

Exploring Relationships Between Coping Styles and Wellbeing Among Girls and Boys During the COVID-19 Crisis in the UK

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doi:10.56397/JRSSH.2023.08.06

Abstract

This study explores the associations between children's different coping styles and wellbeing outcomes across the UK during the COVID-19 pandemic. By employing the Profile of Coping Dimensions in Children (PCDC), this study categorises coping strategies into adaptive and maladaptive coping and focuses on patterns of these two coping styles among children aged 7-11. Results suggest that with the crisis of COVID-19, adaptive coping is still a significant protective factor for children wellbeing in terms of anxiety, life satisfaction and childhood happiness. On the other hand, maladaptive coping leads to significantly higher anxiety, lower life satisfaction and lower childhood happiness. Additionally, this study differs from previous literature and indicates that there are no significant gender differences found in terms of children's wellbeing. Although girls still report to be significantly more likely to adopt maladaptive coping strategies than boys, there are no significant gender differences found regarding the endorsement of adaptive coping strategies.

Keywords: wellbeing, coping, children, COVID-19

1. Introduction and Literature Review

During the COVID-19 pandemic, the UK Government implemented a national 'lockdown' that included social distancing, stay-at-home orders, school closures, limiting outdoor social gatherings, remote online learning and various other strategies to reduce the spread of infections (Owens et al., 2022). Although the UK government viewed lockdowns as necessary, wide concern has been expressed about whether this act could have negative impacts on children's mental health from various aspects (OECD, 2020). Like adults, children could experience fears, uncertainties and panic when

faced with the pandemic. Remote working, increasing unemployment and social isolation might also lead to more intense parent-child relationships, increased child abuse and domestic violence (Cauberghe et al., 2022; Owens et al., 2022).

Additionally, social restrictions and reduced contact with peers may cause loneliness and depressive symptoms, while limited physical activity could impair mood homeostasis (Bignardi et al., 2021). Evidence from the UK illustrates that children's depression ratings rose significantly during the lockdown, compared to 18 months beforehand (ibid, 2021). A recent

NHS report (2021) showed that rates of probable mental health disorders among 6–16-year-olds rose from 11.6% to 17.4% since 2017, and the raised rates remained relatively stable between 2020 and 2021. Moreover, young children who were already struggling with mental health issues were considered particularly vulnerable during the pandemic, as the restricted face-to-face contact affected mental health services (OECD, 2020).

Although the lockdown policy is no longer in practice, evidence suggests that these negative influences on young people's mental health may be long-lasting. For instance, a national survey in the UK illustrated that young people generally expressed great loneliness and isolation during the lockdown, with 67% identifying that the pandemic will have a long-term impact on their mental health (Youngminds, 2021). Therefore, it is still essential to gain insights into children's mental wellbeing and coping during COVID-19 at this stage for tailored interventions to address the subsequent impacts of the pandemic.

When assessing children's mental wellbeing, anxiety may be an important item to focus on. Among the mental health concerns in the child population, anxiety disorder is the most frequently reported, leading to various comorbidities such as distress and impairment (Polanczyk et al., 2015). Moreover, disability can be associated with anxiety symptoms that do not reach the diagnosis threshold (Costello et al., 2011). This suggests that there may be a greater number of children suffering from anxiety symptoms than the currently diagnosed figure. Therefore, this research intends to independently assess children's anxiety levels, in addition to other general measures of wellbeing to gain a more comprehensive understanding of children's mental health during COVID-19.

One key factor shaping individuals' development, resilience and functioning is coping, which refers to the different ways individuals respond to stressful circumstances behaviourally and emotionally (Quy et al., 2018; Skinner & Zimmer-Gembeck, 2007). Particularly, as Skinner et al. (2003) argue, a structure of categorisation that groups coping strategies into styles or patterns may be crucial, as it helps reveal the mechanisms through which coping has short-term and long-term effects on individuals' mental and physical wellbeing. In addition to describing children's employed

