



ORIGINAL ARTICLE

# *Factors affecting loneliness among left-behind children*

*Luot V. Nguyen* <sup>1·A,B,C,D,E,F</sup>, *Thu T. A. Nguyen*<sup>1·C,D,E,F</sup>, *Linh T. Trinh* <sup>1·A,D,E,F</sup>,  
*Hanh H. V. Nguyen*<sup>2·E,F</sup>

1: University of Social Sciences and Humanities, Vietnam National University, Hanoi, Vietnam  
2: Vientiane International School, Vientiane, Laos

## BACKGROUND

In Vietnam, research on the impact of parental migration on left-behind children (LBC) has discussed various dimensions of the subject such as subjective well-being, emotional states, social skills, self-esteem and nutrition of LBC. However, there are still gaps in studies on loneliness among LBC in Vietnam. The study aims to explore the status of loneliness in LBC, including associated protective and risk factors, to make suggestions on preventive measures against LBC's loneliness.

## PARTICIPANTS AND PROCEDURE

The conveniently selected sample includes 439 LBC in 4 Vietnamese provinces: Thai Nguyen, Bac Ninh, Thai Binh and Nghe An. The mean age is 12.73 ( $SD = 1.68$ ). Female children account for 47.80%. The Children's Loneliness Scale was employed in the study.

## RESULTS

The total loneliness score of LBC is 28.62 ( $SD = 9.40$ ), 95% CI: 27.75-29.48. Perceived social support from friends, care-

givers and resilience factors of affect control (RAC), family support (RFS) and help-seeking (RHS) are protective factors for loneliness of LBC, with regression coefficient of  $-.27$ ,  $-.18$ ,  $-.11$ ,  $-.11$  and  $-.09$  respectively.

## CONCLUSIONS

Perceived social support from friends, care-giving attachment and resilience factors of RAC, RFS, and RHS are protective factors for LBC against loneliness. Parents, teachers and guardians are encouraged to have a close connection with LBC, provide adequate care giving; and create a supportive environment for LBC in pursuing healthy peer relationships and train/improve children's skills to strengthen their resilience.

## KEY WORDS

social support; resilience; loneliness; left-behind children; caregivers-child attachments

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CORRESPONDING AUTHOR – Luot V. Nguyen, Ph.D., University of Social Sciences and Humanities, Vietnam National University, 336 Nguyen Trai, Thanh Xuan, 084 Hanoi, Vietnam, e-mail: [luotnv@vnu.edu.vn](mailto:luotnv@vnu.edu.vn)

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## BACKGROUND

In developing countries, millions of parents migrate to domestic urban areas or overseas to seek employment. Many of them are forced to leave their children behind in their home town in the care of a parent/guardian (UNICEF, 2020). Overall, this trend has both positive and negative consequences to the people left behind, especially children and the elderly. For the left-behind children (LBC), there has been substantial evidence on the negative impacts of parental migration on socio-psychological aspects and academic performance in children such as low self-esteem, mental health problems, substance abuse, self-harm and school bullying (Chai et al., 2019; Fellmeth et al., 2018; Tang et al., 2018). As one of the negative impacts of LBC, “loneliness” is the most common word when they report their emotional states (Jia & Tian, 2010).

In recent years, researchers from many disciplines (e.g. psychology, education, sociology, anthropology) have shown great interest in understanding LBC’s healthy growth and well-being (Zhao et al., 2015). The resulting research has shown that LBC encounter problems relating to loneliness more often than non-LBC (Chen & Chan, 2016; Chen et al., 2017; Faisal & Turnip, 2019; Jia & Tian, 2010; Shen et al., 2015; Su et al., 2012, 2017; Tang et al., 2019; Wang et al., 2020); and long-term loneliness is extremely detrimental to the physical and mental health of LBC (Cacioppo et al., 2015; Chang et al., 2017; Lempinen et al., 2018; Qualter et al., 2015; Wang & Yao, 2019). Considering the consequences that lengthy feelings of loneliness may cause, a growing amount of worldwide research has focused on exploring personal as well as environmental factors that contribute to the loneliness in children in general and LBC in particular. However, according to Chai et al. (2019), some research gaps still exist in this area of concern. According to the aforementioned author, “it is difficult to tell what factors are more important for left-behind children”. Therefore, further research is necessary to explore the predictability of these factors for the LBC’s loneliness in Vietnamese survey samples at this point of time.

