

How listening to children impacts their quality of life: a cross-sectional study of school-age children during the COVID-19 pandemic in Japan

Arisa Yamaguchi ^{1,2}, Christina D Bethell,³ Yui Yamaoka ⁴, Naho Morisaki ⁵

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AY and CDB contributed equally.

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For numbered affiliations see end of article.

Correspondence to

Dr Arisa Yamaguchi; yamaguchi-ar@ncchd.go.jp

Dr Christina D Bethell; cbethell@jhu.edu

ABSTRACT

Objective To examine the association between children's quality of life (QOL) and their experience of being heard by family and/or teachers during the COVID-19 pandemic.

Design A cross-sectional study.

Settings A randomly sampled postal survey of fifth or eighth grade children conducted in December 2020 in Japan.

Participants Responses from child/caregiver dyads (n=700) were adjusted for complex sampling to ensure the sample's national representativeness, incorporating all regions.

Interventions Based on the survey results, children were categorised as 'being heard' if they reported being frequently asked about their thoughts regarding the pandemic and having their thoughts and feelings considered by family, teachers or both.

Main outcome measures Overall QOL and six QOL subscales measured through the Kid-KINDL Questionnaire (KINDL Questionnaire for Measuring Health-Related Quality of Life in Children and Adolescents).

Results About half (52.9%) of children were heard by both family and teachers, with higher rates in fifth grade (59.9%) than in eighth grade (45.1%). The adjusted prevalence ratio for above median QOL was 4.40-fold (95% CI: 2.80 to 6.94) higher in children heard by both family and teachers than in unheard children. Associations remained significant but were lower in children heard only by family or teachers. QOL subscales showed similar associations, with family, self-esteem and friends being the strongest. Children asked for their thoughts or feelings without adult consideration did not exhibit higher QOL.

Conclusions 'Being heard' during the pandemic was positively associated with higher QOL. Recognising children's right to be heard and promoting environments where they are heard at home and school may improve their well-being.

INTRODUCTION

The United Nations Convention on the Rights of the Child (UNCRC) names the 'right to be heard' as one of its core principles, highlighting the importance of considering children's thoughts and feelings for their psychological well-being.^{1,2} Prepandemic research shows that children have a higher quality of

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The right to be heard is a core principle of the United Nations Convention on the Rights of the Child (UNCRC). Prepandemic research has shown that children's quality of life (QOL) improves markedly when adults facilitate and seriously consider their views, emphasising the importance of positive childhood experiences making children feel heard by key adults.

WHAT THIS STUDY ADDS

⇒ Children who experienced being heard during the pandemic (were both asked about and had their thoughts/feelings considered) by both caregivers and teachers were more likely than children who were not heard to have higher QOL scores overall and across each of six QOL domains.
⇒ Being asked about their thoughts and feelings and having them considered was important for children, whereas those reporting only one of these elements were not more likely to have a higher QOL.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Implementing the UNCRC recommendation to proactively ask about and consider children's thoughts and feelings about events impacting them may enhance children's QOL.

life (QOL) when adults facilitate their expression and take their views seriously.³ Additionally, positive childhood experiences (PCEs) are crucial for health outcomes, ensuring children feel safe discussing feelings with family, supported during difficult times and have a sense of belonging in school and the community.⁴⁻⁷

The COVID-19 pandemic had a profound effect on children's daily lives and well-being.⁸⁻¹⁰ During the pandemic, the United Nations Committee on the Rights of the Child called on state parties to ensure opportunities for children's views, feelings and wishes to be elicited, heard and considered

in decision-making processes.¹¹ Although numerous qualitative and quantitative studies indicate that children wished to be heard about changes during the pandemic at home, school and policymaking, little information is available on whether they felt heard.^{12–15} Research has highlighted the importance of open communication at home and school for positive mental and emotional outcomes in children, but few studies have assessed children's reported experience of being heard according to their QOL during the pandemic.^{14 16} Gaps in research especially exist in understanding whether being heard through multiple channels (for instance, by family and by teachers) is associated with children's QOL and if associations vary based on whether children are both asked about and experience that their thoughts/feelings were considered compared with only one of these.

This study explored associations between children's experience of being heard about the pandemic and their QOL and hypothesises that both elements of being heard—being asked about and having thoughts/feelings considered—would be positively associated with a higher QOL after adjusting for confounding factors.