coping strategies, the researchers may understand how certain coping styles are associated with different wellbeing outcomes by classifying these strategies. For example, Caputi and Schoenborn (2018) find that 'maladaptive coping', which involves more emotion-focused strategies including avoidance, denial, social withdrawal and internalising problems, and 'adaptive coping', which involves more problem-solving, support seeking and less internalising symptoms, is positively and negatively related to children's depression respectively. They also report that higher 'maladaptive coping' is associated with increased anxiety. Wright et al. (2010) find that 'internalising coping' such as self-pitying and immersion in emotions leads to significantly increased depression and social anxiety, while 'problem-solving focused coping' strategies that focus on actively managing the situation are associated with lower depression levels. Similarly, Thorne et al. (2013) report a significant positive association between anxiety and avoidance and support-seeking, while 'active coping' is related to higher self-perceived coping efficacy, mediating to reduced anxiety. A longitudinal study also confirms that avoidant and emotion-focused coping strategies are associated with increased psychiatric problems from childhood to adulthood (Sheffler et al., 2019). Overall, 'problem-focused coping' seems to be associated with stronger individual resilience, while 'emotion-focused coping' is associated with lower resilience (Alonso-Tapia et al., 2019).

However, there are also inconsistent findings regarding coping styles and corresponding wellbeing outcomes. Some have found that 'emotion-focused coping' is related to higher perceived wellbeing among children (Gillett & Crisp, 2017). Similarly, it is reported that avoidance-oriented coping styles are associated with increased psychological adaptation and less psychological symptoms (Orgilés et al., 2021). A possible explanation for this would be the inconsistent instruments to categorise coping strategies. For example, emotion-focused coping might be both adaptive and maladaptive under different circumstances, as it has been shown to be effective in situations that are uncontrollable for individuals (Gillett & Crisp, 2017). Therefore, a more generalising categorisation such as maladaptive and adaptive coping styles may be helpful for a more accurate examination of

wellbeing outcomes.

Some studies have further investigated the associations between coping styles and specific individual characteristics. Especially, gender appears to be a key determinant of coping styles. For example, it has been found that girls are significantly less likely to adopt adaptive coping strategies than boys and are more likely to show avoidance when faced with stressors (Hampel & Petermann, 2005; Quay et al., 2020). As maladaptive coping is often associated with reduced wellbeing, such gender differences in coping styles may arguably affect children's mental health outcomes. For example, evidence shows that girls tend to report a greater degree of anxiety disorders than boys (Ollendick, Grills & Alexander, 2001). This pattern seems to continue during COVID-19, with girls reporting to be more concerned with the pandemic than boys (Cauberghe et al., 2022). Gender differences in coping and wellbeing may further influence the effectiveness of interventions regarding children's coping strategies. Some have found that interventions designed to reduce anxiety or to improve 'positive coping' tend to be more effective on girls than on boys (Lyneham & Rapee, 2011; Wong & Power, 2019). Hence, after the initial classification of coping strategies, it is important to explore potentially different gender preferences for coping styles, which may further influence the effectiveness of interventions.

However, current studies regarding coping styles and children's wellbeing are mostly before the COVID-19 crisis. As discussed above, the pandemic may have unexpected impacts on children's mental health, as well as their preferences for coping strategies. To address this research gap, it is essential to conduct further research for a more precise understanding of any potential change during this time period. Moreover, by continuing the study conducted by Quay et al. (2018) and using the same measurement of coping, this study may provide some valuable longitudinal data about children's coping under the influences of COVID-19 in the UK.

Particularly, coping is developed most rapidly during middle childhood (5-7 and 8-12 years old), leading to differences in preferred coping patterns (Skinner & Zimmer-Gembeck, 2007). The current study focuses on a community of children aged 7-11 during COVID-19 lockdowns in the UK, and aims to explore the associations between different coping styles and children's

self-reported anxiety, childhood happiness and life satisfaction. This is to examine whether primarily employing adaptive or maladaptive coping strategies would be associated with children's subjective wellbeing. The second aim is to explore whether subjective wellbeing is different between genders during COVID-19. Finally, it intends to explore the relationship between gender and children's coping styles, to see if gender is associated with individuals' coping strategies.

