Helping, sharing, and comforting behaviours in primary school children: The effects of year group and well-being on prosocial behaviour

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Prosocial behaviours have been shown to be influenced by both age and well-being in the developmental literature, both in terms of home and school environments. The current study aimed to investigate the influences of age and well-being upon prosocial behaviours and whether they are displayed by primary school children in years 1–6, aged 5–11 years. The current research measured sharing, helping, and comforting behaviours as three separate prosocial constructs as previous research identified these as three key types of behaviours. A total of 185 parents were asked to complete two online questionnaires about their child. The Child Prosocial Behaviour Questionnaire was completed to measure the child’s prosocial behaviour, and the Personal Wellbeing Index – School Children was completed to evaluate the child’s level of well-being. Results showed that both year group and well-being affected the constructs of prosocial behaviour. Children with a higher (more positive) well-being displayed more prosocial behaviours. The older age groups, aged 9–11 years in year groups 5 and 7, displayed more helping, sharing, and comforting behaviours than that of the middle age group consisting of children aged 7–9 in year groups 3 and 4. This was consistent with previous research. Results are discussed in relation to the prosocial behaviour literature and the consideration of parental influences and individual differences relating to the different age groups.

Keywords: behaviours; primary school children; prosocial behaviour; school environment; well-being
Prosocial behaviour, as defined by Eisenberg et al. (2007, p. 646) is ‘voluntary, intentional behaviour that results in benefits for another person’. Prosocial behaviour often involves comforting, helping, and caring for others, offering emotional support, and sharing resources (Williams & Berthelsen, 2017). A form of prosocial behaviour is altruism, which is behaviour motivated by a genuine desire to benefit another individual or improve their welfare. Altruistic behaviour is executed without expectation for external reward and often involves sacrificing own personal gain, also known as ‘costly giving’ (Batson & Shaw, 1991; Hastings et al., 2005). This concept contrasts with egoism, referring to the motivation to increase one’s welfare rather than another individual’s (Batson & Powell, 2003). The development and presentation of prosocial behaviours also vary among genders, with research showing males are less likely to engage in prosocial behaviours, compared to females (Caprara et al., 2010; Hastings et al., 2007; Morrison-Gutman & Feinstein, 2008). Further research shows prosociality increases with age and also into adulthood (Catherine & Schonert-Reichel, 2011; Mayr & Freund, 2020; Takagishi et al., 2010), likely on account of older individuals having enhanced empathy and perspective-taking skills (Kokko et al., 2006). Outstanding prosocial behaviours are also associated with higher quality peer relationships (Clark & Ladd, 2000; Deković & Gerris, 1994; Fabes et al., 2012), increased social competence (Saarni, 1990) greater academic achievement (Caprara et al., 2000; Wentzel, 1993; 2015) and an increase in self-esteem (Lui et al., 2020).

Hoffman’s (2000) Development of Empathy Theory suggests that prosocial behaviours are displayed during the first 12–24 months of life, as babies and toddlers begin to learn how to respond to another’s distress around this age. Research by Geangu et al. (2010) found that when presenting aged 1, 3, 6, and 9-month-old infants with a crying sound; they displayed vocal and facial expressions of distress in response to the sound, an initial sign of early prosocial development. Further, Roth-Hanania et al. (2011) found prosocial behaviours during the first year of life were rare, but increase dramatically during the second year. Hoffman (2000) proposed this increase in prosociality is due to infant ability to express concern for another, as, at 24 months, the toddler can differentiate themselves and their feelings from that of others.