## LITERATURE REVIEW

*Loneliness among left behind children.* Research has shown that LBC experience a higher level of loneliness as compared to non-LBC. Jia and Tian (2010) estimated that LBC children had a score for loneliness 2.5 times higher than non-LBC and loneliness is the most common and significant experience among LBC (Su et al., 2012). There is a difference between how male and female LBC endure the loneliness, although these results are not consistent. A number of studies indicate that boys have a higher level of loneliness than girls (Chai et al., 2019; Zhao et al., 2015). Never-

theless, some research has shown the inverse (Faisal & Turnip, 2019; Jiang et al., 2020). Furthermore, some research indicates no difference in how boys and girls experience loneliness (Wang et al., 2006). A number of studies have revealed that LBC with both parents migrating or with the mother migrating report more feelings of loneliness than those with the father migrating (Yue & Lu, 2015; Zhao et al., 2015). Loneliness in LBC decreases with age and maturity (Chai et al., 2019; Wang et al., 2006) and LBC endure emotional more than social loneliness (Faisal & Turnip, 2019).

*Parent-child relationships and loneliness.* Several researchers affirm that as compared to non-LBC, the lack of parental companionship is one of the biggest challenges that LBC may encounter. Lengthy separation from parents often results in inadequate care and intimacy for LBC (Davison & Birch, 2001; Jia & Tian, 2010; Ling et al., 2015). Accordingly, children who had poor relationships with parents were at the highest risk for severe loneliness. Inversely, positive family functioning and support from parents as well as healthy connections between parents and their child are likely protective factors against loneliness (Sharabi et al., 2012; Zhao et al., 2015). This is also strongly confirmed and supported in a meta-analysis by Chai et al. (2019) on loneliness among LBC. Additionally, a number of studies have shown that a strong parent-child relationship plays a role in regulating the relationship between loneliness and friendship quality among LBC (Wang et al., 2020). Contrary to these results, some research does not indicate a statistical relationship between loneliness and parent-child interaction (Su et al., 2012) or mother-child cohesion when either both parents or only the mother migrates (Zhao et al., 2015). In the context of parental migration, this interaction and connection have been transferred to the daily caregiver of the child.

*Resilience and loneliness of LBC.* Research on LBC has suggested that psychological resilience can be a protective factor against loneliness (Ai & Hu, 2016). In other words, developing resilience can help the child foster confidence and positivity, which are important traits that reduce the risk of loneliness. A meta-analysis by Chai et al. (2019), once again, confirms the consistency of research results on the relationship between resilience and loneliness in LBC. Recently, Cao et al. (2022) showed that resilience can be a mediating factor that reduces negative impacts of loneliness related to internet addiction among LBC. According to Hu and Gan (2008), the resilience of LBC can be generalized in two ways. First, it is finding the drive/support from within, such as setting goals for oneself, regulating one’s own emotions or fostering positive thinking. Second, it is seeking support from external societal factors, such as from family, peers, teachers or trustworthy individuals. Specifically, LBC utilize 5 different types of resilience such as setting goals, thinking positively, regulating emotions and seeking

external support from others. Therefore, resilience plays a role in protecting LBC against negative consequences of parental migration, helping them achieve better adaptation in their studies and lives.

*Social support and loneliness of LBC.* Previous research has demonstrated that, as compared to non-LBC, LBC reported lower levels of social support (Lian & Chen, 2016; Luo et al., 2009). Along with interpersonal relationships, social support is regarded as one of the two important predictive factors against a child's loneliness (Bowker & Spencer, 2010; Merz & Jak, 2013). Man et al. (2017) also found that social support was negatively associated with the psychological problems of left-behind children. LBC who have higher perceived social support are reported to achieve a lower score on the loneliness scale than those who have low perception of social support (Ai & Hu, 2016). Chai et al. (2019) pointed out that social support serves as one of the most important protective factors in predicting loneliness of left-behind children. Based on the ecological theory by Bronfenbrenner (1979), through this research, we suppose that in addition to exploring the child's internal factors (resilience) as well as external factors derived from their closest relationships (parent-child relationship), it is necessary to look at the social support that the child receives and how that relates to their experiences of loneliness.

