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Sibling relationships and parental interventions to sibling bullying during COVID-19: A qualitative comparison of British and Turkish families of autistic adolescents

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Abstract

Background and aims: Despite its high potential for affecting sibling relationships, few studies have explored the impact of the COVID-19 pandemic on this important family dynamic. Of these, the reported evidence has been inconsistent across cultures and lacks cross-cultural comparability. For the first time, we investigated cross-cultural variability in the impact of COVID-19, and the restrictions associated with it, on sibling relationships of autistic adolescents from a Western (United Kingdom) and non-Western (Turkey) country. We also explored how British and Turkish parents intervene in negative sibling interactions—that is, sibling bullying—when witnessed.
Methods: Parents of 164 British and 96 Turkish autistic adolescents, aged 9 to 20 years, were asked how they perceived the effects of COVID-19 on their children's sibling relationships, and how they were most likely to react to instances of sibling bullying. Free response data from parents were analyzed using qualitative content analysis.
Results: Our findings indicated more cross-cultural similarities than differences between British and Turkish families. The majority of both British and Turkish parents indicated that COVID-19 worsened sibling relationships between their autistic and nonautistic children. An overwhelming majority of British and Turkish parents also said that they would step in directly when witnessing sibling bullying. Despite the high volume of cross-cultural similarities generally, we also found some cross-cultural differences, for instance in relation to the most common negative impact of COVID-19 on sibling relationships and the most preferred parental responses to sibling bullying.
Conclusions and implication: Implications and suggestions are discussed in more detail, drawing on the Etic approach to cross-cultural psychology.

Keywords
Autism, COVID-19, cross-cultural, parental interventions, sibling relationships

Nearly all families around the globe had to abide by nationwide lockdowns, stay-at-home orders, school closures, and social distancing rules during the COVID-19 pandemic. This social disruption, without proper support in place, brought profound challenges for intrafamily relationships such as increased parental stress and burnout, marital conflict, and parent–child conflict (Asbury et al., 2021; Horton et al., 2022; Russell et al., 2020). Such deteriorations in intrafamily relationships were projected to have a spillover impact on sibling relationships (Prime et al., 2020). Similarly, Perkins

et al. (2022) predicted that the increased proximity of siblings during the pandemic would increase negative sibling interactions such as sibling violence. Confirming what Prime et al. (2020) projected, researchers have indeed found deteriorated sibling relationships with strong links to negative intrafamily relationships during the pandemic (Horton et al., 2022). Additionally, aligning with Perkins et al.'s (2022) predictions, researchers have found that the pandemic increased daily sibling conflict and sibling violence among children and youth due to increased proximity, that is, increased time

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together, of siblings (Salmon et al., 2022; Stadheim et al., 2022; Toseeb, 2022). That is, COVID-19-related social disruptions and their immediate consequences for intrafamily relationships have had profound impacts on sibling relationships.

Impact of COVID-19 on sibling relationships in families with an autistic child

The deteriorating impact of the pandemic on sibling relationships may have been particularly prominent in some families where additional challenges were in place, for example, families with one or more autistic children. Families with autistic children appear to have been disproportionately affected by the pandemic for reasons including autistic children's resistance to changes in routines, urgent needs for education and therapies, and intense child-care responsibilities for parents (Asbury & Toseeb, 2023; Bellomo et al., 2020). Such a disproportionate impact on the lives of autistic children and their families meant there were likely to be heightened risks for experiencing negative intrafamily relationships (Degli Espinosa et al., 2020) which could then lead to negative sibling relationships (Prime et al., 2020). Confirming this, researchers have reported increased sibling fights, rivalry, and jealousy since the onset of the pandemic in families with autistic children (Stadheim et al., 2022; Tokatly Latzer et al., 2021; Toseeb, 2022).[1] Those researchers have argued that changes in routines, challenges in remote education and therapy, increased parental stress, and increased time spent together at home heightened the risk of deteriorating impacts of the pandemic in such families.

Furthermore, given autistic individuals' emerging social interests during the transition from childhood to adolescence, pandemic-related social disruption may have been a particular challenge for families of autistic adolescents. It is suggested that the improvement in social communication skills from childhood to adolescence may trigger social interest and desires for peer interaction in autistic adolescents (Fecteau et al., 2003; McGovern & Sigman, 2005; Seltzer et al., 2003). Despite their increased peer interest during adolescence, autistic adolescents are less likely to see friends, get called by friends, and be invited to social activities with friends out of school compared to their nonautistic peers (Shattuck et al., 2011). That said, school is the primary source for autistic adolescents to socialize and interact with their peers. This means that school closures and confinement to the house during the pandemic potentially meant a sudden loss of full-scale peer interaction for autistic adolescents. Such social isolation felt to this extent may have triggered mental health problems in autistic adolescents such as anxiety, depression, and stress (Cage & McManemy, 2022), which have previously been reported as being associated with negative sibling interactions

(Toseeb et al., 2018, 2020a). Thus, unmet social needs due to unprecedented social isolation in families of autistic adolescents have made them more susceptible to the negative effects of the pandemic than other young people.

Also, families consisting of autistic and nonautistic siblings may have been more prone to the negative impact of the pandemic than those with autistic-only siblings. This argument is based on the homophily-effect theory which suggests that individuals prefer forming friendships and social relationships with people similar to themselves (Lazarsfeld & Merton, 1954). In support of this, researchers have reported that autistic individuals show a tendency to form friendships based on propinquity (i.e., proximity) and homophily meaning that they prefer to be friends with autistic peers more than nonautistic peers (Black et al., 2022; Chen et al., 2021). The reverse argument is also true; neurotypical[2] individuals may prefer forming friendships with neurotypical peers (Hoffmann et al., 2021). Perhaps the double-empathy problem[3] (Milton, 2012) may be the leading cause of homophily-oriented friendships in these groups. Strengthening these arguments, the likelihood of experiencing negative peer interactions, such as bullying, is higher between autistic and nonautistic peers compared to autistic-autistic or autistic peers with special educational needs (SEN) (Humphrey & Hebron, 2015; Maiano et al., 2016). Taken from here, families formed by autistic–nonautistic sibling pairs may have been at greater risk for experiencing negative sibling interactions during the pandemic than families of autistic–autistic sibling pairs.