It is evident from the literature that parents can contribute to an integral part of prosocial behaviour development in children. Parents will often respond to their child’s distress using empathy, which provides context for the child to observe their parents’ behaviour and imitate their behaviour when responding to distress shown by others, by using empathy and prosocial behaviours of their own (Emdeet al., 2001). Further, parents can encourage their child to take the perspective of others, which in turn promotes feelings of sympathy and compassion towards other individuals, ultimately motivating the onset and development of prosocial behaviours (Acharya & Relojio, 2017; Hoffman, 1984). Additionally, Farrant et al. (2011) discovered that parents who encourage their child to take the perspective of others are also facilitating the child’s development of cognitive empathy skills. This is advantageous, as further research suggests that children with greater cognitive empathy skills are likely to engage in increased positive prosocial behaviours (Eisenberg et al., 2007). Different parenting styles can also have a fundamental impact on a child’s prosocial behaviour development. Displaying a warm, sensitive, and responsive nature as a parent during infancy is beneficial for aiding the development of prosocial behaviours (Clark et al., 1996, Relojio et al., 2018). Likewise, positive parenting practices are associated with higher levels of child prosocial behaviour (McGrath et al., 2003). Consequently, disciplinary parenting styles, such as maternal hostility, are associated with lower levels of prosocial behaviour in children (Romano et al., 2005). Therefore, parent-child relationships and interactions, paired with varying parenting styles, largely impact the development of prosocial behaviours amongst children (Hoffman, 2000; Knafo & Ploomin, 2006; Yoo et al., 2013). When a child receives the appropriate parenting practices to develop prosocial behaviours, these behaviours can continue to develop into adulthood. Mayr and Freund (2020) suggest that older adults are more likely to engage in prosocial behaviours than younger adults due to considerations such as wealth, therefore the cost of acting on prosocial behaviours is less than younger adults (see Huggett, 1996). This does leave the question as to how this can be applied to even younger populations, such as primary school children, as children of this age will not have experienced any form of wealth or financial gain.

During childhood and adolescence, the presence of prosocial behaviours is crucial for engaging in positive social interactions and increasing social understanding and awareness (Eisenberg et al., 2018). Learning to share with siblings or peers at an early age can help children to develop the prosocial skills required to form positive relationships (White et al., 2014). Noble and McGrath (2008) found that positive relationships between peers and teachers, enable children to feel supported and accepted within the school, thus more likely to adhere to the prosocial culture within a school environment. Similarly, Gillies (2006) found when secondary school students worked in cooperative classrooms, they engaged in more positive helping behaviours with their classmates, highlighting the significance of different social contexts and how the environment can influence prosocial behaviours. Prosocial behaviours have also been positively related to academic achievement during primary school education (Caprara et al., 2000; Wentzel, 1993; 2015). Therefore, it is noticeable that educational environments play a huge role in the development of child behaviour and social
education. This in turn positively impacts academic achievement, peer relationships, and how children progress through school, all of which could ultimately influence the child’s well-being (Lozada et al., 2014). There is little research looking at the links between primary school-aged children, well-being, and prosocial behaviour, therefore the present study aims to build upon this, whilst using a much wider age span of primary school children (in years 1–6) compared to previous research (e.g., Gillies, 2006). The current study will consider the use of helping, sharing, and comforting behaviours as these are key behaviours indicated in the previous prosocial behaviour literature and are all distinct in nature (Gillies, 2006).