## PRESENT STUDY

In Vietnam, since Vietnam's economic and politic reforms called Doi Moi in Vietnam in 1986, the development of industrial areas in urban cities has attracted a large number of migrating workers from rural areas to seek employment (Dang, 2017). In 2019, domestic migration for employment accounted for 8.6% of Vietnam's entire workforce (4.2 million people), with the main reason being seeking or starting a new job. Women constitute 53.4% of the domestic working migrants (UNFPA, 2020). For international migration, the number of international migrants from 2017 to 2019 increased to 100,000 per year. For example, the international workforce in 3 consecutive years (2017-2019) was 134,751, 142,860 and 147,387, respectively (Dolab – MOLISA Vietnam, 2020). Many people in this workforce are compelled to leave their children behind with their spouse or a close relative, mostly with a grandparent(s) given their difficulties in accessing public services such as education, medical care and affording expensive cost of living in the host area (Tran, 2015; Tran & Pham, 2015).

Studies on LBC in Vietnam have mentioned various aspects such as nutrition, perception (Nguyen, 2016), behaviour problems (Nguyen, 2017), subjective well-being (Graham & Jordan, 2011; Nguyen et al., 2018) and self-esteem (Giang et al., 2019). However, there is

little research on current situation and factors affecting loneliness in LBC in Vietnam. According to existing research mentioned above, factors that have impacts on LBC's loneliness have not been confirmed. There is no clear significant difference in the importance of individual and contextual factors in predicting LBC's loneliness. This research was carried out on LBC in Vietnam with the aim of assessing their loneliness situation and identifying protective and risk factors. In consideration of that, it recommended a number of actions to reduce the risk of loneliness among LBC.

This research aims to answer the following questions: (1) What is the current situation of loneliness in LBC in Vietnam? (2) How do the factors of perceived social support, caregiver-child attachment and resilience affect loneliness among LBC?

## PARTICIPANTS AND PROCEDURE

### PARTICIPANTS

This is a quantitative, cross-sectional study with samples selected by the convenient sampling method. The data were collected at the end of 2020 and beginning of 2021. At that time, Vietnam had not recorded any COVID-19 infection in the community for 55 consecutive days. There were no COVID cases in the 4 local provinces in which the survey was conducted.

The total number of surveyed samples includes 439 children (ages 10-17), mean age = 12.73 ( $SD = 1.68$ ); mean time of parental migration = 6.44 years ( $SD = 3.72$ ); 210 females (47.8%), 229 males (52.20%); 231 children with father migration (52.60%), 71 children with mother migration (16.20%), 137 children (31.20%) with migration of both parents; 118 overseas migrant parents (30.10%), 274 domestic migrant parents (69.90%). The survey was carried out in the four provinces of Thai Nguyen, Bac Ninh, Thai Binh and Nghe An in Vietnam. The site selection was based on the fact that the ratio of local people migrating for employment in these sites is higher than in other regions in the north of Vietnam. Children from grade 6 to 12 at secondary schools and high schools were questioned in this study.

### MEASURES

On the basis of the literature review, we determined that the dependent variable is loneliness and the three independent variables are: perceived social support (PSS); parental bonding and resilience.

*Loneliness of LBC.* The Children's Loneliness Scale (CLS) was first developed by Asher et al. (1984) and has been utilized by many researchers on loneliness among LBC (Su, 2012; Zhao et al., 2015). This scale includes 24 items, where 16 are focused on the child's

loneliness and 8 serve as buffer questions (not being scored). The scale depends on the child's perceptions and feelings on their peer relationships. Items are graded from 1 to 5: 1 – *not true at all*; 2 – *hardly ever true*; 3 – *sometimes true*; 4 – *true most of the time*; 5 – *always true* (example items: "I have lots of friends", "I get along with other kids"). The scale score is the sum of all scores of the items, with the minimum and maximum score of 16 and 80, respectively. The higher the score is, the more loneliness the child experiences.

In Vietnam, CLS has been used by Nguyen et al. (2020) for children of mean age 14.89 ( $SD = 2.52$ ). The results showed that CLS ensures internal consistency with a Cronbach's  $\alpha$  of .85, split-half part 1 = 0.76 and part 2 = 0.81. The item-to-total-score correlation ranged from 0.43 to 0.74. In this study, the Cronbach's  $\alpha$  is .85.