METHODS

Data collection and study sample

This study used data from the Japanese National Center for Child Health and Development nationwide postal survey of children in fifth grade (aged 10–11 years) and eighth grade (aged 13–14 years) conducted in December 2020. The survey aimed to measure the pandemic's effect on children's daily lives, and previous reports on dietary intake during the pandemic have been based on data from this survey.¹⁷ Grades 5 and 8 were chosen as representative of higher elementary school and middle school children.¹⁸ As the birthdate cut-off for school grade is uniform across Japan, we selected fifth grade age children and eighth grade age children, who were defined as children whose birthdates were between 2 April 2010 and 1 April 2011 and between 2 April 2007 and 1 April 2008, respectively. Since skipping or repeating grades is legally not allowed and deferring entry of school is very minimally allowed in Japan, this method allowed us to estimate a child's grade quite accurately. A two-stage stratified clustered random sampling method was used to select 3000 children (15 each from fifth and eighth grades across 50 of 1724 municipalities in Japan) from the Basic Resident Registry. The probability of a municipality being chosen was proportional to the number of fifth or eighth grade residents, and every child in a selected municipality had the same chance to be chosen. The survey included questions about children's experiences of being heard by their family and teachers about the changes they experienced during the pandemic. Half of the children additionally received questions on mental health and QOL, while half received dietary questionnaires.¹⁷ Of the 1500 caregiver and child dyads who received questionnaires including items on QOL and being heard, 772 responses

were received (51.5%) and 700 of these had complete data for QOL, being heard and family and demographic variables (online supplemental figure 1). These cases were included in this analysis. See online supplemental table 1 for a comparison between the 700 cases used in this analysis and the 72 cases that were excluded.

To foster the authenticity of children's responses about their QOL and their experiences of being heard, instructions directed children and caregivers to not consult on children's answers and children were told they did not need to share their responses with their caregivers. We defined 'caregiver' as the child's parent, guardian or primary caregiver.

Patient and public involvement

Patients or the public were not directly involved in the design, or conduct, or reporting, or dissemination plans of our research. However, we incorporated insights from children which were obtained from a meeting where we asked them to propose questions they would like to ask other children.¹⁹

Key measures

Demographic and family characteristics

Demographic and family characteristics assessed included the child's gender, grade, household income, family structure, education level of up to two caregivers and the presence of psychological distress in the responding caregiver. Children identified gender as male, female or preferred not to report. Caregivers provided data on all other demographic and family variables. Household income was categorised into four quantiles and 'do not wish to report'. Caregiver education was classified as 'college level or above' or 'less than college level', based on the highest reported education level of the mother and/or father. If education was reported for only one parent, the information was used. Caregiver psychological distress was assessed using the Kessler Psychological Distress Scale (K6), with scores ranging from 0 to 24, and a cut-off of ≥ 5 was used in the Japanese sample to identify significant distress with its sensitivity and specificity of 100% and 68.7%, respectively, in the Japanese sample.²⁰

Children's QOL

QOL in children includes multiple aspects such as physical, emotional, social and relational well-being.²¹ Health-related QOL (HR-QOL) instruments are tailored to children's developmental stages and are effective for self-rating, considering their maturity. QOL was measured using the child self-reported Kid-KINDL^R (KINDL Questionnaire for Measuring Health-Related Quality of Life in Children and Adolescents), covering six key areas of HR-QOL including physical well-being, emotional well-being, self-esteem, family relationships, peer interactions and school functioning.⁸ Kid-KINDL^R is originally designed for children aged 7–12 years and is validated in the sample of Japanese elementary school children.²² In our survey, KINDL showed good internal consistency with

Cronbach's alpha 0.89 for the entire instrument and 0.62 (Friend) to 0.91 (Self-esteem) across subscales. Scores were transformed into percentages, with 100 indicating the highest QOL. The median total QOL and subscale QOL were calculated. A child's QOL being above or below the median score was used as the dependent variable in the regression and other statistical analyses employed in this study.