Increased sibling conflict in autistic families during the pandemic (Stadheim et al., 2022; Tokatly Latzer et al., 2021; Toseeb, 2022) could evolve into a more harmful form of negative sibling interaction such as bullying (Hoetger et al., 2015; Wolke et al., 2015). Sibling bullying is defined as repeated aggressive behaviors that intend to harm the other sibling directly (i.e., physical bullying) or indirectly (i.e., social, relational, or psychological bullying) (Wolke et al., 2015). It is potentially the most common form of violence in autistic adolescents' lives because it has been found that as many as one in two experience sibling bullying every week (Deniz & Toseeb, 2023a; Toseeb et al., 2018). Hence, given that autistic adolescents already had high rates of sibling bullying prior to the onset of the pandemic, increased time together at home with limited space has potentially created fertile ground for daily sibling conflict and perhaps increased sibling bullying (Toseeb, 2022).

## Sibling relationships in cross-cultural context during COVID-19

Whether or not sibling relationships differ across cultures has been an important scientific question that many researchers have attempted to answer. According to the

Ecological Systems Theory (Bronfenbrenner, 1979), cultures are distal environments that influence individuals' proxy environments which, in turn, shape their thoughts, emotions, and behaviors. While the influence of culture on the positive aspects of sibling relationships has remained a mystery, there is a relatively clearer picture in terms of whether and how negative sibling relationships vary across cultures. For instance, some researchers argued that there may be increased caregiving responsibilities for older siblings in Western cultures to allow both parents to carry out additional duties such as both parents being in active work-life (Cicirelli, 1995; Updegraff et al., 2011). This may indicate an increased likelihood of negative sibling interactions in Western compared to non-Western cultures due to increased time spent together (Toseeb, 2022). On the contrary, non-Western families are larger—formed by more siblings—compared to Western families (OECD, 2023a, 2023b) which is likely to increase negative sibling interactions, such as bullying, due to overcrowding and competition over family resources (Bowes et al., 2014; Tucker et al., 2014; Wolke et al., 2015). Hence, sibling relationships appear to be influenced by certain proximal environmental factors which are shaped by cultural values and norms.

COVID-19 may have worsened sibling relations, and this effect could have varied across cultures due to differences in the strictness of governmental measures and culture-specific protective mechanisms. Supporting this, Foley et al. (2021) have found a positive link between the stringency of COVID-19 measures and intrafamily difficulties such as parent–child conflict. This multinational study reported that families from the United States experienced greater social disruption than those from China. Based on the previously made argument (Prime et al., 2020), American children may be expected to deteriorate more in sibling relations than Chinese ones. However, researchers have found no significant changes in sibling relationships in American families during the pandemic (Cassinat et al., 2021; Sun et al., 2021), while both improving and worsening impacts have been reported from Chinese families (Jiang et al., 2023; Tang et al., 2023; Zhang et al., 2022). This indicates that there may be culture-level protective mechanisms that mitigated the negative impact of the pandemic on intrafamily relationships. In this specific case, Foley et al. (2021) have argued that this was potentially due to the protective impact of the American families' unique daily family routines such as having family meals, doing family leisure activities, and following bedtime routines. That is, although the differences in the stringency of the pandemic measures are likely to lead to differing impacts of the pandemic on sibling relationships, culture-specific protective mechanisms might mitigate this impact.

The United Kingdom and Turkey, two culturally distanced countries (Hofstede Insights, 2023), differed in the severity and duration of the pandemic measures implemented. This means that families from the two cultures faced unequal levels of social disruption. As can be seen in Figure 1, the United Kingdom government imposed stricter and longer-term COVID-19 restrictions than the Turkish government; families in the United Kingdom entered their third nationwide lockdown while Turkish families were yet to enter their first nationwide lockdown. Given the greater social disruption faced by British families, British siblings may be expected to be more susceptible to the pandemic than Turkish siblings. The literature is extremely limited in this regard. However, evidence from both cultures suggests increased levels of negative sibling interactions during the pandemic (Sancili & Tugluk, 2021; Toseeb, 2022). More specifically, a recent cross-cultural comparison between British and Turkish families of autistic adolescents showed higher rates of sibling bullying in
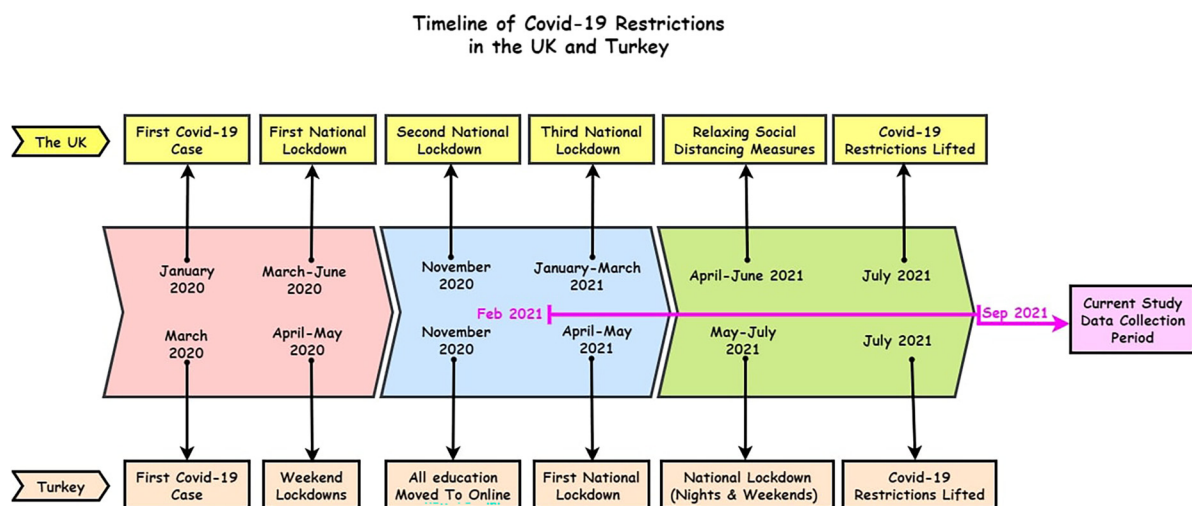
Figure 1. The COVID-19 pandemic timeline in the United Kingdom and Turkey.