The well-being of a child refers to their health, safety, security, education, socialisation, development, and their sense of being loved, valued, and included within family and society (Adamson et al., 2007). A report by Morrison-Gutman and Feinstein (2008) found children at age 8 who experience low levels of well-being, will experience more positive well-being at age 10, demonstrating how this variable can vary and fluctuate across the life span. Further, the report detailed a correlation between children’s academic achievement and well-being. Thus, prosocial behaviours at one stage of development may strengthen other aspects of children’s positive development at a later stage. Research has also identified that aspects of higher levels of wellbeing, such as happiness and contentment, can reinforce and predict prosocial behaviours (Aknin et al., 2018; Light et al., 2015). Similarly, Aknin et al. (2015) suggested that engaging in prosocial behaviours can result in feelings of happiness, which could sequentially promote positive well-being, suggesting there is a link between the two variables of well-being and prosocial behaviours. They concluded that children aged between 2 and 5 years old displayed more happiness when giving sweets to another, compared to receiving them for themselves. Further, the emotional rewards of giving and sharing were greater when the child gave their sweets away, rather than sweets belonging to the experimenter. Additionally, Miler et al. (2015) found children who altruistically helped others by sacrificing personal gain, could be promoting their well-being, as well as the well-being of their peers. During this experiment, the children were allowed to donate tokens they had collected to exchange for a prize, too (fictitious) sick children. They found children from less affluent families were more likely to sacrifice their tokens to promote the well-being of another. This altruistic behaviour displayed by the children also predicted higher levels of well-being for themselves, as well as the children they donated their tokens to. Further, Alden and Trew (2013) identified a possible link between well-being and prosocial behaviour, by demonstrating how engaging in acts of kindness can increase positive emotions, particularly in individuals who have social anxiety. It is much of the existing research fails to directly measure well-being; therefore, the present study will aim to build upon this, adopting parental impressions regarding the well-being of their child, along with the prosocial behaviours they display. Parental involvement was found to give a more precise description of how their child behaves, as Fisher et al. (2014) found parents and carers can provide more accurate predictions of their child’s social behaviours. The present study will also contribute to existing findings by using the perspectives of parents, instead of teacher perspectives which are commonly adopted. For example, Johnson et al. (2002) asked class teachers questions related to different areas of their pupils’ behaviour, including prosocial interactions, to gain an understanding of how prosocial each child was, from a professional who works with them day. Other research combines parent ratings with teacher ratings, peer ratings, and self-report from the children (Caprara & Pastorelli, 1993; Eisenberg et al., 1996), failing to isolate parent perspectives alone. The preceding research also utilises samples of relatively young children (e.g., Aknin et al., 2015) or uses a more restricted age range, such as years 8–10 (e.g., Gillies, 2006). Therefore, the sample used in the present study covers a larger age span (years 1–6 at Primary school, ages 5–11) than what has been researched previously.

Prosocial behaviour is one aspect of development that is gaining increased attention in the literature (Brittain & Humphries, 2015; Suet al., 2020), possibly due to the movement towards positive psychology – an optimistic approach to promote well-being, resilience, and positive learning outcomes (Noble & McGrath, 2008). An existing body of research investigates prosocial behaviour by conducting observations of children in naturalistic environments (Davis, 2000; Eisenberg et al., 1999) resulting in subjective data which is difficult to code and interpret. Therefore, the present study aims to quantitatively measure prosocial behaviour through the use of questionnaires which are more objective measures of behaviour.

Recent research from Suet al., (2019), Lui et al. (2020), and Chenet al., (2020) have investigated how prosocial behaviour may link to subjective well-being in school, providing suggestions that greater subjective well-being in school can increase children’s prosocial behaviours. Su et al., (2019) used the Primary School Upper-Grade Students Prosocial Behaviours Questionnaire, and this questionnaire was specifically designed to assess behaviours within a school environment. As this most recent research focuses upon a school environment, the current investigation will expand upon this further by focussing upon general well-being that could be applied to both home and school life, from the view of parents. To do this, the Personal Wellbeing Index – School Children (Cummins & Lau, 2005) will be used. While this is a measure designed for children, the questions are not specifically related to a child’s school environment and can be completed by parents. The Personal
Wellbeing Index will be used in comparison to previous measures (such as the Primary School Upper-Grade Students Prosocial Behaviours Questionnaire, Feng, 2009) as this index separates prosocial behaviours that are discussed in the research rather than classifying prosocial behaviour as simply positive or negative. The investigation of more general well-being has not been studied in the previous literature and this gap will be addressed by the current investigation.

Following the previous research outlined in relation to age (Mayr & Freund, 2020), it is evident that age could be an influencing factor when measuring prosocial behaviours and while adults may be able to develop prosocial behaviours, it is unclear about the links between prosocial behaviours and age in children. Thus, it is key to establish if age, measured by year group of children in primary school, using a wider age span than preceding research, can impact a child’s prosocial behaviour. Age will be measured by using a sample of children in school year groups 1–6 (ranged from age 5–11) and this age range has yet to be studied within the same investigation. As a result, one hypothesis is presented suggesting that: ‘There will be a significant difference of year group on all prosocial behaviours (sharing, comforting, helping).’