2. Methodology

2.1 Sample and Data Collection

This research is based on the datasets collected by Quay and Fridkin (Quay, Fridkin & Smith, 2023) in May 2020 during the first nationwide lockdown in the UK. Participants were 100 children aged 7-11 years and 143 parents recruited via schools in London, Essex and Hertfordshire. The researchers asked children and their families to complete a pack of online questionnaires at home. For the purpose of this research, the analysis will focus on data collected from children only.

2.2 Measures

Various questionnaires were employed to assess children's anxiety symptoms, happiness and life satisfaction. Anxiety symptoms were assessed using the Spence Children's Anxiety Scale (SCAS: Spence 1998), which was developed to measure the severity of anxiety symptoms in line with the symptoms of anxiety disorder in the DSM-IV. The scale assesses six domains of anxiety including generalized anxiety, panic/agoraphobia, social phobia, separation anxiety, obsessive-compulsive disorder and physical injury fears. Children were asked to rate on a 4-point scale based on the frequency with which they experienced each symptom over the past two weeks (see Appendix A).

The Profile of Coping Dimensions in children (PCDC: Quay et al., 2018) was used for measuring coping styles. This is a measure specifically designed to capture children's key dimensions of coping based on a review of relevant literature and research findings. It composed of 11 items regarding coping strategies and asked children to answer whether or not they endorsed each of them (see Appendix B).

Finally, children's childhood happiness and life satisfaction were measured via the Good Childhood Index (The Children's Society, 2021)

and Huebner's Life Satisfaction Scale (Huebner, 1991). The measures included 10 and 7 items respectively, which asked children to rate to what extent they are satisfied with their life, family relationships, health, etc. (see Appendix C and Appendix D).

All the measures are pre-existing instruments with established validity and reliability in previous studies. Therefore, procedures to test the measurement validity were omitted in this study. Questions from each questionnaire were then reverse recoded into the same direction for further data processing.

2.3 Data Processing

After the initial data cleaning, 62 valid responses were left out of a total of 100 participants. Items in the measurements were coded to generate a final score for anxiety level, childhood happiness and life satisfaction respectively.

Based on Quy et al.'s (2018) study, the eleven items of the PCDC were categorised into two

dimensions, 'Adaptive coping' and 'Maladaptive coping', as shown in Table 1. The item 'Getting angry helps me to feel better' was excluded since it does not load substantially to either dimension. Since each element included a yes or no question, 'yes' was coded as 1 and 'no' was coded as 0 when processing the data to calculate an adaptive and maladaptive coping 'score'. Children who scored higher than the mean on a dimension were then categorised as 'adaptive copers' and 'maladaptive copers', while those who scored below the means were categorised as 'non-adaptive copers' and 'non-maladaptive copers'. Children who scored above the means on both coping styles were categorised as 'bidirectional copers'. As this study focuses on examining the associations between specific coping styles and wellbeing, children who scored lower the means on both styles were not specifically categorised, as they did not show any specific coping preferences.

Table 1. Adaptive and maladaptive coping (Quy et al., 2018)

Adaptive coping	Maladaptive coping
I can usually do something to make the situation better	I find it hard to stop thinking about it
I try to think about how I can solve the problem	There is nothing I can do about it
I can see the good side of things	
I can change how I feel	Sometimes I don't know why I'm upset
I can calm myself down	
I try not to think about it	I stay upset for several days

2.4 Procedure

Quantitative data analysis was conducted using SPSS. A series of independent samples t tests were first conducted to examine whether being adaptive copers or maladaptive copers were associated with different levels of anxiety, childhood happiness and life satisfaction from those who did not endorse that coping style. The second section involves independent samples t tests which explored gender differences regarding the mean scores of anxiety, childhood happiness and life satisfaction during the COVID-19 pandemic. Finally, binary logistic regression tests were used to explore how gender affected children's employment of coping styles.