British families than in Turkish ones during the pandemic (Deniz & Toseeb, 2023b). That is, families of autistic adolescents facing greater social disruptions might have been more prone to the impact of the pandemic than others.

British and Turkish families show distinct family characteristics (OECD, 2023a, 2023b). These differences in family dynamics could have influenced the way COVID-19, and restrictions associated with it, impacted sibling relationships in both countries. For instance, British mothers of autistic adolescents have, on average, higher educational attainment, are more likely to be in paid employment and spend less time with their children than Turkish mothers which points toward potentially lower parental supervision in British families than in Turkish ones (Deniz & Toseeb, 2023b). Additionally, a greater proportion of mothers in employment may mean higher rates of parentification—caregiving responsibilities of siblings—for British siblings compared to Turkish ones (Kosonen, 1996; Updegraff et al., 2011), due to reduced parent–child interaction (Deniz & Toseeb, 2023b). Conversely, Turkish families are larger, have more children, and show higher rates of poverty than British families (OECD, 2023a, 2023b) which indicates lower familial resources and higher overcrowding rates in Turkish families than in British ones. Such family characteristics, in both cultures, are likely to serve, to some extent, as risk factors for negative sibling interactions (Bowes et al., 2014; Deniz & Toseeb, 2023b; Dirks et al., 2019; Tippett & Wolke, 2015; Toseeb et al., 2020b; Tucker et al., 2014; Wolke et al., 2015). That said, family characteristics of British and Turkish parents are likely to mitigate, that is, strengthen or weaken, the impact of the pandemic on sibling relationships.

British and Turkish families differ in parenting styles, which could have potentially impacted the way COVID-19 measures affected sibling relationships (Gozu, 2019; Kiernan, 1998). For instance, in child disciplining, British parents prefer verbal communication and negotiations while Turkish parents tend to use physical punishment (Aytac et al., 2019). This could lead to differing parental responses to negative sibling interactions, such as conflict and bullying, which holds the potential to increase or decrease the likelihood of such actions being repeated. For instance, siblings in families where parents use punitive disciplinary techniques exhibit increasingly aggressive and hostile behaviors toward each other (Cicirelli, 2013). Given that Turkish parents show more negativity and apply disciplinary measures (e.g., punishment and verbal criticism) more often than British parents (Aytac et al., 2019; Gürmen & Kılıç, 2022), one might expect Turkish siblings to be at a heightened risk for repeated sibling conflict, and bullying too, during the pandemic than British siblings. That is, differences in the way British and Turkish parents handle negative sibling interactions are likely to have potentially mitigated the deteriorating impact of COVID-19 on sibling relationships.

The current study

The evidence suggests that COVID-19 has worsened sibling relations in both families with and without autistic children (Perkins et al., 2022; Horton et al., 2022). There are growing concerns about the impact of COVID-19 on sibling relationships in families of autistic adolescents with autistic–nonautistic sibling pairs. Within this particular group, sibling relationships in families living in countries with high levels of COVID-19-related restrictions may have been worsened above and beyond the deterioration felt in other cultures where milder restrictions were in place. However, this is not clear cut as the existence of culture-specific protective mechanisms might have mitigated the negative impact of COVID-19 on sibling relationships in those cultures. Similarly, differing parental intervention styles to negative sibling interactions, such as bullying, could have influenced, that is, strengthened or weakened, the impact of COVID-19 on sibling relationships. Such lack of clarity makes it particularly important to investigate the impact of the COVID-19 pandemic on sibling relationships and parents' intervention styles when faced with sibling bullying in families of autistic adolescents from two culturally distanced countries where COVID-19 measures were in place at different stringency. To bridge this knowledge gap, we proposed a cross-cultural study comparing families of autistic adolescents from two distant cultures (the United Kingdom and Turkey) where COVID-19 measures were in place at different scales. To the best of our knowledge, this study is the first to perform a cross-cultural evaluation on the impact of COVID-19 on sibling relationships and parental intervention styles to sibling bullying during the pandemic.

The current study had two aims. First, to investigate how British and Turkish parents perceived the impact of the COVID-19 pandemic on the relationships between their autistic and nonautistic children. Based on previous research (Stadheim et al., 2022; Tokatly Latzer et al., 2021; Toseeb, 2022), we expected to find worsened sibling relationships in both British and Turkish families during the pandemic. Given the differences in the stringency of COVID-19 measures in both countries, we expected more deteriorated sibling relationships in British families compared to Turkish ones. More specifically, based on a recent report (Deniz & Toseeb, 2023b), we expected to find more frequent sibling conflict in British families than in Turkish families. Finally, we also hypothesized that parents would report indices of sibling bullying during the pandemic *(e.g., constant physical harm and picking on each other)*. However, we were expecting that parents may not explicitly mention such instances as bullying due to most parents not perceiving such negative sibling interactions as bullying (Caffaro, 2013; Rypi, 2023; Skinner & Kowalski, 2013). Second, based on expectations toward the occurrence of sibling bullying indices during the pandemic, we aimed to investigate how British and Turkish parents intervene in sibling bullying when witnessed. Based

on a previous report (Aytac et al., 2019), we expected Turkish parents to take more disciplinary measures when intervening in sibling bullying than British parents.

When performing a cross-cultural comparison, researchers often adopt one of the two common frameworks, namely the *etic* and the *emic* (Helfrich, 1999). The etic approach suggests that culture is an external factor that influences the studied psychological phenomena, as also suggested by Bronfenbrenner (1979), instead of being the form of studied phenomena as implied by the emic approach (Helfrich, 1999). While the etic focuses on the presence or absence of between-culture variations on a psychological phenomenon, the emic approach focuses on how a psychological phenomenon subjectively exists within a specific culture and the reasons why it differs from other cultures (Helfrich, 1999; Kagitcibasi & Berry, 1989). Hence, the etic approach suited best to the aims of the current study which were to investigate the cross-cultural variation in the impact of COVID-19 on sibling relationships of British and Turkish autistic adolescents and parental responses to sibling bullying in these cultures. In doing so, we sought to answer the following research questions: (1) Do British and Turkish families of autistic adolescents differ in terms of parents' perceptions of the impact of COVID-19 on their children's sibling relationships? and (2) Do British and Turkish families of autistic adolescents differ regarding parental intervention styles to sibling bullying?