METHODS

Participants

The parents, who completed the questionnaires about their child, consisted of nine males and 176 females, totalling 185 participants, with a mean age of 36 (SD = 5.90). Among the children, the subjects of the questionnaires, there were 92 males and 93 females. To ensure adequate sample sizes in each age group, the school year groups were collapsed into three categories: a younger age group (including years 1 and 2, corresponding to ages 5–7, totalling 76 participants, mean age 5.37, SD = .48), a middle-age group (years 3 and 4, corresponding to ages 7–9, totalling 56 participants, mean age of 7.32, SD = .47) and an older age group (years 5 and 6, corresponding to ages 9–11, totalling 53 participants, mean age 9.52, SD = .50). Parent participation was recruited by posting the link to the online survey on several social media platforms, through the use of opportunity sampling. The criteria to complete the questionnaire required the parent to have been at least 18 years of age and must have at least one child who is currently in years 1–6 at primary school.

Materials

The child prosocial behaviour questionnaire. The Child Prosocial Behaviour Questionnaire (Grazzani et al., 2016) consisted of 10 items, measuring three separate constructs of prosocial behaviour: helping, sharing, and comforting (see appendix A). The questionnaire involved a five-point Likert scale, selecting one answer between ’never’, ’rarely’, ’sometimes’, ’often’, and ’always’. Questions 2, 4, and 8 measured helping behaviours and involved statements such as ’picks up something that I have accidentally dropped and hands it to me’. Questions 1, 7, 9, and 10 measured sharing behaviours, such as ’willingly shares toys with other children without being asked’. Questions 3, 5, and 6 measured behaviours shown to comfort others, and included statements such as ’hugs others when they are upset’. An average score out of five was calculated for each prosocial construct for each child. A higher score meant the child displays more sharing, helping or comforting behaviours (they had more positive behaviours). The measure has demonstrated very good internal reliability scores for all constructs of helping ($\alpha = .726$), comforting ($\alpha = .782$), and sharing ($\alpha = .695$).

The Personal Wellbeing Index – School Children. The Personal Wellbeing Index – School Children (Cummins & Lau, 2005) is a 7-item questionnaire, measuring child well-being (see appendix B). This questionnaire involved an 11-point Likert scale for each question, selecting answers ranging from 0 (very sad) to 10 (very happy). An example question is ’How happy is your child with the things they want to be good at?’. The measure has shown very good internal reliability, $\alpha = .840$.

After completing the questionnaires, the well-being scores were categorised into groups of negative well-being (a score of 60% and under) and positive well-being (over 60%), using a median split of the well-being raw data.

Procedures

Upon obtaining ethical clearance from the Loughborough University Ethics Committee (HPSC Approval R19-P201), the online questionnaire was advertised on various social media platforms and posted in numerous online groups. The participants clicked on the link, which took them directly to the online survey. Firstly, participant information was presented for the parent to read, providing information about the purpose of the research, requirements of the participant, any personal information that will be collected, and the researcher
's contact email address for further questions, or to withdraw from the study. This information allowed the participants to give informed consent. If participants were happy to continue, the consent box was ticked. The parents then completed demographic questions about themselves, including their age and gender, then about their child, including their gender and school year group. The first questionnaire, The Child Prosocial Behaviour Questionnaire, and the second questionnaire, The Personal Wellbeing Index – School Children, then followed. The questionnaires required participants to select their responses by clicking on the box next to the answer most appropriate. Finally, the participants were debriefed, thanked for their time, and presented with a button to submit their answers if they were still happy to do so. The online questionnaires lasted around ten minutes and participants were able to complete them at a time most convenient for them, therefore placing no constraints on the opportunity to participate.