3. Results

3.1 Descriptive Statistics

A descriptive analysis was conducted to illustrate the overall mean score of each measure, including adaptive coping (4.65) and maladaptive coping (1.80), anxiety (0.85), childhood happiness (8.25) and life satisfaction (2.61). Out of the 62 valid responses, 30 (48.4%) identified themselves as girls and 31 (50.8%) identified themselves as boys, with one answering 'prefer not to say'. As for coping styles, 41 children (66.1%) scored above the mean of adaptive coping and were categorised as adaptive copers, while 21 (33.9%) were non-adaptive copers. 36 children (58.1%) were maladaptive copers and 26 (41.9%) were non-maladaptive copers.

Table 2. Descriptive statistics

	N	M	SD
Maladaptive coping	60	1.80	.99
Adaptive coping	60	4.65	1.56
Anxiety	62	.85	.36
Life satisfaction	61	2.61	.56
Childhood satisfaction	61	8.25	1.33

3.2 Coping Styles and Children's Wellbeing

Independent samples t tests were conducted to determine the association between adaptive coping style and children's wellbeing. It should be noted that the *p* value has been modified into .016 based on the Bonferroni correction to avoid Type I errors, due to multiple times of running independent samples t tests. Generally, results show that maladaptive copers (*M* = .96, *SD* = .36) were significantly more anxious than non-maladaptive copers, with a large effect size

(*M* = .69, *SD* = .28), $t(60) = -3.22$, $p = .001$, $d = -.830$. Meanwhile, maladaptive copers (*M* = 2.47, *SD* = .64) reported significantly lower life satisfaction than non-maladaptive copers with a medium effect size (*M* = 2.81, *SD* = .34), $t(56) = 2.65$, $p = .005 < .016$, $d = .622$. Additionally, maladaptive copers (*M* = 7.94, *SD* = 1.44) reported significantly lower childhood happiness than non-maladaptive copers with a medium effect size (*M* = 8.69, *SD* = 1.04), $t(59) = 2.22$, $p = .015 < .016$, $d = .577$.

Table 3. Independent t tests for the association between maladaptive coping and wellbeing

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sig.	Mean Difference	Std. Error Difference
Anxiety	.35	.56	-3.22	60	.001	-.27	.09
Life satisfaction	4.37	.04	2.65	56.03	.005	.34	.13
Childhood happiness	3.30	.08	2.22	59	.015	.75	.34

Conversely, children who were categorised as adaptive copers (*M* = .77, *SD* = .31) were significantly less anxious than those who were categorised as non-adaptive copers (*M* = .99, *SD* = .40), $t(60) = 2.46$, $p = .008 < .016$. The effect size was medium ($d = .66$). On the other hand, adaptive copers (*M* = 2.73, *SD* = .50) reported significantly higher life satisfaction than non-adaptive copers, which also showed a

medium effect size (*M* = 2.36, *SD* = .61), $t(59) = -2.54$, $p = .007 < .016$, $d = -.69$. Similarly, adaptive copers (*M* = 8.48, *SD* = 1.28) also reported higher childhood happiness than non-adaptive copers (*M* = 7.77, *SD* = 1.34). Although this difference was not significant ($p = .026 > .016$), it was noticeable that $p < .05$, which may indicate that the difference was still observable.

Table 4. Independent t tests for the association between adaptive coping and wellbeing

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sig.	Mean Difference	Std. Error Difference

Anxiety	.18	.67	2.46	60	.008	.23	.16
Life satisfaction	.76	.39	-2.54	59	.007	- .37	.15
Childhood happiness	.02	.88	-1.98	59	.026	- .70	.36

Generally, endorsing a maladaptive coping style was associated with higher anxiety, lower life satisfaction and lower childhood happiness, with medium to large effect sizes. By contrast, endorsing an adaptive coping style was associated with lower anxiety, higher life satisfaction and higher childhood happiness. It may thus be suggested that maladaptive coping shows a stronger association with children's wellbeing than adaptive coping.

In addition, 20 participants were bidirectional copers, that is, they scored high on both maladaptive and adaptive coping. Independent sample t test showed that bidirectional copers ($M = .88$, $SD = .30$) were slightly more anxious than others ($M = .83$, $SD = .38$), but not significantly ($t(60) = -.46$, $p = .324$). They also reported lower life satisfaction ($M = 2.59$, $SD = .60$) and lower childhood happiness ($M = 8.24$, $SD = 1.44$) than others ($M = 2.62$, $SD = .55$; $M =$

8.25 , $SD = 1.30$), although the differences were not significant either ($t(59) = .19$, $p = .424$; $t(59) = .05$, $p = .481$).