Methods

Ethical approval

Ethical approval for this study was granted by the Department of Education Ethics Committee, University of York (Ref: FC20/2). Research permission was also sought from the Turkish Ministry of National Education (Ref: b34d-55f1-3d4e-9ee4-6c65) to recruit participants from Turkish schools. All participants provided informed consent.

Sampling

The present study is part of a larger-scale project in which convenience sampling was used to recruit parents of autistic adolescents from the United Kingdom and Turkey. To participate in the study, families were required to meet the following criteria: *(a) having an autistic child, (b) the autistic child is between nine and 20 years of age,*[4] *(c) having a nonautistic child, and (d) both autistic and nonautistic child had been living in the same house in the preceding six months.* To determine whether the families met the first inclusion criteria (a), parents were asked to answer the following questions: "*Have any of your children been diagnosed with autism, Asperger's syndrome or autistic spectrum disorder?*" and "*What types of special education needs or disabilities does your child have?*". Those who

answered *yes* to the former question or *autism spectrum conditions* to the latter question met the first inclusion criteria.

An online survey was distributed to parents of autistic adolescents using Qualtrics (Qualtrics, 2022). In cases where parents had more than one autistic or nonautistic child, they were asked to choose two siblings closest in age when answering the survey. All data were collected between February and September 2021. Detailed information regarding the national COVID-19 measures of both countries, during the data collection period, can be seen in Figure 1.

Participants

Participants were 260 parents of autistic adolescents (British = 164 and Turkish = 96) who answered the open-ended questions. Sample characteristics are summarized below, and detailed information about siblings' demographics is shown in Table 1.

The characteristics of the British and Turkish families were broadly similar. For British families, the majority of respondents were mothers (87%), White (90%), married (78%), and living in England (96%). In terms of their children, the majority of autistic adolescents were boys (74%), and the nonautistic siblings were approximately equally boys (46%) and girls (54%). The mean ages of autistic and nonautistic siblings were 13.2 and 12 years, respectively. For Turkish families, the majority of respondents were mothers (90%), Turkic ethnicity (86%), and married (80%). A large proportion of Turkish parents were living in Marmara—Greater Istanbul—province (40%). As with the British sample, the majority of Turkish autistic adolescents (84%) were boys, and their siblings were approximately equally boys (52%) and girls (48%). The mean ages of Turkish autistic adolescents and their nonautistic siblings were 12.6 and 14.4 years, respectively. In both cultures, less than 2% were out of formal education (i.e., not attending school).

Concerning sample differences, mostly representing mothers, more British parents (57%) had a college or above degree compared to Turkish ones (22%). Additionally, there were more working mothers in the British sample (68%) compared to the Turkish sample (22%). Finally, Turkish parents were spending more daily time with their children than British parents, both prepandemic (British = 5.8 h and Turkish = 8.1 h) and during the pandemic (British = 7.8 h and Turkish = 9 h).

Measures

Parents were asked to report their own as well as their children's demographic information. Additionally, they were also asked to answer two open-ended questions in regard to the impacts of COVID-19 on children's sibling relationships, and how parents respond to sibling bullying among

Table 1. Demographic characteristics of siblings by country.

	UK (n = 164)		TR (n = 87*)	
	Autistic	Nonautistic	Autistic	Nonautistic
Mean age (years)	13.2	12.0	12.6	14.4
Boys, n (%)	122 (74)	76 (46)	73 (84)	45 (52)
First-born, n (%)	94 (57)	47 (29)	44 (51)	31 (36)
Full-biological siblings, n (%)	145 (88)	79 (91)		
One only sibling, n (%)	106 (65)	60 (69)		
Same-sex siblings, n (%)	94 (57)	51 (59)		
Siblings mean time spent together (pre-COVID)[a]	4.5h	6.6h		
Siblings mean time spent together (after-COVID)[2]	6.1h	7.4h		
Parent–child mean time spent together (pre-COVID)[b]	5.8h	8.1h		
Parent–child mean time spent together (after-COVID)[3]	7.8h	9h		
Autistic child school type—mainstream, n (%)	66 (40)		40 (46)	
Autistic child school type—special, n (%)	82 (50)		34 (39)	
Autistic child school type—other, n (%)	13 (8)		12 (14)	
Autistic child school type—not in education, n (%)	3 (2		1 (1)	
Full-time school attainment	114 (70%)	100 (61%)	57 (65%)	70 (80%)

Note. *Of 96 Turkish (TR) parents, 9 participants did not report any demographic information.
[a]This represents time spent together between the autistic and nonautistic child.
[b]This represents time spent together between the parent and both children.

their children. All questions were asked in the participants' native languages (English or Turkish). All questions were translated into Turkish by the first author, a bilingual speaker of both languages. Although the term *bullying* in English has a literal translation in Turkish, *zorbalık,* to minimize the construct bias across two cultures, we provided a broad definition for sibling bullying (see Q2), using items from a well-constructed sibling bullying measure (Dantchev et al., 2019). Additionally, the existing literature indicates that parents tend to perceive sibling bullying incidents not as bullying due to the normalizing discourse on the term sibling bullying and perhaps due to its very high prevalence (Wolke et al., 2015). Therefore, to be able to capture parents' responses and minimize attrition in this question, we used a semiconditional sentence. That is, instead of asking parents their reaction to sibling bullying when witnessed, we asked parents how they react or *would react* when or *if* they witness sibling bullying.

> **Q1:** "Please describe how the Covid-19 pandemic and school closures have been affecting the sibling relationships between your autistic child and their non-autistic sibling."

> **Q2:** "Definition of sibling bullying: Sibling Bullying is when a sibling tries to upset the other one by saying nasty and hurtful things, or completely excluding [them] from their group of friends, hitting, kicking, pushing or shoving [them] around, telling lies or making up false rumours about [them].

> Please describe how you react or would react when or if you witness sibling bullying between your autistic child and their non-autistic sibling."