*Perceived social support.* The scale reflects multiple dimensions of the children's perception of social support that they receive from family (e.g. "my family really tries to help me"), friends (e.g. "I can count on my friends when things go wrong") and others (e.g. "there is a special person with whom I can share my joys and sorrows"). It includes 12 items designed in a 7-point Likert-type scale from 1 (*strongly disagree*) to and 7 (*very strongly agree*). The scores of the total scale are calculated based on the average score of each sub-scale. Higher scores show higher levels of the children's perceived social support. In Vietnam, this scale has been used by Dinh (2016) for research on adolescents. The reliability of the sub-scale of support from a special care-giver, family and friends is .91, .87 and .85, respectively. In this research, the scale by Dinh (2016) was applied and the Cronbach's  $\alpha$  values of sub-scales including perceived social support from family, perceived social support from friends, perceived social support from significant others with 4 items each were .78, .73 and .81, respectively.

*Caregiver-child attachment.* The parental bonding instrument (PBI) developed by Parker (1979) was employed to measure the bonding of caregivers with children. The scale consists of 25 items, designed according to a 4-point Likert-type scale to measure the caregiver's attachment to the child in the two dimensions of care and overprotection. This scale has been widely used in previous studies to ensure high reliability and validity. Research by Tran et al. (2013) on a group of Vietnamese adolescents showed that  $\alpha = .83$  and  $.84$  for the younger version reporting attachment to parents separately. In this study, the subscale of caregiver's attachment to the child according to the type of care included 12 items (e.g. "spoke to me in a warm and friendly voice"; "enjoyed talking things over with me"),  $\alpha = .80$ . The subscale of caregiver's attachment to the child is in the type of control consisting of 13 items (e.g. "tried to control everything I did", "invaded my privacy"),  $\alpha = .70$ . The scale is self-reported by the child. The score is

calculated as the sum of the items. Higher scores indicate higher levels of attachment.

*Resilience of children.* In measuring the resilience of children, we employed the psychological resilience scale, which was used in the study of Hu and Gan (2008) with left-behind children in China. It consists of 27 items, which are rated on a five-point Likert scale, rating from 1 (*not true at all*), 2 (*mostly not true*), 3 (*half true, half not true*), 4 (*mostly true*) to 5 (*completely true*). The resilience of children is measured according to five types of resilience: resilience by goal planning (RGP) with 5 items (e.g. "I set goals for myself to motivate me to move forward"),  $\alpha = .72$ ; resilience by affect control (RAC) with 6 items (e.g. "I can regulate my emotions in a short time"),  $\alpha = .60$ ; resilience by positive thinking (RPT) with 4 items (e.g. "I think everything has its good side"),  $\alpha = .67$ ; resilience by family support (RFS) with 6 items (e.g. "My parents/grandparents respect my opinion"),  $\alpha = .72$ ; and resilience by help-seeking from individuals (RHS) including 6 items (e.g. "I can talk about my problems with a friend of my age"),  $\alpha = .60$ . The score of the total scale is calculated based on the average score of each sub-scale. Higher scores of sub-scales reflect higher levels of use of the respective resilience type by children.

Among the CLS scales, perception of social support and parent-child attachment has been used in previous research for adolescents in Vietnam by Nguyen et al. (2020), Dinh (2016) and Tran et al. (2013), proving its reliability and efficacy. The resilience measurement scale was translated from Chinese into Vietnamese by a Vietnamese Ph.D., who is not a member of the research team. Each item of the resilience scale is then discussed in the research team, and the language is edited in terms of vocabulary and expression to make it understandable to children in Vietnam. In the next step, we conducted a pre-test survey with 5 children, including 3 secondary school students and 2 high school students. A group discussion among researchers, investigators, and the school students was conducted immediately after the pre-test to discuss the suitability of the scale content and the words and expressions used in the questionnaire. Based on this group discussion, a final questionnaire was formed and used for the official survey.