3.3 Gender Differences in Wellbeing

Another series of independent samples t tests were employed to examine the relationship between gender and children's wellbeing. As mentioned above, the p -value was again adjusted to .016 based on the Bonferroni correction. Overall, girls ($M = .90$, $SD = .34$) were more anxious than boys ($M = .79$, $SD = .37$). However, the difference in this sample was not statistically significant, $t(59) = 1.25$, $p = .108$.

Interestingly, in this study, girls ($M = 2.68$, $SD = .51$) showed higher life satisfaction than boys ($M = 2.60$, $SD = .52$). They ($M = 8.36$, $SD = 1.32$) also reported higher childhood happiness than boys ($M = 8.10$, $SD = 1.37$). However, differences were not significant ($p = .268$ and $p = .224$).

Table 5. Independent t tests for the association between gender and wellbeing

	Levene's Test for Equality of Variances		t-test for Equality of Means				
	<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sig.	Mean Difference	Std. Error Difference
Anxiety	.22	.64	1.25	58.77	.108	.11	1.33
Life satisfaction	.01	.93	.62	57.94	.268	.08	.15
Childhood happiness	.03	.86	.76	57.95	.224	.26	.35

3.4 Gender Differences in Coping Styles

To compare different genders' coping preferences, independent samples t tests were first employed to explore the relationship between gender and adaptive or maladaptive coping scores. It was found that girls ($M = 4.68$, $SD = 1.47$) scored slightly lower than boys ($M = 4.71$, $SD = 1.66$) on adaptive coping, although the difference was not significant, $t(57) = -.08$, $p = .470$. However, girls ($M = 2.07$, $SD = .90$) scored significantly higher than boys ($M = 1.55$, $SD = 1.03$) on maladaptive coping, ($t(57) = 2.07$, p

$= .021 < .05$).

When employing the categories of adaptive and maladaptive copers, boys were 1.92 times more likely to be adaptive copers than girls, but the difference was not statistically significant ($OR = 1.92$, $p = .241$). The rates of being maladaptive copers for boys seemed to be 53.1% lower than those among girls, but the difference was not significant either ($OR = .47$, $p = .152$). These results are consistent with the patterns found in the independent samples t tests.

Table 6. Gender distributions of coping styles

		Maladaptive copers	Adaptive copers
Girls	N	20	18
	%	57.1%	43.9%
Boys	N	15	23
	%	42.9%	56.1%
Total	N	35	41
	%	57.4%	67.2%

4. Discussion

This study aimed to examine the associations between children's coping styles and wellbeing, as well as potential gender differences regarding children's coping styles and wellbeing outcomes during the COVID-19 crisis in the UK. Particularly, it focuses on the categorisation of coping strategies as adaptive and maladaptive, and how each style was related to children's wellbeing outcomes and gender.

Findings showed that different coping styles were related to varied outcomes of children's wellbeing. Consistent with previous studies (Caputi & Schoenborn, 2018; Quay et al., 2018), endorsing maladaptive coping strategies, or strategies that involved internalisation, emotion endorsement or perceived incapability to manage the situation was associated with higher anxiety levels and lower life satisfaction with medium to large effect sizes. This confirms the literature on emotion-focused coping, which shows that being unable to regulate one's emotions, as well as a lack of confidence in solving problems independently, are often associated with reduced subjective wellbeing (Alonso-Tapia et al., 2019; Lyneham & Rapee,

2011). On the other hand, endorsing adaptive coping strategies was associated with lower anxiety and higher life satisfaction with medium effect sizes. This corresponds with previous findings that problem-focused coping and a sense of mastery can contribute to children's increased resilience when faced with stressful life events (Alonso-Tapia et al., 2019). It also confirms previous findings which show that greater problem-focused coping has been identified as associated with children's higher perceived wellbeing (Gillett & Crisp, 2017).