Coding frame and analysis

When conducting multisite qualitative research, Miles and Huberman (1994) recommend using a detailed, systematic, and shared coding scheme as well as joint analysis of data across sites for consistency purposes. This has been successfully applied in previous multisite research as well as in cross-cultural qualitative studies (Osborn, 2001; Webb et al., 2004). Additionally, it is suggested that cross-cultural research should be conducted by researchers who are familiar with the language and culture they are studying (Niblo & Jackson, 2004). Thus, for consistency purposes, the entire coding and analysis procedures were carried out by the first author [ED], who is a bilingual speaker of Turkish and English and has lived in both cultural settings, using a single data-driven codebook. The third author [KA] assisted in the initial stages of the data coding process for the development of a codebook-based approach and the second author [LF] assisted with the development and refinement of codes and carried out the qualitative content analysis.

Codebook approach. In the present study, the codebook approach was followed to systematically code the multisite and multilanguage data (MacQueen et al., 1998). As the first step, prior to the development of the codebook, the first author [ED] deeply engaged with the data by reading the text repeatedly, highlighting potentially relevant segments, and taking notes (Forman & Damschroder, 2007). Second, upon sufficient engagement with the data, a hybrid coding scheme (a combination of inductive and deductive coding approaches) was developed. Third, the data was split into three parts for the application of the hybrid

coding scheme: (1) Batch-I (10% of the data), (2) Batch-II (10% of the data), and (3) Batch-III (80% of the data). In the fourth step, Batch-I data were coded following a data-driven coding scheme (i.e., inductive coding) where codes were freely produced and a codebook, with codes, definitions of codes, and exemplar quotes, was drafted. The codebook was then reviewed and revised by the third author [KA]. In the fifth step, the first author used the agreed codebook to code Batch-II data (i.e., deductive coding). At this stage, new codes were allowed to be freely produced. The Batch-II data coding process was also reviewed and agreed upon by the third author. As the final step, the first author deductively coded the rest of the data—Batch-III—using the latest version of the agreed codebook.

Qualitative content analysis. Following data coding, qualitative content analysis (QCA) was used to explore cross-cultural similarities and differences between families from the United Kingdom and Turkey. The QCA was chosen as the analytical method due to its advantages in analyzing rich data that requires interpretation and in quantifying the qualitative findings in multisite comparisons such as cross-cultural comparisons (Bernard et al., 2016). It is described as a method for systematically analyzing qualitative data to generate codes (manifests), group them under relevant subcategories, and combine those subcategories under higher-order latent meanings (categories) that may not be immediately obvious in texts (Schreier, 2012).

Community involvement statement

All authors of the current study are neurotypical researchers; one author is a parent of an autistic child with neurotypical siblings. Additionally, we used identity-first language, that is, autistic, as it appears to be the most commonly preferred language by the autistic community in the United Kingdom (Kenny et al., 2016). However, cases where parents used person-first language, that is, my child with autism, were quoted in their original format and not re-worded to reflect personal preferences.

Results

Descriptions of the ways parents believed COVID-19 impacted sibling relationships and how they chose to intervene when sibling bullying occurred are presented here by research questions. A full description of each code and example quotes for each code are provided in Tables S1 and S2 (Supplemental Materials).

Research question 1: The impact of COVID-19 on sibling relationships

The way in which parents described the overall impact of COVID-19 on sibling relationships was categorized into 24 codes. These codes were clustered into three main categories and seven subcategories: (1) negative impact on behavior; (2) changes in relationships; and (3) disruption of physical spaces. A full overview of the categories and subcategories can be found in Table 2.

Category 1: Negative impact on behavior. Parents across the study spoke of the ways in which COVID-19 had negatively impacted on their children's behavior. While British and Turkish parents agreed that the pandemic had negative impacts on both their autistic child and their non-autistic sibling, the behaviors and descriptions of changes differed between British and Turkish families with more British parents reporting an increase in negative behavior than Turkish parents (British = 36% and Turkish = 22%).

Parents reported that conflict between their children had increased as a result of the pandemic, with many reporting increases in aggression and an increase in both physical and verbal abuse: "My Autistic son has been *more violent and aggressive* towards his sister" (British Parent); "His obsessions increased, and he was aggressively *hitting his sister*" (Turkish Parent). Increases in conflict were more commonly reported by British parents, with 32% reporting more conflict between their children in comparison to 16% of Turkish families.

For some, the pandemic had resulted in changes in the behaviors of their autistic child. British parents, but not Turkish parents, reported more frequent autistic meltdowns, and an increased need to be in control was also more frequently reported by British parents:

> Sibling has become more aware of autistic child's behaviours and questioning why at times despite the autistic child being older do they act the way they do. The autistic child has less tolerance to have their sibling around them and **meltdowns and lashing out has increased**. (British Parent)

Turkish parents reported that their autistic child had become much more withdrawn during the pandemic, a perception that was not described as frequently by British parents: "As socialisation decreased, my son with Asperger's contact with friends decreased, he used to be better at continuing the conversation. *He became withdrawn*" (Turkish Parent).

Category 2: Changes in relationships. More than 73% of British and 51% of Turkish parents indicated that COVID-19 changed the relationship between their autistic child and their sibling. Parents across both cultures described how the change was negative (British = 33% and Turkish = 25%), and British parents more commonly reported positive changes than Turkish parents (British = 24% and Turkish = 18%). For a smaller proportion of parents across both countries, no change in relationship was reported.

To British and Turkish parents, the most commonly described challenge was the strain the pandemic had on

Table 2. Impacts of COVID-19 on sibling relationships: categories, subcategories, and codes.