## PROCEDURE

The research team first contacted the managing boards of schools with a high number of LBC and asked for their agreement to the survey being conducted in the schools. With the data provided by the school managing boards, we made lists of students who are LBC. The research team then sent the consent form to parents/caregivers of the selected LBC for their agreement to allow their children to participate in the survey. Upon receiving the signed consent form, we

surveyed the students in the schools, with the support of the school managing boards and teachers in room arrangements. Before filling in the questionnaire, students were clearly explained in detail the research’s purpose and content. Students were gathered in schoolrooms to participate in the self-report survey so that their study was not affected. A researcher and a teacher were present in each room to explain to students when they completed the questionnaire. Participants were guaranteed that non-participation in the study would not result in any harm to them, and the participants could stop answering the questionnaires at any time if any research participant felt uncomfortable. All personal information and answered questionnaires in the research were kept confidential in a secure place and used only for research purposes. Ethics approval for this study was granted by the University of Social Science and Humanities, Vietnam National University, Hanoi, no. 2887/CN-XHNV-KH.

STATISTICAL PROCESSING

All the data were processed by SPSS version 26.0. In this study, we conducted descriptive statistics, correlation and multiple regression analyses by the stepwise method.

RESULTS

The data in Table 1 show that LBC report feelings of loneliness with a total score of 28.62 (95% CI: 27.75-29.48), min = 16, max = 70 on the CLS scale with the

score range of 16-80. There is no difference in loneliness in LBC in terms of gender, location of where the parents migrate, age range, duration of parental migration or whether the parent migrating is the father, mother or both.

The data in Table 2 show an inverse relationship with statistical significance between loneliness and PSS from family, friend and significant others, caregiver attachment type of care, and types of resilience: RPT, RAC, RFS, RHS ( $p < .01$ ). There is a positive correlation between loneliness in LBC and caregiver attachment type of control ( $p < .01$ ).

The research team used regression analysis with the stepwise method. Among the independent variables mentioned above, the regression model proposed 5 models, from model 1 to model 5 for 1 to 5 independent variables. Testing of the model’s appropriateness showed that the statistic *F* in the five models has a significance level of *p* from  $< .001$  to  $.044$  ( $p < .05$ ), VIF from 1.00 to 1.72, Durbin-Watson statistic = 1.82. Therefore, it can be confirmed that the database is consistent with these five models. In model 1, 17.00% of the variation in loneliness of LBC is explained by PSS from friends. In model 2, 26.00% of the variation in loneliness is explained by PSS from friends, caregiver attachment type of care. In model 3, 28.00% of the variation in loneliness is explained by PSS from friends, caregiver attachment type of care, type of RAC. In model 4, 29.00% of the variation in loneliness is explained by PSS from friends, caregiver attachment type of care, types of RAC, RFS. In model 5, 29.00% of the variation in loneliness is explained by PSS from friends, caregiver attachment type of care, types of RAC, RFS and RHS.

Table 1

*Loneliness in left-behind children*

Demographic	Sort	<i>M</i> ( <i>SD</i> )	95% CI	<i>F</i> , <i>t</i> , <i>df</i> , <i>p</i>
Gender	Male	28.23 (9.14)	27.07-29.41	$t(437) = -0.90$ $p = .368$
	Female	29.04 (9.69)	27.74-30.33	
Type of migration	Domestic	28.45 (9.16)	27.42-31.30	$t(390) = 0.80$ $p = .390$
	International	29.30 (10.44)	27.34-29.66	
Age range	10-14	28.76 (9.18)	27.92-29.67	$t(437) = 0.85$ $p = .394$
	15-17	27.56 (11.03)	24.58-30.76	
Duration of parental migration	< 6 years	28.11 (9.05)	28.86-29.47	$t(437) = -1.02$ $p = .306$
	> 6 years	29.04 (9.69)	27.88-30.26	
Parent migrating	Father	28.39 (9.06)	27.22-29.57	$F(2, 436) = 1.27$ $p = .283$
	Mother	30.23 (10.34)	27.78-32.68	
	Both parents	28.17 (9.45)	27.74-29.50	
Loneliness_score_total		28.62 (9.40)	27.75-29.48	-

**Table 2***Correlation between loneliness and independence variables of left-behind children*

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Loneliness	1										
2. PSS from family	-.40**	1									
3. PSS from friend	-.42**	.51**	1								
4. PSS from significant others	-.32**	.51**	.56**	1							
5. Caregiver attachment type of care	-.40**	.56**	.30**	.34**	1						
6. Caregiver attachment type of control	.24**	-.36**	-.21**	-.21**	-.56**	1					
7. RGP	-.25**	.39**	.32**	.36**	.36**	-.25**	1				
8. RAC	-.27**	.22**	.14**	.04	.26**	-.14**	.04	1			
9. RPT	-.07	.18**	.15**	.21**	.21**	-.22**	.51**	-.14**	1		
10. RFS	-.39**	.48**	.31**	.32**	.59**	-.49**	.35**	.30**	.22**	1	
11. RHS	-.36**	.35**	.38**	.30**	.38**	-.25**	.14**	.35**	-.08	.43**	1

Note. \*\* $p < .01$ ; PSS – perceived social support; RGP – resilience by goal planning; RAC – resilience by affect control; RPT – resilience by positive thinking; RFS – resilience by family support; RHS – resilience by help-seeking.