RESULTS

Year groups. A one-way independent groups ANOVA was conducted to look at the main effect of a year group on prosocial sharing. There was a significant main effect between year group and prosocial sharing, $R^2 = .182$, $F(2, 182) = 7.648$, $p = .001$. Tukey HSD post hoc comparisons revealed that the older age group has a higher mean prosocial sharing score of 4.57 ($SD = .45$) than both the younger group with a mean of 4.12 ($SD = .68$), $p < .001$, and middle age group with a mean of 3.87 ($SD = .76$), $p < .001$. A one-way independent groups ANOVA was conducted to look at the main effect between year group and prosocial helping. There was a significant main effect between year group and prosocial helping, $F(2, 182) = 16.521$, $p < .001$. Tukey HSD post hoc comparisons revealed that the older age group has a higher mean prosocial helping score of 3.81 ($SD = .75$) than the middle group with a mean of 3.34 ($SD = .73$), $p = .002$. The younger age group has a higher mean prosocial helping score of 3.78 ($SD = .72$) than the middle group with a mean of 3.34 ($SD = .73$), $p = .002$. A one-way independent groups ANOVA was conducted to look at the main effect between year group and prosocial comforting. There was a significant main effect between year group and prosocial comforting, $F(2, 182) = 6.919$, $p = .001$. Tukey HSD post hoc comparisons revealed that the older age group has a higher mean prosocial comforting score of 4.01 ($SD = .74$) than the middle group with a mean of 3.43 ($SD = .94$), $p = .001$. The younger age group has a higher mean prosocial helping score of 3.79 ($SD = .82$) than the middle group with a mean of 3.43 ($SD = .94$), $p = .037$. Please see Table 1 for the means and standard deviations of the three independent groups' ANOVAs.

| Table 1 | Means (and Standard Deviations) of Prosocial Behaviour Scores for Each Year Group |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Younger age group               | 4.12 (.68)                      | 3.78 (.72)                      | 3.79 (.82)                      |
| Middle age group                | 3.87 (.76)                      | 3.34 (.73)                      | 3.43 (.94)                      |
| Older age group                 | 4.57 (.45)                      | 3.81 (.75)                      | 4.01 (.74)                      |

Well-being. An independent samples t-test revealed a significant effect between well-being and prosocial sharing, $t(183) = -3.308$, $p = .001$. The high well-being group had more sharing behaviours with a mean of 4.34 ($SD = .63$) than the low well-being group with a mean of 4.01 ($SD = .74$). An independent samples t-test revealed a significant effect between well-being and prosocial helping, $t(183) = -3.216$, $p = .002$. The high well-being group had more helping behaviours with a mean of 3.84 ($SD = .71$) than the low well-being group with a mean of 3.49 ($SD = .76$). An independent samples t-test revealed a significant effect between well-being and prosocial comforting, $t(183) = -2.368$, $p = .019$. The high well-being group had more comforting behaviours with a mean of 3.90 ($SD = .79$) than the low well-being group with a mean of 3.60 ($SD = .90$). Please see Table 2 for the means and standard deviations of the independent samples t-tests.

| Table 2 | Means (and Standard Deviations) of Prosocial Behaviour Scores for Each Well-Being Group |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| High well-being                 | 4.34 (.63)                      | 3.84 (.71)                      | 3.90 (.79)                      |
| Low well-being                  | 4.01 (.74)                      | 3.49 (.76)                      | 3.60 (.90)                      |
DISCUSSION

Overview of the study findings

The current study aimed to expand and advance upon existing knowledge and understanding, concerning the impact of age (measured by school year group) and well-being, upon prosocial behaviours displayed by primary school children. To enhance that of preceding research, prosocial behaviour was separated into three distinct constructs of prosocial sharing, prosocial helping, and prosocial comforting behaviours. Although the current investigation provides a direction for results and explanation for findings, it must be noted that this study may be viewed as correlational and not directly causation. This will be discussed in more detail about potential other influencing factors such as personality.

Overall, the results of the current study presented a significant difference in well-being upon prosocial sharing. This suggests that children with positive (higher) levels of well-being are more likely to share with others. The results also demonstrated a significant difference of year group upon prosocial sharing, with the older age group demonstrating more sharing behaviours. A significant difference of well-being upon prosocial helping was found. This suggests children with positive levels of well-being are more likely to help others. There was a significant difference of year group on prosocial helping, suggesting age influences prosocial helping. The older age group presented more helping behaviours than the middle age group, however, the younger age group also presented similar behaviours (with more helping behaviours than the middle group). This discovery could suggest that a larger difference in age does not indicate more or less helping behaviours, but irrespective of age, the children will still help others. There was a significant difference in well-being upon prosocial comforting, suggesting that the children with higher levels of well-being displayed more comforting behaviours. A significant difference of year group upon prosocial comforting was found, suggesting age has an influence on comforting behaviours and showing final support for the hypothesis. Again, the older children displayed more comforting behaviours than the middle-aged children.