	British (N = 144) Freq (%)	Turkish (N = 91) Freq (%)		British	Turkish
1. Negative impact on behavior	**52 (36%)**	**20 (22%)**	*Better relationships*	15	7
1.1. Increase in conflict	**46 (32%)**	**15 (16%)**	*Brought them closer*	18	6
Increased aggression	5	9	*Cared more*	4	3
Increased physical abuse	6	4	**2.3. No change**	**26 (18%)**	**20 (22%)**
Increased verbal abuse	4	1	*Same as before*	22	18
Argued more	42	6	*Got along well*	4	2
1.2. Changes in autistic child's behavior	**10 (7%)**	**4 (4%)**	**3. Disruption of physical spaces**	**44 (30%)**	**33 (36%)**
Increased meltdowns	5	0	**3.1. Disruption was well received**	**22 (15%)**	**14 (15%)**
Increased reliance or controlling	8	2	*No outside triggers*	5	0
Withdrawn	2	4	*Spent more time together*	9	9
2. Changes in relationships	**105 (73%)**	**46 (51%)**	*Increase in shared activities*	12	7
2.1. Negative impacts	**47 (33%)**	**23 (25%)**	**3.2. Changes in togetherness were challenging**	**23 (16%)**	**22 (24%)**
The strain on relationships	17	17	*Increased time together-negative*	10	2
Increased tension	5	1	*No alone time*	7	1
Decrease in patience	25	4	*No space*	6	13
Loss of sibling interest	10	1	*Changes in routines-Negative*	1	4
2.2. Positive changes	**34 (24%)**	**16 (18%)**	*Increased boredom*	0	5

sibling relationships, and increased tension was reported by some:

> They are not able to have a break from each other during the day are in each other's spaces a lot **so this is causing lots of tension.** They're level of learning is hugely different and our autistic child finds it unfair her younger sibling has "less" work to do. (British Parent)

> Negative. Tension and disagreement between them increased. (Turkish Parent)

A decrease in children's patience was more commonly reported by British parents and some participants reported that their autistic child's sibling had lost interest in them: "My autistic daughter is *far less tolerant and less patient* with my neurotypical daughter" (British Parent); "Two brothers were distant, without communication unless necessary" (Turkish Parent).

For others, the pandemic had a positive impact on their children's relationships, although this was more frequently spoken about by British parents. Many parents reported that being in lockdown had brought their children closer and described how relationships had improved between siblings as a result. Both cultures spoke of how their children had become more caring toward each other: "They spend more time together, do more activities together, *take care of each other more*" (Turkish Parent).

For a smaller proportion of parents, COVID-19 was reported to have no impact on sibling relationships (British = 18% and Turkish = 22%). Parents across cultures described that their children's relationships stayed the same as prior to the pandemic, and for some, this was reported to be because of strong positive sibling relationships prior to lockdowns: "The relationship between the brothers *remained the same* during the pandemic" (British Parent).

Category 3: Disruption of physical spaces. Parents spoke of how disruption to physical spaces, such as the home environment, had impacted sibling relationships. This was less frequently reported than other categories and was more evenly reported across cultures (British = 30% and Turkish = 36%).

Some parents described how this disruption had been well received. As children were kept home more frequently during the pandemic as a result of lockdowns and restrictions, this increased the time children were spending together in a positive way (British = 15% and Turkish = 15%): "*They spend more time together,* do more activities together, take care of each other more" (British Parent). This increased time had increased the shared activities children engaged in, such as studying, or gameplay, something which was thought to be supportive of sibling relationships. British parents, but not Turkish parents, described that the time spent at home reduced the number of outside triggers, which was seen as a positive:

> It has improved the relationship somewhat as we **haven't had to contend with outside stressors** such as school

[for an autistic child]. This has meant that she's been a lot less explosive towards us as a whole which has meant less lashing out and a massive decline in her being physical towards us, and in particular towards her sister. They seem to have become much closer since been in lockdown and the NT sibling is showing more tolerance and understanding towards her sisters needs and struggles. (British Parent)

For others, being confined to home, such as due to school closures, was challenging for their autistic children and their siblings (British = 16% and Turkish = 24%). Increased togetherness was reported to be a difficulty more common in British families, something which was linked to having limited alone time: "*Spending all day, every day together, with no alone time* was difficult for both the children" (British Parent). Turkish parents more frequently spoke that physical space for the family was detrimental to sibling relationships and increased boredom linked to the pandemic was reported by Turkish parents only: "the communication and play environment at home is not enough" (Turkish Parent). Finally, a small group of parents reported that the change in routine as a result of COVID-19 restrictions negatively impacted sibling relationships: "*My Autistic daughter wasn't in a routine* so played up attacking her siblings so the siblings resent her" (British Parent).

Research question 2: How do parents respond to sibling conflict and bullying?

The way in which parents described intervening in sibling conflict and bullying was categorized into 24 codes. These codes were clustered into three main categories and seven subcategories: (1) Indirect Intervention; (2) Direct Intervention; and (3) No Intervention. A full overview of the categories and subcategories can be found in Table 3.

Category 1: Indirect intervention. Parents reported the indirect ways of intervening with sibling bullying (British = 65% and Turkish = 68%), including the ability to use such incidents as a learning experience for their children (British = 56% and Turkish = 53%): "I get them both to sit down and talk about their behaviour and how they could have handled the situation better" (British Parent). For many, promoting understanding between siblings was key in dealing with sibling bullying and some used this as an opportunity to teach children why their actions were unacceptable: "In such cases, *we tell our daughter not to tug at her sister and to put herself in her shoes*, so that she can correct her behaviour" (Turkish Parent).

British parents, but not Turkish parents, used sibling bullying occurrences to speak about feelings with their children, with some acknowledging the children's own feelings and a smaller number expressing their own feelings to their children: "*I would explain I was disappointed* and that he should protect his brother not bully him" (British Parent). Another key difference can be seen in this category, with British parents reporting making both children apologize to each other, whereas Turkish parents did not report this.

In this category, both Turkish and British parents spoke of using nondisciplinary ways of dealing with sibling bullying (British = 29% and Turkish = 20%). This included spending time investigating the issue and solving the issue that has caused the bullying: "First I try to understand the bullying between the brothers, I try to understand what

Table 3. Parents' responses to sibling bullying: codes, subcategories, and categories.

	British (N = 147) Freq (%)	Turkish (N = 60) Freq (%)		British	Turkish
1. Indirect intervention	**96 (65%)**	**41 (68%)**	*Investigate the issue*	8	3
1.1. Learning opportunities	***83 (56%)***	***32 (53%)***	*Solve the issue*	4	6
Teach how to handle conflict	4	1	**2. Direct intervention**	**91 (62%)**	**22 (37%)**
Promote understanding	42	29	*Use/threat with punishment*	21	4
Explain why their action is unacceptable	35	14	*Discipline both*	4	8
Refer to family rules	5	2	*Discipline the bully*	11	9
Acknowledge children's feelings	8	0	*Discipline the nonautistic child*	0	3
Express own feelings (parents)	3	0	*Show no tolerance*	7	2
Make both apologize	10	1	*Time-out*	33	6
1.2. Nondisciplinary responses	***43 (29%)***	***12 (20%)***	*React angrily*	8	7
Intervene calmly	6	2	*Tell them to stop*	30	0
Comfort the victim	1	2	**3. No intervention**	**5 (3%)**	**2 (3%)**
Calm the autistic child	5	2	*Ignore*	2	2
Individual chat	16	5	*Feel helpless*	4	0
Group chat	21	0			

is the situation and why it happened" (Turkish Parent). Some parents, but not all, reported comforting the victim, with others comforting the autistic child regardless of who was at fault.