**Table 3***Multivariate linear regression to predict scores of loneliness among left-behind children*

Independent variable	Loneliness			Collinearity statistics	
	$\beta$	$R^2$	adj. $R^2$	Tolerance	VIF
1. PSS from friend	-.27***	.30***	.29***	.81	1.22
2. Caregiver attachment type of care	-.18***			.61	1.62
3. RAC	-.11***			.84	1.19
4. RFS	-.11*			.57	1.72
5. RHS	-.09*			.68	1.46

Note. \* $p < .05$ , \*\*\* $p < .001$ . PSS – perceived social support from friend; RAC – resilience by affect control; RFS – resilience by family support; RHS – resilience by help-seeking.

The regression coefficient for model 5 is shown in Table 3. In particular, the variation of loneliness is most explained by PSS from friends with  $-.27$  ( $p < .001$ ), followed by caregiver attachment type of care with  $-.18$  ( $p < .001$ ), and types of resilience are RAC with  $-.11$  ( $p < .01$ ), RFS with  $-.11$  ( $p < .05$ ), and RHS with  $-.09$  ( $p < .05$ ).

## DISCUSSION

The study aims to assess the prevalence of loneliness and identify factors affecting loneliness among LBC. The results show that, on average, LBC obtained a total score of 28.62 on the loneliness scale ranging from

16 to 80. Perception of social support from friends, caregiver's care, RAC, RFS, and RHS are protective factors against LBC's loneliness.

First, LBC in this study have a lower loneliness score than LBC in other studies, especially in China (Ai & Hu, 2016; Cao et al., 2022; Zhao et al., 2015; Zhao et al., 2019). The score is comparable for the adolescent group in Vietnam studied by Nguyen et al. (2020). There is no significant difference in loneliness among different sub-groups of LBC. These results are inconsistent with other studies which showed differences in loneliness in terms of gender (Jiang et al., 2020; Zhao et al., 2015), age (Wang et al., 2006), and parental migration status (Yue et al., 2015; Zhao et al., 2015). Overall, this research indicates that LBC in

Vietnam experienced a lower level of loneliness than LBC in previous research and that there are no differences in loneliness across subgroups of LBC. In the cultural context of Vietnam, the score of loneliness in the group of children whose parents work far away is lower than the previous LBC groups for two reasons. The first is that, when children do not live with their parents, they may receive support from other relatives, such as aunts and uncles. This situation is expressed via a Vietnamese idiom “when there is no father, uncles help, when there is no mother, aunts help”. It emphasizes love and protection from the larger family for the child separated from his or her parents. These relatives’ support may be a protective factor helping the child to be less lonely in comparison to the LBC in previous studies. The second reason is that the long-distance care strategy used by migrant parents has contributed to reducing loneliness in children. Nowadays, with the support of information technology, especially smartphones, the LBC and parents can easily communicate through online video calls and social networks (Madianou & Miller, 2011). Thanks to modern technology, mothers can provide emotional support and guidance to their children regardless of geographical distance, helping mothers to have a copresence in their children’s lives (Nedelcu & Wyss, 2016). Migrant parents can participate in day-to-day childcare such as decision making, academic support and daily activities through video conferencing (Jordan et al., 2018).