In addition to confirming previous studies regarding anxiety and life satisfaction, this study also found that endorsing maladaptive or adaptive coping strategies was associated with significantly different childhood happiness outcomes. Compared to the standard Huebner's Life Satisfaction Scale, the Good Childhood Index places more emphasis on children's daily interactions with family, friends and school life. Therefore, it may be argued that different coping strategies not only affect children's general life satisfaction, but also how positively they perceive relationships with other people and daily interactions.

Table 7. Examples of questions from the two scales

Huebner's Life Satisfaction Scale	The Good Childhood Index
1. My life is going well.	1. How happy are you with your relationships with your family?
2. My life is just right.	2. How happy are you with the home that you live in?
3. I would like to change many things in my life.	3. How happy are you with your relationships with your friends?
4. I wish I had a different kind of life.	4. How happy are you with the school that you go to?

In addition, descriptive analysis in this study illustrated that a considerable number of

children were both maladaptive and adaptive copers. Although when compared with others, children who scored high on both coping styles did not differ significantly from others, their mean scores of life satisfaction and childhood happiness were slightly lower than other children, while the mean score of anxiety was slightly higher. This finding may suggest that maladaptive coping strategies have stronger impacts on children's wellbeing than adaptive coping strategies. This finding echoes Quy *et al.*'s (2018) study, which similarly reports that it is the absence of maladaptive coping, rather than the presence of adaptive coping that had significant influences on children's emotional wellbeing.

When interpreting this study's findings, it should be noticed that all these associations are correlations, rather than causal relationships. The associations may as well be in reverse directions. For example, as suggested by Quy *et al.* (2018), it might be that children experiencing higher happiness were more likely to adopt adapting coping strategies. Similarly, it is possible that children experiencing lower happiness and higher anxiety were more likely to adopt relatively extreme coping strategies, thus scoring high on both coping styles.

As for gender's effects on children's wellbeing, this study did not find any significant gender differences in terms of anxiety levels, life satisfaction or childhood happiness. It may be that the uncertainty brought by the COVID-19 pandemic has considerably increased the stress experienced by both genders, leading to reduced gender differences in wellbeing. However, girls did show slightly higher levels of anxiety than boys, which is in line with statistics before the pandemic (Ollendick, Grills & Alexander, 2001; Thorne *et al.*, 2013; Wong & Power, 2019). Interestingly, unlike previous research, the current study found that boys scored slightly lower than girls on life satisfaction and childhood happiness. It is possible that boys have been comparably more impacted by the COVID-19 pandemic, thus experienced stronger anxiety during this period. This would explain why the gender difference in anxiety was no longer significant after the lockdown, as well as why although boys were still generally less anxious, they reported reduced life satisfaction and childhood happiness. However, this explanation may contrast with previous findings in Western Europe, which illustrate that girls tend to be more concerned by the pandemic

than boys (Cauberghe *et al.*, 2022).

Finally, this study found that girls were significantly more likely to endorse maladaptive coping strategies than boys, which is in line with the literature. This may explain why girls reported higher anxiety levels than boys, as maladaptive coping strategies had a strong positive association with anxiety. However, unlike previous studies, this study did not identify any significant gender difference regarding adaptive coping. One possible explanation is that to cope with the dramatic uncertainty brought by the pandemic, both genders employed a variety of coping strategies, which potentially moderated the original gender differences. When employing the categorisation, gender did not have a significant effect on whether one was maladaptive or adaptive copers. Although boys were almost twice more likely to be adaptive copers and girls reported a higher tendency to be maladaptive copers, the differences seemed to be minor. This may be due to the relatively high skewness of children's coping scores, as the descriptive data showed that over 50% of the sample were above the means in terms of maladaptive and adaptive coping. Nonetheless, these minor patterns are consistent with the literature, which has demonstrated that girls tend to show less adaptive coping strategies and score higher on passive avoidance and maladaptive coping than boys (Hampel & Petermann, 2005; Quy *et al.*, 2018). It has also been identified that boys are more likely to be optimistic, while girls are more likely to feel that there is nothing they can do about the situation (Quy *et al.*, 2020), which is also reflected in the gender preferences for coping styles shown by this study.