Some also used bullying as an opportunity to engage in conversations with their child. British parents more commonly held individual chats with their children and only British parents reported having group chats with children about the incident: "I get them both to sit down and talk about their behaviour" (British Parent).

Category 2: Direct intervention. Parents across cultures both reported the use of direct intervention, however, this was more common among British families (British = 62% and Turkish = 37%). The use of discipline was used by both British and Turkish families, with some taking disciplinary action toward the bully perpetrator whereas others chose to discipline both children: "We separate, *warn the wrong one*, and if necessary, *punish the guilty one*" (Turkish Parent). Turkish parents, but not British parents, reported disciplining their autistic child only.

British parents were more likely to report using or threatening their children with punitive measures, and more commonly reported putting children in time-out. British parents, but not Turkish parents, reported directly telling children to stop when they witnessed bullying: "If either my neurotypical or ASD son is nasty to the other, they are told to stop" (British Parent). Both cultures had a small number of parents report that they showed no tolerance to bullying in their household and bullying was reported to elicit an angry response which was more common in Turkish families: "*I harshly warned* the autistic child for hitting his brother" (Turkish Parent) and "I would get angry" (British Parent).

Category 3: No intervention. A small number of parents reported that they took no intervention when faced with sibling bullying (British = 3% and Turkish = 3%). Some parents across cultures reported that they chose to ignore the situation: "I usually *prefer not to intervene*" (Turkish Parent), and British parents only reported that they felt helpless when bullying occurred: "They are both considerably bigger than me and know I can't physically restrain them. I reprimand them but it seems to have a limited effect" (British Parent).

Discussion

Using a cross-cultural sample, we conducted a qualitative study to explore how British and Turkish parents perceived the impact of COVID-19 on their autistic and nonautistic children's sibling relationships. Additionally, we also looked to see how British and Turkish parents respond to sibling bullying, predicting that the pandemic would increase the instances of sibling bullying in both cultures. Overall, we found more cross-cultural similarities than differences in the effects of COVID-19 on sibling relationships of autistic adolescents and parents' responses to sibling bullying across the two cultures. The cross-cultural differences are discussed following the etic approach's principles and potential causes of such differences are speculated in light of the existing literature.

Impact of COVID-19 on sibling relationships

For the first time, in a cross-cultural study, we identified three distinct impacts of the pandemic on sibling relationships of autistic adolescents; the negative impacts COVID-19 had on children's behavior, the changes in children's relationships, and the impact disrupting physical spaces had on sibling relationships. Interestingly, not all parents reported that their children's relationships with their siblings had worsened, some reported that there was a positive change and for others, no change at all. Closely supporting our findings, a single-culture study, from the general population, has also shown a triple impact of the pandemic, worsened, improved, or not impacted, on sibling relationships of Canadian adolescents (Martin-Storey et al., 2021). Similarly, reports from China have also indicated a double-edged impact of the pandemic—positive and negative—on sibling relationships of children and adolescents (Jiang et al., 2023; Tang et al., 2023). Moreover, some other researchers across the globe have also found either negative, positive, or no impact of the pandemic on sibling relationships (Cassinat et al., 2021; Stadheim et al., 2022; Sun et al., 2021; Toseeb, 2022; Zhang et al., 2022). Taken together, providing the first cross-cultural perspective, we argue that COVID-19 has had not only negative but also positive or no impact on the sibling relationships of autistic adolescents and that this three-fold effect appears to be consistent across Western and non-Western cultures.

Although many British and Turkish parents reported a negative impact of the pandemic on their children's behavior, which in turn impacted sibling relationships, the way COVID-19 related factors led to a negative impact differed across the two cultures. For instance, more British (32%) than Turkish parents (16%) reported increased sibling conflict, suggesting a potential increase in sibling bullying occurrences during the pandemic. Aligning with this, a recent study also indicated higher sibling bullying rates in the British than in Turkish culture during the pandemic (Deniz & Toseeb, 2023b). Although reasons for why British families were more prone to increased sibling conflict stayed unclear. We speculate two potential reasons for this namely individualistic/collectivist values and parental supervision in British and Turkish families. For instance, British siblings are more individualistic while their Turkish counterparts are more collectivist which means increased needs for autonomy and independence in the British than in Turkish families (Hofstede Insights, 2023). Based on this, one might argue that the pandemic-related disruptions to

individuals' personal space and private time might have led to higher sibling conflict in British, than Turkish, culture. Additionally, although both British and Turkish mothers spent more time with their children during the pandemic than prepandemic, Turkish mothers reported higher parental supervision than British mothers. Based on this, one might argue that the extra time that Turkish mothers were spending with their children potentially prevented siblings' struggles in getting along leading to sibling conflicts (Tucker et al., 2014; Wolke et al., 2015). It is crucial to note that our arguments are only speculations and, therefore, more research is needed to support these arguments. More research following the emic approach (i.e., in-depth testing of culture-level differences) is needed to clarify the potential cultural reasons underlying such differences found in the current study.

Parental interventions for sibling bullying

For the first time, we explored three cross-culturally common parental responses to sibling bullying: *direct, indirect,* and *no intervention*. Overall, our findings are in line with previous reports. For instance, McHale et al. (2000) conceptualized three common parental interventions for sibling conflict which closely resemble our findings: *noninvolvement, intervene, and coach*. Similarly, Kramer et al. (1999) also found that American parents apply similar responses when witnessing sibling conflicts such as *no intervention (e.g., passive active no intervention), direct intervention (e.g., commands to stop the fight, collaborative problem solving)*, and *indirect intervention (e.g., exploring emotions)*. Moreover, Tucker and Kazura (2013) identified three common categories of parental responses to sibling bullying, two of which are well aligned with the intervention styles conceptualized in the present study: *no intervention (nonintervention; ignore, do not pay attention); indirect intervention (child-centred; help them negotiate, teach them, explain the other child's feelings)*. Although none of these studies were cross-cultural, we argue that triple parental intervention styles to sibling bullying—*no intervention, direct intervention, indirect intervention*—appear to be a universal parental catalogue for intervening in sibling conflict and bullying.

