BCEs. It is probable that young people reporting on BCEs such as ‘one caregiver with whom you felt safe’ and ‘predictable home environment’ would be likely to overreport such experiences in the presence of caregivers.

The overall aim of the present study was to determine the prevalence and predictors of benevolent childhood experiences in a representative sample of young people living in NI. In keeping with the extant adult evidence base, findings from the present study suggest that most young people in the general population encounter multiple positive experiences during their upbringing. Moreover, the current study is the first of its kind to assess differences in BCE item endorsement according to the gender of young people, and thus, provides novel insights into those individuals (i.e., males) who are at greater risk for fewer BCEs. Finally, this study highlights those predictors that are positively and negatively associated with BCEs, with these factors largely pertaining to the socio-economic position and other demographic characteristics of the young person.

**AUTHOR CONTRIBUTIONS**

Enya Redican contributed to writing—original draft and formal analysis. Orla McBride, Lisa Bunting and Jamie Murphy contributed to original study design and management and writing—review and editing. Mark Shevlin contributed to conceptualization and formal analysis.

**ACKNOWLEDGEMENT**

This work was supported by the Department for the Economy PhD studentship. The Department for the Economy had no role in the study design, the collection, analysis and interpretation of data, in writing the report and in the decision to submit the article for publication. We would also like to acknowledge the Social Care Directorate (Children’s Service and Think Family NI), Health and Social Care Board who commissioned and funded the Northern Ireland Youth Wellbeing Prevalence Survey.

**CONFLICT OF INTEREST**

All authors declare no conflict of interest.

**DATA AVAILABILITY STATEMENT**

Research data are not shared.

**ORCID**

Enya Redican [https://orcid.org/0000-0002-8863-2234](https://orcid.org/0000-0002-8863-2234)
Orla McBride [https://orcid.org/0000-0003-3399-9466](https://orcid.org/0000-0003-3399-9466)
Jamie Murphy [https://orcid.org/0000-0003-1821-0025](https://orcid.org/0000-0003-1821-0025)
Mark Shevlin [https://orcid.org/0000-0001-6262-5223](https://orcid.org/0000-0001-6262-5223)
REFERENCES


Negriff, S. (2020). ACEs are not equal: Examining the relative impact of household dysfunction versus childhood maltreatment on mental health in adolescence. Social Science & Medicine, 245, 112696.