Secondly, the current study suggests that perception of social support is the key protective factor against loneliness among LBC. In line with the findings, Ai and Hu (2016) stated that perceived social support accounts for 54.5% of the variance in LBC’s loneliness. However, unlike Ai and Hu (2016), our study shows that only social support from friends was regarded as a protective factor against LBC’s loneliness. It is noted that social support in Ai and Hu’s study was the total score of all three dimensions rather than the composite score for each dimension (family, friends, and significant others). This could be attributed to the fact that due to parental migration, adolescents did not have a close connection with their parents; thus, seeking connection from their peers would help them reduce their loneliness (Wang et al., 2020). In a similar view, Zhao et al. (2015) reported that the loneliness of LBC with a migrating father and two migrating parents is negatively correlated with friend companionship. Additionally, when examining the effect of friendship quality and left-behind experience on LBC’s loneliness, Ling et al. (2017) found that friendship quality has a greater impact on predicting loneliness than left-behind experience. Therefore, peer support should be encouraged to help LBC deal with their problems and overcome loneliness due to parental migration. Communities for LBC in China and Vietnam may be a great source that could support

LBC by connecting LBC with their peers and other support networks (Nam, 2015; Zhao et al., 2017).

The third matter concerns the attachment of the caregiver with LBC. The results show that caregiver’s care is a protective factor against loneliness. This is consistent with previous research, which showed that children with negative relationships with their parents often experience a higher level of loneliness (Jia & Tian, 2010; Wang et al., 2006); limited communication with parents is also a significant predictor of loneliness among LBC (Faisal & Turnip, 2019; Jia & Tian, 2010). Moreover, parent-child cohesion is an important protective factor against loneliness, in which a stronger bond helps reduce LBC’s experience of loneliness (Zhao et al., 2013; Zhao et al., 2015). In the context of Vietnam, our study is similar to the previous study of Nguyen et al. (2019). With the sample of 331 Vietnamese children aging from 8 to 12, the study indicated that parental control was significantly associated with greater likelihood of being physical attacked, and mental health problems such as suicidal ideation and loneliness. In other words, the study demonstrated that, in the cultural context of Southeast Asia, the bond between children and parents/caregivers in the caring manner can help protect adolescents’ psychological health (Nguyen et al., 2019). Likewise, a survey of high school students in Vietnam shows that poor communication between parents and adolescents has a negative impact on children’s mental health (Le et al., 2018).

The role of resilience against loneliness in LBC in this study has also been demonstrated in previous research (Ai & Hu, 2016;; Liao et al., 2014). For example, Ai and Hu (2016) stated that psychological resilience is a predictor of loneliness in LBC. Furthermore, psychological resilience is shown to moderate the relationship between social support and loneliness in LBC. Particularly, high psychological resilience will enhance the effect of social support on LBC’s loneliness. In addition, positive coping styles such as problem-solving and help-seeking are shown to have an essential role in reducing LBC’s loneliness (Liao et al., 2014). Similarly, the study of Cao et al. (2022) indicated that resilience plays a mediating role in the relationship between feelings of loneliness and Internet addiction in children whose parents work away from home in China. Specifically, a statistically significant positive effect of loneliness was noted on Internet addiction among children with low resilience, whereas no significant association between loneliness and Internet addiction was found among those with a high level of resilience.

#### LIMITATIONS AND FUTURE RESEARCH

The results of the study should be considered together with some limitations. The sample chosen for

the study is within the school environment; thus, the results might not fully reflect the problems of out-of-school LBC. The regions chosen for sampling were from the rural areas in the North and Central regions of Vietnam, so there is a lack of representation from the further South and from remote and inaccessible areas. The children loneliness scale used in the study was particularly developed to measure children's loneliness in school settings. Therefore, an alternative measurement is needed to measure children's perception of loneliness in a household-specific context or out-of-school environment such as the UCLA Loneliness Scale (Kwiatkowska et al., 2018). Another limitation of the study is that it did not consider the impact of socio-economic factors, such as level of economic and material satisfaction as well as factors related to caregiver's health status and education that may have an impact on children's loneliness. Moreover, the nature of the study, being a cross-sectional study based on self-report by children, can lead to biases in the research (for example, social desirability bias). Future research is strongly recommended to include the primary caregiver's and teachers' perspectives, the impact of socio-economic status on children's loneliness, and, overall, more qualitative research on the matter is needed.

## CONCLUSIONS

The loneliness score in the Vietnamese LBC group was lower than that of the LBC investigated in the previous study. There was no statistically significant difference in loneliness between LBC groups according to some sociodemographic criteria. Social support from friends, caring caregivers, and affect control, family support, and help-seeking recovery patterns are factors that protect children from loneliness. Parents, carers and others involved with LBC need to create conditions for children to establish good relationships with friends. Carers need to continue to engage with children in a safe, caring manner. Educational programmes for LBC to enhance children's resilience should also be emphasized.

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