Experience of being heard

According to Article 12 of the UNCRC, two key elements of being heard are having the opportunity to express one's views, feelings and wishes and having them given appropriate consideration.¹ However, prepandemic survey about the recognition of children's rights suggests that 26.5% of children feel the rights of being heard is not realised in Japan.²³ Furthermore, in prior surveys, children quantitatively and qualitatively shared that their voices were not heard enough during the pandemic. For instance, 42% of children aged 12–17 years responded that adults did not ask about their views or thoughts when making decisions.²⁴ Considering these results, the survey used in this study first asked children to reflect on changes in their daily lives during the pandemic and to then report the frequency of the following occurrences: (1) 'my family asks me questions or checks in with me so that I can share my thoughts (asked to share thoughts)', (2) 'when I express my thoughts and feelings, my family tries to incorporate them (thoughts/feelings considered)'. The same two questions were asked about a child's teachers substituting 'family' for 'teachers'. Children rated their response on a 5-point Likert scale (0=not at all, 1=rarely, 2=sometimes, 3=usually, 4=always). Children who reported 'usually or always' to both questions were counted as often having the experience of being heard. The 'being heard' variable was constructed placing children into one of four categories based on their responses: (1) often heard by both their family and teachers; (2) often heard only by their family; (3) often heard only by their teachers; (4) often heard by neither their family nor their teachers.

Analytic methods

First, characteristics of the study sample were calculated across response options for each demographic, family, QOL and 'being heard' variable. The prevalence of children meeting criteria for each of the four 'being heard' categories (neither, family only, teachers only, both) was then calculated for all children and separately for each variable. χ^2 tests assessed differences in prevalence across 'being heard' categories using a p value of 0.05 for significance.

Next, associations between whether children had higher or lower QOL (overall and for each subscale) and their experience of being heard were evaluated using Poisson multivariate regression models with robust variance, calculating adjusted prevalence ratios (aPRs).²⁵ Models were adjusted for demographic and family

characteristics, including child's grade,²⁶ gender,²⁷ family income,²⁸ family structure²⁹ caregivers' education level³⁰ and caregivers' psychological distress.^{8 31}

Finally, associations between children's overall QOL and their responses to survey items (eg, 'being asked to share thoughts' and 'having thoughts/feelings considered') were evaluated to align with the UNCRC concept that being heard involves both eliciting and considering children's views. Overall QOL was the dependent variable, and a four-part variable representing response options across the two being heard survey items was the key independent variable (asked and considered, asked only, considered only, neither asked nor considered). Separate models were run for questions about being heard by the family or teachers. All data were weighted to adjust for the complex sampling of the survey. Analyses were conducted using Stata/MP V.17.³²

RESULTS

Prevalence of demographic and family characteristics

Table 1 presents the sample size and weighted prevalence for each demographic and family variable included in the study. As shown, 49.0% of the children reported their gender as male. Over three-quarters of the sample had at least one caregiver with college or above educational level (79.6%). Over one-third of caregivers exhibited psychological distress levels exceeding the established K6 Score threshold of 5. Nearly all caregiver respondents were mothers (93%).

Differences in the distribution of children for key demographic variables, sense of being heard and QOL scores ($p < 0.05$) between the analytic ($n = 700$) and excluded ($n = 72$) samples were found in gender, family structure and mean total QOL score (online supplemental table 1).

Experience of being heard

Overall, 52.9% (95% CI: 48.4% to 57.3%) of children were heard by both family and teachers, while 24.6% (95% CI: 21.1% to 28.4%) of children were not heard by either. Prevalence rates varied significantly by grade level ($p = 0.0017$) but not by other demographic or family characteristics. Differences in prevalence across 'being heard' categories were observed for all QOL measures (table 1).

Associations between children's QOL and being heard

Poisson regression analysis showed that children who reported 'being heard' by both family and teachers had a 4.40 (95% CI: 2.80 to 6.94) times greater aPR for having above median QOL compared with those heard by neither (68.4% vs 14.0%) (table 2). Although being heard by family only or teachers only was also positively associated with higher total QOL, the aPRs were lower (family: aPR 3.05, 95% CI: 1.80 to 5.17; teachers: aPR 2.66, 95% CI: 1.69 to 4.17). This pattern held across all QOL subscales, with the weakest association for physical QOL and the strongest for family, self-esteem and family



Table 1 Prevalence of demographic, family and quality of life characteristics of the study sample overall and by child's experience of being heard†‡