In both British and Turkish cultures, the most common parental intervention for sibling bullying was direct intervention where the parent immediately stepped into the situation. The existing literature, although based on sibling conflict not bullying, contradicted our findings. For instance, American parents were found to be more inclined toward indirect interventions (i.e., coaching) than directly intervening in sibling conflict when witnessed (Milevsky et al., 2011). Similarly, others have also found that most parents prefer not to intervene (Kramer et al., 1999; Martin & Ross, 1995) or indirectly intervene (Tucker & Kazura, 2013) when witnessing sibling conflict. We anticipate two reasons for this inconsistency. First, parental

awareness of sibling bullying has recently increased as researchers have found moderate agreement between child-report and parent-report sibling bullying rates (Dantchev & Zemp, 2022) compared to low agreement found in the past (Durán et al., 2017; Holt et al., 2008). We suspect that this increase in parental awareness might have encouraged parents to take more direct actions to prevent the detrimental impacts of sibling bullying. Second, all previous findings regarding how parents intervene in sibling bullying come from the nonautistic population. We argue that the social communication differences experienced by autistic individuals may be leading parents to take direct interventions more often than indirect interventions to defuse sibling bullying.

British and Turkish parents differed in terms of the use of direct and indirect intervention styles. In regard to direct interventions, most British parents preferred to directly step into the situation (e.g., stop the bullying action), while Turkish parents tended to take disciplinary actions. One might link this difference to the different parenting styles between British and Turkish families. For instance, in child-rearing, Turkish parents show more negativity and apply disciplinary measures (e.g., punishment and verbal criticism) more often than British parents (Aytac et al., 2019; Gürmen & Kılıç, 2022) which may be the reason that most Turkish parents chose to take disciplinary measures. In terms of indirect interventions, we found that acknowledging feelings, both children's and parents', was an indirect intervention style specifically used by British but not Turkish parents. Addressing children's feelings has frequently been found as a parental strategy to deal with sibling conflict, although the existing evidence comes primarily from Western cultures (Kramer et al., 1999; McHale et al., 2000; Milevsky et al., 2011; Tucker & Kazura, 2013). Based on this, we argue that addressing children's feelings may be a Western culture-specific parental strategy to deal with sibling conflict, although more non-Western studies are needed to support this argument. To conclude, we argue that the differences in the types of direct and indirect interventions parents use to respond to sibling bullying may be due to cross-cultural differences in parenting and child-rearing styles.

Strengths and limitations

The current study holds several strengths and limitations. In terms of its strengths, having sufficiently large samples from both cultures, improved the cross-cultural comparability. Moreover, the data coder in the current study was a bilingual speaker of both Turkish and English languages and had living experience in both cultures which, we believe, improved the engagement of the coder with the data. There were also a number of limitations. First, our sample is mainly formed by mothers, thus, British and Turkish fathers' views were underrepresented in our study. Second, we had a relatively larger

sample of British parents, compared to Turkish parents, which might have affected the degree of representation of Turkish parents in the reported cross-cultural comparison. Third, we were interested in autistic adolescents' sibling relationships with their closest aged nonautistic sibling, thus, our findings do not inform about the relationships of autistic adolescents with other or multiple siblings. Fourth, we focused on parents' perceptions which do not represent lived experiences of autistic adolescents in terms of the impacts of COVID-19 on their sibling relationships. Finally, we made certain speculations about the potential causes of cross-cultural variations found in the current study, though we did not specifically investigate this as it was not the main focus of the study. It is important to bear in mind that we do not have supporting data for such speculations and that they were made merely to guide future researchers to where to look when searching for potential culture-specific causes of such variations. Thus, all findings should be evaluated within these strengths and limitations.

Conclusions

Overall, our findings showed that COVID-19 negatively affected sibling relationships in most families of autistic adolescents in both cultures. In terms of parental responses to sibling bullying, most British and Turkish parents indicated directly intervening in sibling bullying when witnessed, which has not been found in other previous studies. This may suggest a potential increase in parents' awareness of sibling bullying from the past to the present. Differences in parenting styles potentially led to the differing direct parental interventions to sibling bullying (British = Step in directly and Turkish = Take disciplinary actions).

We emphasize that parental awareness of such negative impacts of the pandemic on sibling relationships could potentially buffer the aftermath of the pandemic. Additionally, effective parental interventions to negative sibling interactions, such as sibling bullying, are also likely to reduce the likelihood of such events repeating in the future. At times when parents struggle with how to handle sibling bullying, seeking professional support may be more beneficial than ignoring the situation or letting children work it out between themselves.

It is important to note that the current findings indicated the presence of cross-cultural differences in the effects of COVID-19 on sibling relationships and parental reactions to sibling bullying following the etic approach. Although taking the current literature into account, some speculations were made to explain potential reasons for cross-cultural differences found in the current study, where possible, future researchers should conduct in-depth culture-specific studies—adopting the emic approach—to better explain such variations. Finally, given the qualitative nature of the current study, as well as the conveniently recruited samples from both cultures, which were not culturally representative, readers, and researchers shall refrain from

generalizing current findings across Western and non-Western families of autistic adolescents. Future researchers may wish to consider conducting larger-scale and culturally representative cross-cultural research to improve the generalizability of their findings.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. This study had a sample of children and youth with special educational needs, mostly autistic (75%).
2. Individuals with typical neurological functioning.
3. The double empathy problem suggests a mutual failure between autistic and non-autistic individuals to take the perspective of the other.
4. This inclusion criterion was defined to recruit autistic adolescents. According to the World Health Organisation (2023), adolescence is the period of life between childhood and adulthood which covers ages 10 and 19. Since the current study was designed as a 1-year longitudinal study, the lower and upper age bounds were moved 1 year and set as 9 and 20 to maximise the sample power.

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