Comparison to previous research

The current findings link back to the previous research in suggesting that age could be an influencing factor in the presentation of prosocial behaviours (Mayr & Freund, 2020). Similar to the current investigation, Mayr and Freund (2020) suggested that older individuals have developed more prosocial behaviours, similar to the current investigation suggesting that older children demonstrate more sharing behaviours. Although there is a similarity in the results, it must not be ignored that the research from Mayr and Freund (2020) focussed heavily upon charitable behaviours in adults. As the current research used children, charitable behaviours may not have fully developed as children may not have experienced the opportunity to give to others, therefore the comparisons between the research must be considered with caution.

The findings of the current investigation align with previous research (e.g., Aknin et al., 2015), providing evidence for an apparent association between higher levels of positive well-being, and sharing with others. This outcome could perhaps be due to parents socialising their children to share with siblings and peers from a young age. However, the research from Aknin et al. (2015) was conducted within a small American population and the current investigation used a UK-wide sample and this makes any results have the potential to be influenced by cultural and societal differences.

Alongside parents, siblings act as a source of influence on prosocial development, as children learn to respond to each other’s needs by sharing (Smith & Hart, 2002) and this is one thing that the current investigation considered as the prosocial behaviour measure was not solely related to school unlike the previous research (e.g. Lui et al., 2020; Su et al., 2019) Also, parenting style has a meaningful role to play in the development of a child’s sharing behaviours (McGrath et al., 2003) and this is one thing that neither the previous research nor the current study has investigated. For example, an authoritative parenting style, when the parent is firm yet responsive towards their child’s needs, engenders more prosocial behaviours in the child, both at home and in school (Krevans & Gibbs, 1996). Moreover, giving and sharing with others could grant the child a sense of purpose, happiness, and allow them to feel satisfied, which in turn can improve their well-being. However, one uncertainty is that it cannot be certain as to whether the well-being can be a cause of the prosocial behaviour of a result (Miller et al., 2015).

Results are also similar to existing research (e.g. Liu et al., 2016) that uncovered the proportion of children who shared with their peers increased with age, strengthening this claim. It is plausible that increasing age results in increased sharing behaviours, as the children have presumably experienced a higher volume of encounters with other individuals, increasing the opportunities to practice sharing behaviours. Moreover, the
sample of children in Liu et al.’s (2016) research were Chinese children, suggesting the knowledge that sharing behaviours increasing with age may be applied cross-culturally, establishing the ground for future research to strengthen or dispute this claim.

Results surrounding helping behaviours could perhaps be due to children with higher levels of well-being are more willing, or more inclined to help others, as they may have a stronger desire to increase the well-being and happiness of others to align with their state of well-being. Interestingly, this finding is dissimilar to the findings from Miller et al. (2015), who concluded that children from more wealthy families are less likely to altruistically help others, compared to children from less wealthy families, who are more likely to help others. This effect was found even when the helping involved sacrificing their treats to benefit another. As increased wealth is strongly associated with positive well-being and prosocial behaviours (Mayr & Freund, 2020), this finding is inconsistent with the idea that higher levels of well-being lead to increased helping behaviours, as found by the current study. Consequently, the findings of the current study are consistent with existing research by Smith and Hart (2002), who also found children help others when in need, particularly those children who exhibit more empathy and sympathy towards others.

Age-related differences from the current study, although similar to the previous work of Chen et al. (2020), need to be considered in terms of the study design. Chen et al. (2020) used a longitudinal study design, clearly showing the progression of prosocial behaviours as children age whereas the current study used a cross-sectional design with different children in each group. This difference in design could be a reason for results and from the current study, it cannot be inferred that prosocial behaviours change as we age, just that they may be different in terms of age. Perhaps in the future, a longitudinal approach for the current investigation would allow researchers to show the clear development.

A possible explanation of the finding of the display of different prosocial behaviours, in particular comforting behaviours, could be due to dispositional factors or individual differences that vary amongst children, such as personality. The Five-Factor Model of Personality Traits (Digman, 1990) proposes five main personality traits which all individuals possess, but with varying levels. Of interest about the Big 5 is agreeableness. Agreeableness is a personality trait that refers to an individual’s overall level of kindness and empathy. Research has found levels of agreeableness in children can predict empathy and also can be linked with prosocial behaviour (Habashi et al., 2016; Sneed, 2002), and as levels of this personality trait vary between children, this attribute could impact when, how, and even if children engage in behaviours to comfort another. If a child is seen as more empathetic then they may display more prosocial behaviours such as comforting if they know how someone else is feeling. More specifically, Capra et al. (2010) found agreeableness accounted for a large proportion of variance in prosocial behaviours in children, further supporting the indication that individual differences can influence prosocial behaviours, thus potentially contributing to this finding. Researchers could also account for personality in terms of the HEXACO Model (Ashton & Lee, 2007). Hilbig et al. (2014) suggested that a person who scores highly on the honest-humility construct of personality is more likely to engage in more prosocial behaviours. This research was conducted within an adult sample; however, considerations could be made as to whether this is the same within children. In terms of the relationship between personality, health, and well-being, Goodwin & Friedman (2006) have suggested strong links between conscientiousness (the ability to be organised and perform well) and both physical and mental well-being. This could be a potential influence within the current investigation and warrants further investigation.

These findings of comforting behaviours support previous research, such as Catherine and Schonert-Reichl (2011), that used a sample of children in grades 1–7, a similar span of ages to the present study, which may explain the comparable findings. Additionally, Eisenberg et al. (1996) also found differences between age and levels of comfort. However, they found younger children often comfort others less when compared to other age groups, as it was found younger children have higher levels of shyness. Younger children may wish to comfort peers, but potentially lack the assertiveness and confidence to do so. This research contrasts with the current findings, as the younger age group displayed higher levels of comforting behaviours. The difference in the findings may be a result of only adopting parental input in the present study. The results may have been different if, like previous studies (e.g., Eisenberg et al., 1996), teacher perspectives were also used. Children often behave differently at home compared to when at school, and, for example, if levels of shyness were incorporated into the current study, teachers may report higher levels of shyness for particular children, which can alter the results and possibly explain the identified discrepancy. Further, this difference between the findings may be due to situational factors, as comforting is only likely to occur when a child has experienced empathy towards another in a particular context and learned how to respond to their needs. Empathy is likely to lead to increased prosocial actions, as the primary goal of the child who is comforting another, is to increase the other’s welfare (Chavez et al., 2019; Smith & Hart, 2002). These empathic experiences are likely to vary between children, therefore no significant difference between the younger and older age groups may be suitably explained as a consequence of these situational factors. Additionally, there was a significant difference
found between middle and older age groups, with the older age group obtaining higher mean prosocial comforting scores, confirming what has been widely reported in the literature regarding prosocial behaviours increasing with age (Catherine & Schonert-Reichl, 2011; Takagishi et al., 2010).

**Potential limitations**

Several limitations of the present study must be acknowledged. Firstly, the data collection was largely committed to the use of questionnaires, perhaps limiting the investigation of prosocial behaviours and wellbeing, two large and complex areas of research regarding child development. It must also be noted that there are alternative methods of data collection, which may have been more suitable for the investigation of these variables. For example, peer and self-report methods (e.g., Wentzel & McNamara, 1999), or observations of particular behaviours during laboratory experiments (e.g., Miller et al., 2015) as these would have provided researchers with further control of the complete environment within the study. Additionally, the children in this study were in years 1–6 (aged 5–11 years old), covering a much wider age span than the samples used in most existing research. However, in the current study, to increase the number of participants for each age group, the year groups were combined, creating three categories (younger, middle, and older age groups). Although this is comparable with previous research (e.g., Liu et al., 2016; Zahn-Waxler et al., 1983), future research using a similar span of ages may find it beneficial to carry out the data analysis with the year groups remaining separate, to detect any specific differences at each age. Lastly, the present study does not consider external influences that differ between children (parenting style, personality influences, socioeconomic status), which could potentially alter the results. This could involve the different cultures, social environments, or economic situations that the children are living in, or varying parenting styles that the children are exposed to (Petito & Cummins, 2000; Røysamb, et al., 2018).

Despite these limitations, the current study offers a unique contribution by extending the understanding around child well-being and age, and the impact these variables may have on the types of prosocial behaviours that children display. This study was unique in that it quantitatively measured well-being, using a sample of primary school children, in years 1–6 (aged 5–11), while investigating three separate constructs of prosocial behaviour: helping, sharing, and comforting behaviours. The current findings, suggesting that higher levels of well-being across all ages, can motivate positive prosocial actions amongst children, could be implemented into classroom initiatives. For example, teachers could aim to encourage cooperative group work, problem-solving tasks, and activities to improve teamwork skills so the children are consistently presented with opportunities to develop solid peer relationships, that primarily focus on helping, sharing, or comforting others. Further, encouraging the development of these desirable prosocial behaviours has positive associations with academic achievement (Caprara et al., 2000; Morrison-Gutman & Feinstein, 2008; Wentzel, 1993; 2015). Therefore, prosocial behaviours should be managed in the classroom, using praise and reward to encourage and promote these types of positive behaviours, with the expectation of detecting a positive correlation when monitoring the children’s academic achievement. Outside of the classroom, teachers could liaise with parents regularly, to promote child well-being as a priority, whilst emphasising the importance that well-being has on their child’s prosocial behavioural development, and further, academic achievement. Alternative research methods may have considered going into classrooms to test and measure the children directly, to gain knowledge of how prosocial they view themselves and the extent to which they understand their well-being. Caprara and Pastorelli (1993) concluded that children can be a reliable source when reporting their level, or view of their prosocial behaviours, and the issue of social desirability bias is less present in children. Perhaps the current investigation can be criticised for using parental views only and not investigating the views of the children themselves as this would have been an insightful way to improve the investigation.

**Future research directions**

There are several directions for future research which could be implemented from the current investigation, with the main direction being the consideration of personality. Previous research has shown that personality traits can influence how an individual may behave in terms of their behaviours (Habashi et al., 2016; Hilbig et al., 2014), therefore this could be investigated in terms of future research. Future research may want to include a measure of personality such as that of the Ten Item Personality Inventory (Gosling et al., 2003) which could look specifically at agreeableness.

Another future research direction could be to look at the type of parenting style parents have about their children. Previous research (Krevans & Gibbs, 1996) has suggested that parental actions can influence how a child may behave and think and this concept could be used to see if an authoritarian parenting style has the same reflection upon a child’s type of prosocial behaviour. Therefore, variable parenting styles could explain the difference between the level of well-being and the effect this has on prosocial sharing.
A final direction for future research could be to consider the cross-cultural differences within prosocial behaviours. In the research discussed (such as Liu et al., 2016; Aknin et al., 2015), different cultures were used and in the current investigation, these cultures were not replicated. It would be interesting to see if cultural differences were present by conducting the current investigation again within an American sample of children and adults.

CONCLUSION

It is apparent that positive levels of child well-being have a positive effect on helping, sharing, and comforting behaviours displayed by children in primary school, however, the effects of age were not fully in line with previous literature as both prosocial helping and sharing demonstrated higher levels in the older and younger ages, rather than a steady progression across the ages. This ignites ground for future research, to account for these potentially confounding influencing factors. Thus, a further suggestion for future research could consider additional perspectives, such as teachers, to gain a multifaceted view of each child. Overall, the findings have provided a valuable insight into the different elements of a child’s life, regarding their age and level of well-being, which can be applied into both educational environments and home settings, to promote and encourage more positive and prosocial behaviours during childhood.

REFERENCES