		Analytic sample			Neither	Family only	Teachers only	Both	P value††
		Uwtd n	Wtd n	Wtd %	Wtd %	Wtd %	Wtd %		
Analytic sample§		700	1 035 528	100	24.6	12.0	10.6	52.9	
Gender									
	Male	343	506 895	49.0	23.6	10.3	12.7	53.5	0.39
	Female	357	528 633	51.0	25.6	13.6	8.5	52.3	
Grade¶									
	Grade 5	364	544 026	52.5	17.1	10.8	12.2	59.9	0.0017*
	Grade 8	336	491 502	47.5	32.9	13.3	8.7	45.1	
Household income#									
	Lowest	149	204 167	19.7	25.8	12.8	11.4	50.1	0.67
	Low	146	185 437	17.9	28.2	11.4	11.4	49.1	
	High	148	214 784	20.7	21.2	15.2	9.5	54.2	
	Highest	158	286 689	27.7	24.6	10.1	7.3	57.9	
	Do not wish to report	99	144 451	14.0	23.3	10.6	16.3	49.9	
Family structure									
	With both parents	572	867 658	83.8	23.9	12.2	9.6	54.4	0.24
	Single or no parent	128	167 878	16.2	28.2	11.1	15.5	45.3	
Highest education among caregivers									
	Less than college	148	210 934	20.4	26.6	12.7	10.4	50.3	0.61
	College or above	552	824 594	79.6	24.1	11.8	10.6	53.6	
Caregiver's psychological distress									
	No distress (K6<5)	423	629 239	60.8	20.2	12.0	9.9	58.0	0.10
	Distress (K6≥5)	277	406 289	39.2	31.43	11.9	11.6	45.0	
QOL scores									
Overall	Lower	354	526 165	50.8	41.6	12.8	12.6	32.9	<0.001**
	Higher	346	509 363	49.2	7.0	11.1	8.4	73.5	
Emotional	Lower	370	564 832	54.5	33.8	12.4	11.1	42.7	<0.001**
	Higher	330	470 696	45.5	13.6	11.4	9.9	65.1	
Self-esteem	Lower	348	505 843	48.9	39.8	12.4	10.6	37.2	<0.001**
	Higher	352	529 685	51.1	10.1	11.5	10.5	67.9	
Physical	Lower	361	536 729	51.8	31.3	14.1	11.3	43.3	0.0014
	Higher	339	498 799	48.2	17.3	9.8	9.8	63.2	
Family	Lower	429	653 267	63.1	33.7	12.0	12.7	41.7	<0.001**
	Higher	271	382 261	36.9	9.1	11.9	7.0	72.1	
Friend	Lower	394	602 811	58.2	34.1	12.0	11.8	42.2	<0.001**
	Higher	306	432 717	41.8	11.3	12.0	8.8	67.8	
School	Lower	411	597 758	57.7	32.6	13.1	10.0	44.4	<0.001**
	Higher	289	437 770	42.3	13.7	12.0	10.6	52.9	

*p<0.05, **p<0.01, ***p<0.001.

†Participants were weighted by the inverse of the probability of selection. ‡Participants were weighted by the inverse of the probability of selection.

§Being heard is defined as 'always' or 'usually' being both asked to share thoughts and having thoughts/feelings considered.

¶The difference between the analytic sample and excluded sample is presented in the online supplemental table 1.

¶Fifth grade children and eighth grade children were defined as children whose birthdates were between 2 April 2010 and 1 April 2011 and between 2 April 2007 and 1 April 2008, respectively.

#Household equivalent income was categorised into four quantiles (lowest, low, high and highest), and 'do not wish to report' was coded as a separate category (14.0%).

††Test of independence.

K6, Kessler Psychological Distress Scale; QOL, quality of life; Uwtd, unweighted; Wtd, weighted.

Table 2 Prevalence and adjusted prevalence ratios (aPRs) for having above median total and QOL subscale score, by being heard categories*†

	Total		Emotional		Self-esteem		Physical health		Family		Friends		School	
	%‡	aPR§ (95% CI)	%	aPR (95% CI)	%	aPR (95% CI)	%	aPR (95% CI)	%	aPR (95% CI)	%	aPR (95% CI)	%	aPR (95% CI)
Neither¶	14.0	Ref	25.1	Ref	20.9	Ref	33.9	Ref	13.7	Ref	19.3	Ref	23.5	Ref
Family only**	45.6	3.05 (1.80, 5.17)	43.4	1.66 (0.96, 2.87)	49.3	2.17 (1.50, 3.14)	39.2	1.01 (0.75, 1.61)	36.6	2.63 (1.68, 4.12)	41.9	2.01 (1.32, 3.06)	37.1	1.51 (0.90, 2.53)
Teachers only††	39.1	2.66 (1.69, 4.17)	42.9	1.73 (1.08, 2.78)	51.1	2.23 (1.61, 3.09)	44.5	1.26 (0.80, 1.97)	24.3	1.81 (0.96, 3.41)	35.0	1.66 (1.11, 2.49)	45.4	1.69 (1.09, 2.64)
Both‡‡	68.4	4.40 (2.80, 6.94)	55.9	2.16 (1.49, 3.12)	65.6	2.74 (2.01, 3.73)	57.5	1.57 (1.17, 2.10)	50.3	3.67 (2.50, 5.38)	53.6	2.50 (1.71, 3.66)	51.6	1.94 (1.39, 2.72)