5. Limitations and Future Study

Although the findings largely replicate previous studies, some limitations should be acknowledged. First, the sample size is relatively small, with only 62 valid responses, which could reduce the representativeness of this research. This may also explain why some of the relationships were not statistically significant, especially regarding gender differences. Nonetheless, the patterns shown in the findings may still provide important information about children's coping styles and wellbeing during the first COVID-19 lockdown.

In addition, children might not be accurate when self-reporting their wellbeing and coping

strategies. Even if they score high on certain coping strategies, it does not necessarily reflect their behaviours in real-life settings. This might then undermine the value of children's reports when used in isolation (Lyneham & Rapee, 2011).

Moreover, this study did not consider other potential influencing factors for children's coping. For example, age is often identified as another demographic factor affecting coping styles (Hampel & Petermann, 2005; Quy et al., 2018). Also, the pandemic might have highlighted the role of family support since children had to stay at home during the lockdown, contributing to children's wellbeing and new types of coping strategies not covered in the PCDC. Future research may therefore consider how such influencing factors that emerged during the pandemic might have had different impacts on each gender, in order to gain a deeper understanding of the most crucial factors for enhancing children's wellbeing after the COVID-19 crisis.

6. Conclusion

This research aimed to explore the association between different coping styles and wellbeing, as well as gender differences regarding coping styles for children aged 7-11 years during the pandemic. The primary finding of this research is that different styles of coping were shown to be differently associated with the outcomes of children's self-rated anxiety levels, life satisfaction and childhood happiness. With the COVID-19 crisis and its long-lasting impacts on children's wellbeing, adaptive coping strategies still appear to function as a significant protective factor for children, contributing to their resilience. On the other hand, maladaptive coping strategies strongly correlate with reduced subjective wellbeing. Findings also illustrate that although girls still adopt more maladaptive coping strategies, gender differences regarding adaptive coping strategies may have been weakened by the common stress brought by the pandemic. Additionally, this research highlights that a categorising structure of coping strategies provides useful information about children's wellbeing in various social contexts, which may thus contribute to the development of more refined interventions to enhance the resilience of children with specific characteristics.

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Appendix

Appendix A. Spence Children's Anxiety Scale (SCAS)

BELOW IS A LIST OF WAYS YOU MIGHT HAVE FELT OR ACTED RECENTLY.

PLEASE CIRCLE HOW *MUCH* YOU HAVE FELT THIS WAY DURING THE LAST TWO WEEKS

1	I worried about things	Not at all	A little	Quite a bit	A lot
2	I was scared of the dark	Not at all	A little	Quite a bit	A lot
3	When I had a problem, I got a funny feeling in my tummy	Not at all	A little	Quite a bit	A lot
4	I felt afraid	Not at all	A little	Quite a bit	A lot
5	I felt afraid of being on my own at home	Not at all	A little	Quite a bit	A lot
6	I felt scared when I had to take a test	Not at all	A little	Quite a bit	A lot
7	I felt afraid if I had to use public toilets or bathrooms	Not at all	A little	Quite a bit	A lot
8	I worried about being away from my parents	Not at all	A little	Quite a bit	A lot
9	I felt afraid that I would make a fool of myself in front of people	Not at all	A little	Quite a bit	A lot
10	I worried that I would do badly at my school work	Not at all	A little	Quite a bit	A lot
11	Other children liked me	Not at all	A little	Quite a bit	A lot
12	I worried that something awful would happen to someone in my family	Not at all	A little	Quite a bit	A lot
13	I suddenly felt as if I couldn't breathe when there was no reason for this	Not at all	A little	Quite a bit	A lot
14	I had to keep checking that I had done things right (like the switch was off, or the door was locked)	Not at all	A little	Quite a bit	A lot
15	I felt scared if I had to sleep on my own	Not at all	A little	Quite a bit	A lot
16	I had trouble going to school in the mornings because I felt nervous or afraid	Not at all	A little	Quite a bit	A lot
17	I was good at sports	Not at all	A little	Quite a bit	A lot
18	I was scared of dogs	Not at all	A little	Quite a bit	A lot
19	I couldn't seem to get bad or silly thoughts out of my head	Not at all	A little	Quite a bit	A lot
20	When I had a problem, my heart beat really fast	Not at all	A little	Quite a bit	A lot
21	I suddenly started to tremble or shake when there was no reason for this	Not at all	A little	Quite a bit	A lot
22	I worried that something bad would happen to me	Not at all	A little	Quite a bit	A lot
23	I was scared of going to the doctors or dentists	Not at all	A little	Quite a bit	A lot