*Participants were weighted by the inverse of the probability of selection.
 †The results are adjusted for gender, grade, income, family structure, caregiver's educational level and caregiver's psychological distress.
 ‡Prevalence indicates the proportion of children with higher than the median QOL scores according to by whom they were heard.
 §aPR were calculated using Poisson multivariate regression models with robust variance. Models adjusted for child's gender, grade, income, family structure, caregiver's educational level and caregiver's psychological distress.
 ¶Often heard by neither family nor teachers.
 **Often heard at home by family only.
 ††Often heard at school by teachers only.
 ‡‡Often heard by both family and teachers.
 QOL, quality of life.

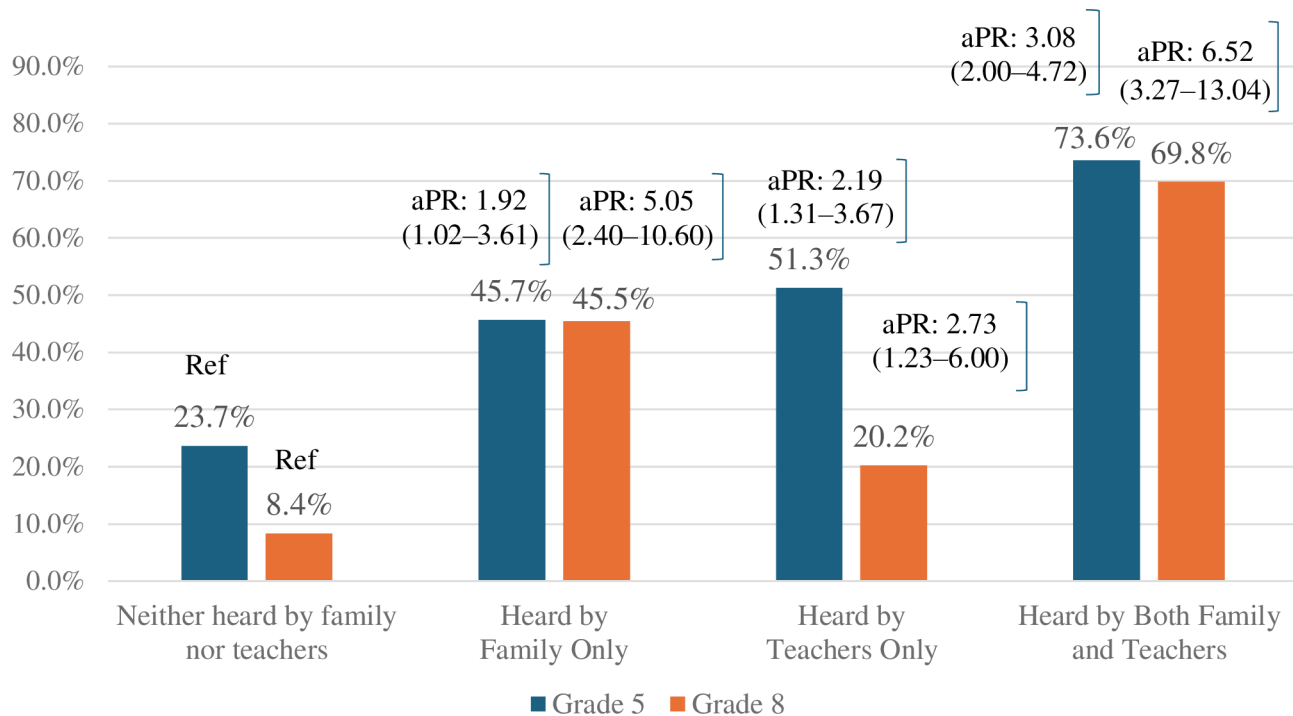


Figure 1 Prevalence of children with an above median total QOL score across “Being Heard” categories, by child’s grade^a, (aPR: Adjusted Prevalence Ratio)^b. ^aParticipants were weighted by the inverse of the probability of selection. ^bAdjusted Prevalence Ratios (aPR) were calculated using Poisson multivariate regression models with robust variance. Models adjusted for child’s gender, grade, income, family structure, caregiver’s educational level, and caregiver’s psychological distress.

QOL subscales. Regardless of grade level, being heard was positively associated with higher QOL, with stronger associations observed in higher grades (fifth grade: aPR 3.08, 95% CI: 2.00 to 4.72; eighth grade: aPR 6.52, 95% CI: 3.27 to 13.04; [figure 1](#)).

The importance of being both asked and considered

Being asked and considered were intertwined in most cases, with 64.8% of children having their family both ask about and consider their thoughts and feelings, and 63.4% reporting their teachers did the same. However, some children experienced being only asked about their thoughts/feelings without reporting that they were considered. Likewise, some children reported that thoughts and feelings they may have proactively shared were considered despite the fact that they were not proactively asked to share their thoughts/feelings ([table 3](#)). Although both being asked and having their thoughts and feelings considered by teachers resulted in significantly higher QOL compared with neither being asked nor considered (aPR 4.32, 95% CI: 2.24 to 7.72 for family; aPR 3.03, 95% CI: 2.17 to 4.22 for teachers), being only asked about thoughts by family was not associated with higher QOL (aPR 1.45, 95% CI: .58 to 2.59). Only having thoughts and feelings considered was associated with higher QOL (aPR 2.47, 95% CI: 1.17 to 5.19), but this association was substantially lower compared with both asking about and considering thought/feelings. Associations with QOL for thoughts/feelings being only asked about or considered by teachers were not significant.

DISCUSSION

This study revealed that being both asked about thoughts and feelings regarding the pandemic and having them considered (‘being heard’) was associated with a higher than median QOL for fifth and eighth grade children in Japan. Approximately half of the children experienced being heard by both their family and teachers, while one in four reported being heard by neither. Older children were less likely to meet the criteria for being heard, possibly due to their growing independence and reduced direct engagement with adults.³³ However, for older children who were both asked and considered, the association with higher QOL was stronger than for younger children.

Although the pandemic’s impact on children’s well-being and the importance of children’s right to be heard have been recognised, research examining the relationship between listening to children’s voices on crucial matters, such as COVID-19, and their well-being has been limited. This study quantitatively established the connection between being heard and children’s QOL, emphasising the importance of being listened to by both family and teachers. Our findings align with existing research that highlights the significance of open communication at home and school for positive mental and emotional outcomes in children during the pandemic.^{14 16} Our study’s findings also have implications that extend beyond the immediate context of the pandemic. Prepandemic research demonstrated that children have a significantly higher QOL when adults facilitate their expression of

Table 3 Prevalence and adjusted prevalence ratios (aPRs) for having a higher than median QOL score, by response to each ‘being heard’ item for family and teachers†‡§

	Prevalence	aPR#	95% CI		P value¶
Family					
Neither asked nor considered§	20.5	Ref			
Asked to share thoughts only	5.7	1.45	0.58	2.59	0.415
Considered thoughts/feelings only	9.0	2.47	1.17	5.19	0.018
Both asked and considered	64.8	4.32	2.42	7.72	<0.001***
Teacher					
Neither asked nor considered	25.3	Ref			
Asked to share thoughts only	4.4	1.46	0.61	3.46	0.384
Considered thoughts/feelings only	6.9	1.55	0.90	2.64	0.109
Both asked and considered	63.4	3.03	2.17	4.22	<0.001***

*p<0.05, **p<0.01, ***p<0.001.

†Participants were weighted by the inverse of the probability of selection.

‡aPR were calculated using Poisson multivariate regression models with robust variance. Models adjusted for child’s gender, grade, income, family structure, caregiver’s educational level and caregiver’s psychological distress.

§‘Asked to share thoughts’ was defined as ‘always’ or ‘usually’ being asked to share thoughts. ‘Considered thoughts’ was defined as ‘always’ or ‘usually’ being considered thoughts.

¶Test of independence.

#aPR were calculated using Poisson multivariate regression models with robust variance. Models adjusted for child’s gender, grade, income, family structure, caregiver’s educational level and caregiver’s psychological distress. QOL, quality of life.

views and took their views seriously.³ Overall, positive relationships between children and their family and teachers promotes children’s well-being and resilience.^{4 6 34} This study directly asked children about their experiences of being heard and their QOL during childhood, compared with other studies that focus on adult reports regarding their childhood and current health status. As such, this study builds knowledge regarding the shorter term and immediate associations between positive relational experiences and health during childhood.

The vital association between being heard and self-esteem is not only attributed to neurologically protective impacts of children’s sense of safety and being cared about but also to how this fosters a child’s sense of agency and autonomy whereby children develop a positive self-image and a sense of control over their lives.³⁵ In self-determination theory, autonomy is a fundamental psychological need for children’s well-being.³⁶ Adults can support children’s autonomy by acknowledging their perspectives, providing choices and explaining decisions,³⁷ and this is closely related to ‘being considered’, namely, giving due weight in accordance with the age, maturity and the capacity of each child.

Past studies document a dose–response association of PCEs, which was also found in this study such that being heard by multiple adults is most strongly associated with a higher QOL.⁴ This observation also aligns with ecological frameworks regarding child development that postulate the importance of various systems of interaction that affect children’s healthy development.^{38 39} It is noteworthy that even when children were heard solely by

teachers, there was a tendency of improvement in family-related QOL, and vice versa. This suggests a ubiquitous impact of ‘being heard’ on QOL, irrespective of the listener and confirms prior research on PCEs regarding the importance of feeling a sense of belonging and inclusion in school and the community.⁶

Our study supports Article 12 of the UNCRC, which ensures children’s rights to freely express their views, feelings and wishes and to have these considered.¹ However, the bifurcation of ‘being asked’ and ‘being considered’—each integral to the realisation of children’s rights to be heard—had not been empirically explored in relation to children’s QOL. The study findings underscore the importance of proactively soliciting and encouraging children’s input rather than passively receiving their thoughts and feelings.⁴⁰

Limitations of the current study

This study has four primary limitations. First, this is a cross-sectional study, and we cannot conclude causality. Second, the Kid-KINDL QOL measure does not incorporate clinical assessments of children’s health, limiting a fully comprehensive view of children’s well-being. Third, although our questionnaires were answered directly by children and its validity is expected to be higher than when answered by a caregiver, further measurement validation on asking children about being heard is important.^{2 3} Fourth, the study’s generalisability may be limited since the study sample had higher QOL scores than the national average reported before the pandemic.²²

However, this would not impact the validity of observed associations between QOL and being heard.

Study implications and next steps

Promoting meaningful participation in decision-making processes and enhancing adults' listening abilities are critical elements of respecting children's right to be heard in homes, schools and policymaking bodies. Further research is needed to refine and validate instruments to gauge children's sense of being heard in population-based surveys. Moreover, qualitative studies are essential to understand children's experiences and the mechanisms through which being heard influences QOL.

CONCLUSION

Adults asking children about their thoughts and feelings and considering them was associated with higher QOL for children independent of various child and household factors. Therefore, consistently listening to children at home and school and potentially in community and policymaking is important. Promoting the recognition and implementation of children's rights to be heard in all aspects of their lives is crucial to create a supportive environment that fosters children's overall well-being and healthy development.

Author affiliations

¹Department of Psychosocial Medicine, Tokyo, National Center for Child Health and Development, Setagaya-ku, Japan

²Department of Social Medicine, National Center for Child Health and Development, Setagaya-ku, Japan

³Population, Family and Reproductive Health, Johns Hopkins University Bloomberg School of Public Health, Baltimore, Maryland, USA

⁴Tokyo Medical and Dental University, Bunkyo-ku, Japan

⁵Department of Social Medicine, Kokuritsu Kenkyu Kaihatsu Hojin Kokuritsu Seikyo Iryo Kenkyu Center, Setagayaku, Japan

Contributors Conceptualisation, development of measures and analytic methods, presentation and interpretation of findings and writing were equally led by AY and CDB. Data acquisition and survey methodology were led by YY and NM. Data analysis was conducted by AY and NM. Overall supervision was provided by NM and CDB. Funding acquisition was led by NM. All authors have read and agreed to the published version of the manuscript. AY and CDB acted as guarantors.

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ORCID iDs

Arisa Yamaguchi <http://orcid.org/0000-0003-4105-5166>

Yui Yamaoka <http://orcid.org/0000-0002-4682-4262>

Naho Morisaki <http://orcid.org/0000-0001-6151-4513>

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