24	When I had a problem, I felt shaky	Not at all	A little	Quite a bit	A lot
25	I was scared of being in high places or lifts	Not at all	A little	Quite a bit	A lot
26	I was a good person	Not at all	A little	Quite a bit	A lot
27	I had to think of special thoughts to stop bad things from happening (like numbers or words)	Not at all	A little	Quite a bit	A lot
28	I felt scared if I had to travel in the car, or on a bus or a train	Not at all	A little	Quite a bit	A lot
29	I worried what other people thought of me	Not at all	A little	Quite a bit	A lot
30	I was afraid of being in crowded places	Not at all	A little	Quite a bit	A lot
31	I felt happy	Not at all	A little	Quite a bit	A lot
32	All of a sudden I felt really scared for no reason at all	Not at all	A little	Quite a bit	A lot
33	I was scared of insects or spiders	Not at all	A little	Quite a bit	A lot
34	I suddenly became dizzy or faint when there was no reason for this	Not at all	A little	Quite a bit	A lot
35	I felt afraid if I had to talk in front of my class	Not at all	A little	Quite a bit	A lot
36	My heart suddenly started to beat too quickly for no reason	Not at all	A little	Quite a bit	A lot
37	I suddenly got a scared feeling when there was nothing to be afraid of	Not at all	A little	Quite a bit	A lot
38	I liked myself	Not at all	A little	Quite a bit	A lot
39	I was afraid of being in small closed places, like tunnels or small rooms	Not at all	A little	Quite a bit	A lot
40	I had to do some things over and over again (like washing my hands, cleaning or putting things in a certain order)	Not at all	A little	Quite a bit	A lot
41	I was bothered by bad or silly thoughts or pictures in my mind	Not at all	A little	Quite a bit	A lot
42	I had to do some things in just the right way to stop bad things happening	Not at all	A little	Quite a bit	A lot
43	I was proud of my school work	Not at all	A little	Quite a bit	A lot
44	I felt scared if I had to stay away from home overnight	Not at all	A little	Quite a bit	A lot

Appendix B. The Profile of Coping Dimensions in Children (PCDC)

When I am worried or upset....

1.	I can usually do something to make the situation better	True for me	Not true for me
2.	I can see the good side of things	True for me	Not true for me
3.	I find it hard to stop thinking about it	True for me	Not true for me
4.	I can change how I feel	True for me	Not true for me
5.	I stay upset for several days	True for me	Not true for me
6.	Getting angry helps me to feel better	True for me	Not true for me
7.	I try not to think about it	True for me	Not true for me
8.	There is nothing I can do about it	True for me	Not true for me
9.	I can calm myself down	True for me	Not true for me
10.	I try to think about how I can solve the problem	True for me	Not true for me
11.	Sometimes I don't know why I'm upset	True for me	Not true for me

Appendix C. The Good Childhood Index

How happy are you with...
1. Your relationships with your family?
2. The home that you live in?
3. How much choice you have in life?
4. Your relationships with your friends?
5. The things that you have (like money and the things you own)?
6. Your health?
7. Your appearance (the way that you look)?
8. What may happen to you later in your life (in the future)?
9. The school that you go to?
10. The way that you use your time?

Appendix D. Huebner's Life Satisfaction Scale

1. My life is going well.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
2. My life is just right.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
3. I would like to change many things in my life.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
4. I wish I had a different kind of life.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
5. I have a good life.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
6. I have what I want in life.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
7. My life is better than most kids.	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree