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Migrant child phenomenon in China: Subjective happiness factors for assessing service needs



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ABSTRACT

In Tianjin, China, 476 migrant children responded to a survey on educational processes and family influences. These children reported a fair-to-good subjective happiness level. A sequential regression model shows that their subjective happiness will rise alongside nine improvements: (1) public school enrollment, (2) nondiscriminatory admission to education, (3) targeted assistance for higher grade students, (4) integrated local-migrant classes, (5) teacher-student interactions, (6) extracurricular activities, (7) academic performance, (8) parent-child communication, and (9) friends in the city. A comprehensive assessment index can be developed to incorporate school-home factors with a *dual focus*: migrant worker welfare and migrant child development.

In China, children who follow their parents to move from rural to urban living ("migrant children") represent a special population of involuntary migrants due to their parents seeking or securing employment with a hope to end poverty or improve quality of life. These children are Chinese citizens but are displaced in an inequitable world and confronted with multiple economic, social, and cultural adaptation problems because of their parents' migration within the country for better employability (Xu, 2010). The authors call this a migrant child phenomenon due to the fact that the children were not immigrants or undocumented, but were by-products of the country's concerted effort to control provincial population movements. Since 2001, the China Central Government has implemented and enforced dual-focus (两为主) public policies: local governments addressing problems faced by migrant workers and local public school systems assisting migrant children to receive proper education. However, the policy impact has not been fully documented, particularly in relation to promoting a healthier life among migrant families.

Due to the *Hukou* (household registration) system in China, the identity of migrant children, though they have moved to and lived in the city, is not clearly defined. Therefore, these children are often discriminatorily labelled as children of *mobile population*. These children are treated as internal refugees due to the fact they are lacking a formal residence status in the city where they currently reside, not because they do not have a Chinese citizenship status. While their parents are

engaged in industrial labor work, their *Hukou* status may still be agricultural status based on their rural residence of origin. Many can only use services offered by the relevant policy in their rural hometown, leaving them without access to the resources governed by the provincial or city policy. To identify concrete factors that can be included in a subjective happiness index, this article reports the findings from a survey that obtained direct input from migrant children who recently moved to a large city. The *migrant child phenomenon* in China is connected to the country's effort to encourage internal migration for economy recovery and growth in large cities and to enhance social inclusion of the migrant families.

1. Migrant children and well-being

Currently, China lacks official statistics on the numeration of migrant children because of their frequent relocation to new places. The China National Statistical Office (2017a) has been collecting annual statistics at the "migrant workers" level. However, no clear indicators are available to measure the number of their children who follow these worker parents to move to urban living for employment. In this study, data of "migrant children" are based on estimates from national statistics. According to the National Bureau of Statistics (2017a), there were 169.34 million migrant workers within China in 2016. The proportion of children aged 0–15 years at the end of 2016 accounted for

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17.7% of China's total population (National Bureau of Statistics, 2017b). With these two statistics, an estimate based on 17.7% of the 169.34 million migrant workers would be 29.9732 million migrant children. However, this estimate may not factor in marriage rate, selective migration, and the rural-urban difference in fertility rate, as well as the proportion of left-behind children, etc. This study targeted mainly migrant children between 5 and 18 years old and even though the projected data show a large proliferation of migrant children, this number may still be underestimated. Nevertheless, having over 29 million migrant children move to a few popular cities represents an important policy matter, particularly for planning a comprehensive education system that will improve children's well-being.

Chinese scholars have recently studied factors addressing children's well-being including the multi-faceted aspects of social and economic issues due to family mobility, including: economic factors (e.g., parents' employment status, income level) (Fang & Sakellariou, 2016; Wu & Chen, 2010; Xing, 2011), social factors (e.g., education, life events, social support) (Ni, Chui, Ji, Jordan, & Chan, 2016; Zhang, 2009), demographic factors (e.g., gender, age, ethnicity) (Ni et al., 2016), cultural factors (e.g., family arrangements, traditional practice) (Ren & Treiman, 2016; Zhang & Shen, 2011), psychological factors (e.g., selfesteem, adjustment) (Wang, Zhou, & Heskth, 2017; Wang & Zou, 2010), and parent-child relationship factors (e.g., conflict and family education) (Wong, Chang, & He, 2009). A commonality among these studies is a positive correlation between economic, education and relationship factors, and the perceived well-being among migrant children. Closely related to the financial needs facing migrant families, Lu, Lin, Vikse, and Huang (2016) contributed children's negative educational outcomes to the migration and residency status of their parents. To further test these findings, a theoretical foundation has been built by Ni et al. (2016) to unravel the roles of "social support and identity integration" (p. 750) on migrant children's subjective well-being.

Another consideration to migrant children's adjustment is the impact of cultural factors. Zhang and Shen (2011) reported that belief in a just world has influenced the future outlook of children in rural China. Psychological factors can have a great influence on subjective wellbeing, including empathy (Huang, Su, & Jin, 2017), optimism (Wang & Zou, 2010), and self-esteem (Wu et al., 2015). Among the social factors, the influences of life events such as divorce (Zhao, Wang, Li, Zhou, & Hesketh, 2017) and the lack of social support such as relative deprivation (Jin, 2016; Ni et al., 2016; Zhang, 2009) have impacted a person's subjective happiness. Among these factors, the lack of support in education can be preventable and studied to identify direction for policy changes.

1.1. Research framework

In China, *subjective happiness* is a culturally-relevant concept representing both the positive perception and well-being of children based on their personal experiences (Chen, 2012). Subjective happiness is also regarded as *subjective well-being* with an emphasis on positivity in thoughts and actions (Ni et al., 2016). The immediate objective of this study is to address how educational factors (in school and at home) may be connected to or influence migrant children's well-being perception. While this study aims to hear directly from children, its long-term objective is to find a connection to support the importance of measuring subjective happiness as a main variable and collect evidence to determine what education and family factors are to be included in this measure when examining migrant children's well-being.

Education in China is a complex multi-level, multi-dimensional, temporal and horizontal cross-vertical system. This study's happiness analysis is based on the theoretical framework proposed by Michalos (2008) and the work by Husen and Postlethwaite (1990) on educational ethics. According to Michalos (2008), education has an impact on happiness in three operationalized terms: educational factors, family influences, and perceived happiness. Educational factors are defined

broadly to include both school and other types of learning including culture and social interaction; family influences are represented by the diverse support, such as financial and value-based backing, to link with one's education and motivation to learning; happiness is a feeling of security that can bring good life to a person, and also connected to education and family influences (Michalos, 2008). This school-homehappiness triangle links migrant children's perception about happiness to the process when these children walk through new changes of life that are influenced by the education they receive both in school and at home. Husen's Theory of Equal Opportunity elaborates on the dynamic structure and process of a country's educational commitment to ensure children's wellbeing; in that, the principle of educational ethics provides an additional base to analyze equality perception in three stages: 1) the starting point of learning with equal opportunities; 2) educational intermediary with equal treatment regardless of ethnicity and socioeconomic status; and 3) goal achievement with equal opportunity, equal treatment, and equality of achieving academic successes through social and educational measures (Husen & Postlethwaite, 1990). When Michalos' school-home-happiness triangle meets Husen's ethical analysis, it is suggested that the impact of education on migrant children's happiness be measured both in school and at home (Fig. 1).

1.2. Method

A survey was designed to collect data from 2012 to 2015 directly from migrant children in China to study its internal migrant phenomenon. Its implementation proposal was officially endorsed by the Civil Affairs Department of the Tianjin government and the use of the survey data was approved by the human subject protection experts after their review at the XX University (blinded for review purposes). Tianjin is chosen as the target city because, as the largest coastal city in northern China, it is one of the central municipalities directly under the Central Government. Since the 1990s, Tianjin has made progress in economic growth, urban construction and community development. With the development of Binhai New Area in recent years, Tianjin has experienced an increasing trend in its internal migration. Tianjin attracts a huge influx of migrant workers. According to statistics, the migrant population has contributed to the main population growth in Tianjin. By the end of 2016, Tianjin's migrant population has already reached 5.2 million, ranked fifth in the country (Tianjin Net, 2016). Following the growth of migration workers, populations of migrant children are exponentially increasing. This survey targeted Tianjin as it represents major cities in China with a high influx of migrant children.

1.3. Survey design

Based on the theoretical framework described above, this study analyzes what has impacted the subjective well-being of migrant children with three data points: 1) the educational starting point, 2) educational process, and 3) educational outcomes. Specifically, the starting point of education refers to the school enrollment of migrant children, including the placement of education as measured by the type of school and the difficulty experienced in school admission. The process of education is the intermediate stage of education, including education procedure variables such as teaching method, teaching process and participation, and teaching evaluation. Educational results are measured by the self-reported perception toward one's academic achievement in school. Home education results are measured by the family environment, parental care, parent-child communication, and parenting style.

A major question in this survey, "How do you feel about your current life in Tianjin?" measures subjective happiness (主观幸福感). To measure happiness as a dependent variable with a five-point scale (1 = very unhappy, 2 = unhappy, 3 = average, 4 = happy, and 5 = very happy), this child-friendly instrument aims to build a connection to the multiple school-home factors, from which an instrument

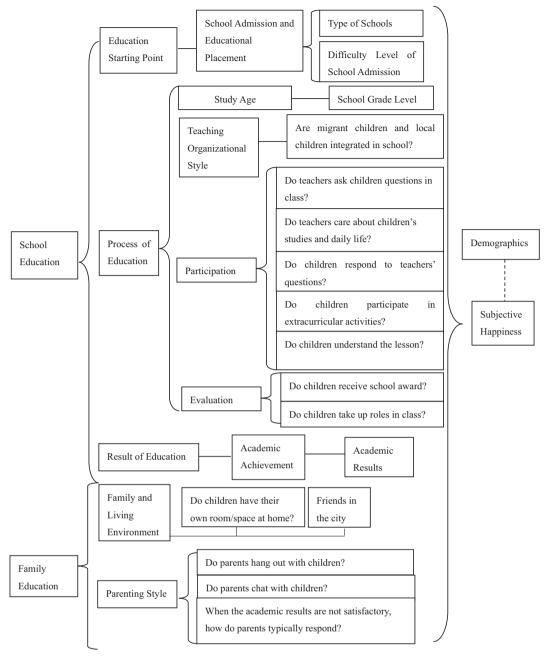


Fig. 1. Framework for analyzing the education influences on subjective happiness among migrant children.

can later be developed for future testing. Table 1 summarizes the independent variables and measures of demographics, school factors, and home factors. Demographic factors include migrant children's gender, ethnicity, and birthplace. Instead of age, school grade level is used to measure the educational readiness of migrant children who may enter a lower grade level than the age appropriate match due to their adjustment to a new school system and city environment. In addition, the social interaction factor is estimated by the number of friends in the residing city.

1.4. Sampling

A group of trained graduate-level researchers distributed the survey to migrant children with parental consent. Some young children were accompanied by their parents and assisted by the interviewers when filling out the survey. Parents were present only to accompany and

comfort a young child, not to ask questions or provide answers. Participants received school stationary after survey completion. Respondents were represented by community samples and snowball samples because of the difficulty in reaching migrant children. A survey was used as a bridge to interview and obtain data from the children. During the data collection process, the main researcher distributed the survey and interviewed respondents on streets in various locations at which migrant workers gathered or worked, and in different school and residential locations where migrant children played or studied. In addition, respondents were invited to ask their acquaintances, fellows, classmates, or other children of migrant workers in the community to participate in this study. As a result of the snowball effect, the scope of this study gradually expanded and became an outreach effort to make local residents aware of the importance of studying migrant children's educational needs.

Table 1 Measures and statistics of independent variables (N = 476).

Independent variable	% of <i>N</i>	Mean (SD)	Scale and values
Education starting point			
Type of schools (public schools)	76.5%		1 = Public school; 0 = Else
Difficulty in school admission		2.88 (0.986)	1 = Very difficult; 2 = Difficult; 3 = Easy; 4 = Very easy
Process of education			
School grade level			
Pre-school & Kindergarten	18.5%		
1st to 6th grade	59.9%		
7th to 9th grade	17.2%		
10th grade plus	4.4%		
In classes with local students (yes)	89.3%		1 = Yes; 0 = No
Teachers ask child questions (yes)	88.9%		1 = Yes; 0 = No
Participate in extracurricular activities		2.17 (0.419)	1 = Rare; 2 = Sometimes; 3 = Always
Understand lesson content		2.54 (0.543)	1 = Not understand at all; 2 = Understand Partly; 3 = Mostly Understand
Teachers care about child (yes)	83.6%		1 = Yes; 0 = No
Respond actively to teachers (yes)	72.7%		1 = Yes; $0 = No$
Receive school awards (yes)	62.4%		1 = Yes; 0 = No
Take up roles in class (yes)	35.1%		1 = Yes; 0 = No
Results in education			
Academic performance results		3.43 (0.862)	1 = Very bad; 2 = Bad; 3 = Moderate; 4 = Good; 5 = Outstanding
Family environment			
Parents chat/communicate with child		2.01 (0.626)	1 = Never; 2 = Sometimes; 3 = Always
Have own room/space at home (yes)	36.1%		1 = Yes; 0 = No
Parents hang out with child		2.08 (0.589)	1 = Never; 2 = Sometimes; 3 = Always
Parenting style (reasonable)	34.7%		1 = Reasonable; 0 = Not Reasonable
Demographics			
Gender (Male)	57.1%		1 = Male; 0 = Else
Ethnicity (Han)	97.9%		1 = Han; $0 = Else$
Birthplace (Tianjin)	18.3%		1 = Tianjin; 0 = Non-Tianjin
Social interaction factor			
Have friends in the city		2.55 (0.602)	1 = Few; $2 = Several$; $3 = Many$

1.5. Findings

A total of 500 surveys were distributed and 476 valid surveys were collected, indicating a response rate of 95.2%. Among the 476 child respondents, 57.1% were males, 97.9% indicated that they were *Han* ethnics, and 18.3% were born in Tianjin representing migrants who were born in Tianjin after their parents migrated from rural to urban but their entire family's *Hukou* remains rural. Over half (59.9%) were in elementary school level (1st to 6th grade) while 18.5% were in pregrade school, 17.2% were in junior high level (7th to 9th grade), and 4.4% were in 10th grade or above. Overall, their home factors and school factors were reportedly rated as *average* or *below average* (See Table 1 for other variables' descriptive statistics).

Among these 476 migrant children, subjective happiness was rated at an average of 3.70 out of a 5-point scale, with a standard deviation of 0.036, meaning that most of them placed their scores between *average* (3 points) and *happy* (4 points). Specifically, 54% of these migrant children regarded their current life in Tianjin as happy (18.1% *happy* and 35.9% *very happy*), while almost half of them (46%) rated average or below (44.1% *average*, 1.5% *unhappy*, and 0.4% *very unhappy*).

1.6. Factors affecting subjective happiness

Sequential multiple regression analysis was conducted to analyze how education factors, both in school and at home, had a significant effect on the subjective well-being of migrant children. Control variables included gender, nationality, birthplace, and social/family interaction (Table 2). With sequential regression modeling, the influence of each variable on the subjective well-being of migrant children was analyzed. Model 1 was the baseline model tested with educational factors listed in the research framework. Models 2 and Model 3 added two sets of control variables, respectively. Model 2 used gender, ethnicity, and birthplace as control variables while Model 3 added "friends

in the city" to Model 2.

With a variance of 24.1%, Model 1 shows nine significant variables on subjective happiness, including school type, school admissibility, school grade level, in classes with local students, teachers asking questions about the child's studies, participating in extracurricular activities, understanding the lesson, academic results, and parents communicating with the child. Results show that educational starting point, educational process, academic performance results and family education factors have significant influences on the subjective well-being of migrant children.

In Model 2, with a variance of 24.4%, demographics tested to have an impact on migrant children's subjective well-being were three variables: gender, ethnicity, and birthplace. Given that demographic factors were controlled, nine variables among the educational factors showed significant effects on the dependent variable, with similar results as in Model 1.

In Model 3, with a variance of 27.6%, the social and demographic factors were controlled in order to examine the impact of educational factors on subjective happiness level. The results show significant impacts on subjective happiness with input from nine variables: type of schools, school admissibility, school grade level, integrated classes with local students, teachers asking questions about the child's studies, participating in extracurricular activities, academic results, parents chat/communicate with the child, and having friends in the city. Results show that the educational starting point, educational process, academic results and family education factors have significantly influenced migrant children's happiness perception (F(20,476) = 8.671, p < .001; $R^2 = 0.276$).

1.7. Education factors

Four education factors demonstrate significant relations with subjective happiness among the respondents in the three models where

 Table 2

 Hierarchical multiple regression of education variables on subjective happiness.

Independent variable $(N = 476)$	Model 1	Model 2	^a Model 3
	(B)	(B)	(B)
	$R^2 = 0.241$	$R^2 = 0.244$	$R^2 = 0.276$
Education starting point			
Type of schools	0.183*	0.189*	0.167*
Difficulty in school admission	0.138***	0.134**	0.113**
Process of education			
School grade level	-0.074***	-0.074***	-0.073***
In classes with local students	0.283*	0.273*	0.269*
Teachers ask child questions	0.253*	0.254*	0.238*
Participate in extracurricular activities	0.249**	0.252**	0.190*
Understand lesson content	0.157*	0.164*	0.134
Teachers care about child	0.016	0.019	-0.014
Respond actively to teachers	0.019	0.019	0.062
Receive school awards	-0.133	-0.132	-0.116
Take up roles in class	-0.107	-0.092	-0.034
Result of education			
Academic performance results	0.154**	0.151**	0.130**
Family environment			
Parents chat/communicate with child	0.136*	0.135*	0.142*
Have own room/space at home	0.092	0.091	0.133
Parents hang out with child	0.079	0.083	0.087
Parenting style	0.001	0.000	0.037
Demographic factors			
Gender		-0.049	-0.024
Ethnicity		-0.172	-0.167
Birthplace		0.047	0.066
Social Interaction factor			
Have friends in the city			0.268***
Constant	1.194	1.370	0.955

Dependent variable = Subjective happiness (1-5, 5 = highest level of happiness)

certain variables were controlled. The impact of these education factors on child well-being is summarized as follows:

2. Educational starting point

At the starting point of education, experiencing less difficulties at school admission (B = 0.167, p < .05) and enrolling in a public school (B = 0.113, p < .01) have significantly and positively affected migrant children's perception of happiness. This result indicates that the first point of entry is an important adjustment milestone for those who have experienced a new way of living from rural to urban. Being accepted by a city public school through a smooth admission process may make the children associate their positive feeling so that their parents' migration decision seems to link to a positive experience in the education they receive in the city. Although these children should not be responsible for their parents' decision, their happiness is still determined by many external factors including their daily engagement in formal education.

3. Educational process

Four school factors are significantly related to the subjective well-being of migrant children: 1) enrolled in a lower school grade level (B = -0.073, p < .001), 2) being in classes with local students (B = 0.269, p = .012), 3) teachers asking students questions about their studies (B = 0.238, p = .039), and 4) participation in extracurricular

activities (B = 0.190, p = .023). The regression coefficients of the four variables and the dependent variables are statistically significant (p < .05). As a better estimate of the developmental level of the child, school grade level was used instead of age. The school grade level of migrant children is negatively correlated with their subjective wellbeing, which indicates that younger migrant children are more likely to express a higher subjective well-being level; contrarily, students in higher grade levels tend to have a hard time with new school adjustments. Being in the same classes with local students and knowing their teachers pay attention to their learning by asking questions about their studies are two explicit learning factors that can make migrant children perceive that they have been justly treated. In addition, when these children have the opportunity to participate in extracurricular activities, they feel happier knowing that they can participate in an implicit curriculum beyond classroom learning.

4. Academic results

The academic performance results could not be retrieved from the school they attended due to the respondents being recruited randomly from various locations. This variable is significant in all three sequential regression steps to support children's perception toward their academic success positively related to subjective happiness. Similar to recent literature on how positive academic emotions can predict psychological resilience among left-behind children in China, perceived successes will uplift one's spirit and thus facilitate a more positive attitude toward learning (Wang, Hu, & Yin, 2017).

5. Influence of family education factors

Among the family education variables, "parents chat/communicate with child" is the only significant factor associated to subjective happiness. Similar to recent studies on left-behind children, productive parent-child communication tends to bring comfort to children and promote their motivation to learn. As supported by research in China, "Parent-child communication is important for the development of all rural children" (Su, Li, Lin, Xu, & Zhu, 2013, p. 170). This finding reflects that promoting autonomy supportive parent-child communication is essential in child development.

6. Discussions

Subjective well-being is analyzed as a connector to migrant children's education and living conditions in an urban area in China. It serves as an indicator for parents and educators to pay attention to what factors could improve children's well-being in school and at home. Migrant children represent a mobile population resulting from rapid social and economic development in China. Internal migration due to the country's recent industrialization has brought a negative perception toward these children that needs to be corrected. This study focuses on examining a positive change starting from measuring and improving migrant children's subjective happiness. China has recently introduced a series of policies and invested resources regarding the needs of migrant children. The questions are: What are the outcomes from these policies? What have impacted migrant children's well-being? Policymakers need to understand migrant children's perspective when planning social programs for them, particularly for integrating them to their environment.

Previous research provided limited information on migrant children and no instrument has been developed for assessing migrant children's well-being as connected to the factors examined in this study such as explicit curricular or implicit extracurricular learning opportunities that help improve migrant children's well-being (Zeng, 2008). If examining migrant children's well-being only through their academic achievements (Wang & Zou, 2010), researchers will miss other associated factors such as promoting parental care and ways to establish

^a $F(20,476) = 8.671, p < .001; R^2 = 0.276.$

^{*} p < 0.05.

^{**} p < 0.01.

^{***} p < 0.001.

social interactions in classroom and after-school activities. In an integrative education environment in which students are justly treated regardless of their migration and other backgrounds, migrant children will enjoy both in-class and after-class learning opportunities with their peers who grow up in the city. With learning enhancement, they will be more active in observing peer interactions for a faster and healthier adjustment into the city's life.

Findings from this study serve as reference points for education policy reform. One finding is that free education must be delivered to all children regardless of the child's *Hukou* status. Since 2008, China has been providing free compulsory education to all children. Policymakers must pay attention to research data showing which admission barriers may have been negatively impacting migrant children's well-being. The China Central Government has reacted to these barriers by passing a public policy to especially assist migrant children to enter the public school system, and by imposing regulations to eliminate differential fees charged by the public schools. In other countries such as the United States, free education is provided by the government even if the child is undocumented and/or unaccompanied by his/her parents to live in the country (Konings, 2017). This policy should be referenced to check its feasibility for implementation in China to make migrant children feel that the first entry to the school system struggle-free.

This study also found that education for children under the age of 18 should be implemented as a legal commitment by the country and a cultural expectation by the family system. In China, before the implementation of the two-child policy, many migrant families who lived in the countryside already had more than one child in their family. Even with the educational clause, the second child may not receive educational benefits because, at the local end, these second children do not have a Hukou based on the previous one-child policy. This learned lesson informs the policymakers that migrant children represent a unique social service client system and their voice is now heard from this survey. In a research study in China, the use of photovoice-a community participatory method through which photographs and images link memories to feelings and thoughts, has proven to capture children's voices and concerns on environmental safety (Wang & Cui, 2010). With the topic about happiness, photovoice can be used in future research to obtaining direct input from young children about their subjective wellbeing in connection to the home-school-happiness triangle.

In addition, school registration processes should be simplified. According to the Central Educational Science Research Institute in 2007, among 12 cities in China, 92% require a proof of parent's employment, 75% require a temporary residence proof, and 58% require an actual residence proof (Research Group in the Central Educational Science Research Center, 2008). In Tianjin, local children must bring three documents for school enrollment, including residence *Hukou* card, residence lease or property ownership document, and the child's vaccination card. The parents of migrant children must also provide two additional documents: temporary residence permit and work permit. These requirements must be waived to eliminate barriers for migrant children to immediately receive formal education upon arrival to a new city.

A final finding from this study is that integrative schooling should be implemented since preschool, with school social work services provided for migrant children to promote their healthier adjustment to a new culture. Results in this study show that the subjective well-being of migrant children worsens as their age advances. Formal education in the city may be negatively perceived if migrant children are treated differently and do not receive adequate assistance (Zhou & Cheung, 2017). Scholars alert the government to care for migrant children's educational needs, which serves as a means to prevent future problems as these children proceed to higher grades (Wang, Luo, Zhang, & Rozelle, 2017; Wang & Zou, 2010). Migrant children are Chinese citizens who should have equal rights to learn social values from education as they will be integrated to society and become productive contributors to the growth of the country. Supporters for integrative

schools for local and migrant students believe that any type of educational segregation could produce further harm to society and educational messages about prohibiting discrimination against migrant children must be communicated to all students to promote social justice and appreciation of cultural differences. Combating social and educational isolation aims to building a stronger culture to promote multiculturalism (Xu, 2010).

Even though this study has surveyed a large number of migrant children, five limitations were identified. First, the survey was conducted in one large city (Tianjin) in China. Geographically, Tianjin can only represent the characteristics of the large cities in northern China, not those at Yangtze River Delta and Pearl River Delta or other locations in western China. In addition, the sample was based on a snowball community sample, not a random representation of the entire migrant children population in Tianjin. Second, this study is based on an analytical framework focusing on migrant children's educational factors and the respondents were children themselves. However, many respondents (18.5%) were young children. The interviewers assisted the child by reading the questions or asked for parental support to comfort. These actions were considered the most viable way to obtain direct responses from the young children whose did not have the language proficiency to read the questions. On the one hand, parental involvement might have created biases when these young children provided answers about family influences in front of their parents. Third, no longitudinal data were available on these children's subjective happiness prior to the implementation of the "dual-focus" policies. One would wonder if the subjective happiness score might be comparatively lower due to the instability in migrant children's educational arrangements. Other factors that may have a significant impact on migrant children, such as political and cultural factors, also need to be explored. In addition, only one question was used to measure happiness. The literature has reported the validity of a subjective wellbeing index (see Davey & Rato, 2012), but the constructs of this type of indexes are typically designed for adults, not suitable for migrant children whose immediate need is education. Through this study, this simple subjective happiness measure has connected with the child's school and home quality as an estimate to find the most influential factors as a channel to plan social services for the children in need.

A final concern was about how a number of key variables were operationalized. Both independent and dependent variables were measured through children's self-reports, and the reliance on the same measurement technique could introduce systematic variances into the measure, which in turn inflate the observed relationship between the substantive variables (e.g., having a common method bias). This instrument was created by the research team to provide initial investigation of child wellbeing perception but the credibility of the findings may be questioned without future research to support its use. Although it is important to obtain from the children directly, some variables such as academic performance might be obtained from other data sources, e.g., asking parents to provide their children's academic ranks in the classroom, to test reliability of the child's self report.

7. Implications & conclusion

It is assumed that when migrant children perceive a good level of well-being, the country's policy on internal migration has achieved its intended progresses and results. This study shows that the subjective happiness as perceived by more than half (54%) of the target subjects with an average of 3.7 on a 5-point scale. This positive outcome may be connected to the result of a series of *dual-focus* policies adopted by the Central China Government. These policies aim to target the educational provision for migrant children and assisting their parents in their cultural adjustment process in the city. The gap between the *Hukou* policy of migrant children in China and the formal education arrangement for these children has largely been resolved in Tianjin. Results in this survey show that 76.5% of the respondents were admitted to public

schools and others in private schools or migrant schools with assistance.

Three main implications can be taken from this research study. First, migrant children are facing numerous problems that are representative of displaced children due to their parents' financial and cultural adjustment conditions. These problems are particularly worse when many children in developing countries are often in constant transition. China has put forward a series of policies in an attempt to immediately resolve the family mobility issue that can negatively affect children's well-being (Zhou & Cheung, 2017). This valuable macro perspective should be taken into consideration when a country is dealing with increasing industrialization and massive family mobility due to war and other internal conflicts. The results of this study show that the solution to the problem affecting migrant children is inseparable from the government's participation, as the government plays an active role in policy formulation, policy resources and policy action. Based on the specificities in China's recent economic, social and cultural changes, policy change cannot take place within a short turnaround time. Timing is an issue to help resolve the difficulties faced by migrant children. This study analyzes this learned lesson to address proactive policy changes.

Secondly, the subjective well-being of migrant children has yet to be improved. In this study, although the average subjective happiness score was 3.7, there was still a negative side on the scale that 1.5% of these 476 children felt unhappy and 0.4% felt very unhappy, meaning that 1.9% of these children felt unhappy and the average score is not high enough. To address these negative feelings, policymakers need to know that, particularly in super-populated cities, a check-and-balance system must be created from the dual-focus policy direction so that the admission procedures in local schools does not create obstacles to migrant children. When the policy is not clearly stipulated, it is hard to predict who will be responsible and what kind of responsibility must be monitored to create a just system for the migrant families. It is recommended that the central government applaud the effort by local public schools that have proportionally accepted migrant children and prepared them during their transitioning phase. With central government enforcement, a comprehensive assessment index can be developed to incorporate school-home factors to improve the openness of various educational venues for migrant children. Additionally, the question about "who will bear the cost" remains a societal challenge. Who would invest on something that is unknown or unrelated to one's own welfare? When the public good is to be improved but the central government is not involved, who would want to take the financial responsibility? This is a question about external and opportunity cost that the central and local governments must work collaboratively to provide answers that ultimately reform their policies.

Since there is a government-sanctioned compulsory education system, there must also be a link to the funding of migrant children's education and inclusion of integrated social services for migrant children and their families. The government cannot let children fall through the crack of economic deprivation or financial stress (Fang, Sun, & Yuen, 2016). If there are not enough educational subsidies from the central government, migrant children would suffer more than the local children. As a result, many parents have left their children behind in the rural hometown for them to receive formal education there without having to deal with the challenges of admissions or integration to the urban lives. This is an example of a spillover cost from setting public policies for resolving a social problem.

In addition, in order to fulfill the government's legal obligation to provide compulsory education, the China Central Government has placed additional resources in rural schools to encourage children to stay so they do not have to compete with the children in the city. Chinese people vividly call this phenomenon *empty tax advantage* to illustrate the fact that many migrant parents do not contribute taxes to their hometown but enjoy the public benefits by leaving their children behind for school and other welfare services. However, this arrangement not only leads to public criticism, but also creates a reduction of

happiness among left-behind children for their lack of parental guidance while studying. Parent-child bonding is a considerable factor to promote child's subjective happiness. Without a clear index directly collected from migrant children, the existing policy may not be able to measure the impact of public schools, with an integration model or a segregation model, on child wellbeing. The existing *dual-focus* policy is mainly a problem-solving based policy design, which lacks evidence to support a system that will provide migrant children with a stabilized learning environment.

To ensure a stabilized educational environment for migrant children, the dual-focus policy reform must also include two components. A first component is the school-home connection that the multifaceted environments affecting children's well-being should be assessed. Another component is the introduction of an education voucher system that can resolve the admissibility issue. An education voucher was first conceptualized by neoliberal scholar Milton Friedman (1999) and has recently been implemented in Hong Kong early education (Yuen & Lam, 2017), purposing that the government's public funds for education can be issued in the form of vouchers for a flexible choice of school to attend. Instead of reassessing which schools to subsidize because of their commitment to admit migrant children, the schools can receive these education vouchers from the users in exchange for education funding from the government. Education vouchers aim to send money to where people go to help children stay in a family-oriented environment with support from the government. With family involvement in a child's education, social integration can be achieved.

The internal migrant phenomenon is a concept that informs governments of many countries such as those with an influx of undocumented children in recent years about policy discrepancies when addressing their educational needs. It is essential for the government to provide either documented or undocumented children who involuntarily migrate with their parents due to economic or political reasons because these children need support to keep their mind focused for better academic performances (Lu, Huang, & Rios, 2017). Educational activities in schools and integrated family services in the community can essentially improve the conditions of those who have been socially excluded (Hao & Cui, 2015). In recent years, social workers in China have been active players in designing interventions for migrant children from various backgrounds to prepare them for developing their growth in human capital, financial and other preparations. For the best interest of the migrant children, this study provides their voice directly to request that governments in all countries be alerted to measure school-home adjustment factors when designing social services to combat the issues faced by migrant children and their families.

Ethics statement

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Conflict of interest statement

The authors declare that they have no conflict of interest to submit this manuscript to this journal.

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References

- Chen, W.-C. (2012). How education enhances happiness: Comparison of mediating factors in four East Asian countries. Social Indicators Research, 106(1), 117–131.
- Davey, G., & Rato, R. (2012). Subjective wellbeing in China: A review. *Journal of Happiness Studies*, 106(2), 333–346. http://dx.doi.org/10.1007/s10902-011-9266-6.
- Fang, L., Sun, R., & Yuen, M. (2016). Acculturation, economic stress, social relationships and school satisfaction among migrant children in urban China. *Journal of Happiness Studies*, 17(2), 507–531. http://dx.doi.org/10.1007/s10902-014-9604-6.
- Fang, Z., & Sakellariou, C. (2016). Social insurance, income and subjective well-being of rural migrants in China: An application of unconditional quantile regression. *Journal* of *Happiness Studies*, 7(4), 1635–1657. http://dx.doi.org/10.1007/s10902-015-9663-3.
- Friedman, M. (1999). Capitalism and freedom. Chicago, IL: The University of Chicago
- Hao, Z., & Cui, Z. (2015). The role of intergroup permeability on Chinese migrant children's social integration. Social Behavior and Personality: An International Journal, 43(2), 303–314. http://dx.doi.org/10.2224/sbp.2015.43.2.303.
- Huang, H., Su, Y., & Jin, J. (2017). Empathy-related responding in Chinese toddlers: Factorial structure and cognitive contributors. *Infant and Child Development*, 26(3), 1–18
- Husen, T., & Postlethwaite, T. N. (1990). *The international encyclopedia of education*. New York, NY: Pergamon Press.
- Jin, L. (2016). Migration, relative deprivation, and psychological well-being in China. American Behavioral Scientist, 60(5/6), 750–770.
- Konings, P. (2017). Protecting immigrant children's right to education. *Child Law Practice*, 36(2), 36–39.
- Lu, S., Huang, C.-C., & Rios, J. (2017). Mindfulness and academic performance: An example of migrant children in China. Children and Youth Services Review, 82, 53–59.
- Lu, S., Lin, Y.-T., Vikse, J. H., & Huang, C.-C. (2016). Well-being of migrant and left-behind children in China: Education, health, parenting, and personal values. *International Journal of Social Welfare*, 25(1), 58–68.
- Michalos, A. C. (2008). Education, happiness and wellbeing. Social Indicators Research, 87(3), 347–366. http://dx.doi.org/10.1007/s11205-007-9144-0.
- National Bureau of Statistics in China (2017a). 2016 investigation report of migrant workers monitoring. Retrieved from: http://www.stats.gov.cn/tjsj/zxfb/201704/t20170428_1489334 html
- National Bureau of Statistics in China. (2017b). 2016 statistics bulletin of the National Economic and Social Development of the People's Republic of China. Retrieved from: http://www.stats.gov.cn/tjsj/zxfb./201702/t20170228_1467424.html
- Ni, S., Chui, C. H.-K., Ji, X., Jordan, L., & Chan, C. L.-W. (2016). Subjective well-being amongst migrant children in China: Unravelling the roles of social support and identity integration. *Child: Care, Health and Development*, 42(5), 750–758.
- Ren, Q., & Treiman, D. J. (2016). The consequences of parental labor migration in China for children's emotional wellbeing. Social Science Research, 58, 46–67.
- Research Group in the Central Educational Science Research Center (2008). Investigation report on the educational status of migrant children. *Educational Research*, 4, 13–21.
- Su, S., Li, X., Lin, D., Xu, X., & Zhu, M. (2013). Psychological adjustment among leftbehind children in rural China: The role of parental migration and parent-child

- communication. Child: Care, Health and Development, 39(2), 162–170. http://dx.doi.org/10.1111/j.1365-2214.2012.01400.x.
- Tianjin Net (2016). There are more than 5 million 200 thousand migrant population in Tianjin, more than Guangzhou. Retrieved from www.tianjinwe.com.
- Wang, D., Hu, M., & Yin, X. (2017). Positive academic emotions and psychological resilience among rural-to-urban migrant adolescents in China. Social Behavior and Personality: An International Journal, 45(10), 1665–1674. http://dx.doi.org/10.2224/shp.6382
- Wang, F., Zhou, X., & Heskth, T. (2017). Psychological adjustment and behaviours in children of migrant workers in China. Child: Care, Health and Development, 43(6), 884–890
- Wang, L., & Cui, M. (2010). Children's photovoice—A multi-sector collaboration stimulus on child pedestrian safety through environment modification. *Injury Prevention*, 16, A287
- Wang, R., & Zou, H. (2010). The characteristic of migrant children's subjective well-being in Beijing. Chinese Mental Health Journal, 2(131–134), 148.
- Wang, X., Luo, R., Zhang, L., & Rozelle, S. (2017). The education gap of China's migrant children and rural counterparts. *Journal of Development Studies*, 53(11), 1865–1881.
- Wong, F. K. D., Chang, Y. L., & He, X. S. (2009). Correlates of psychological wellbeing of children of migrant workers in Shanghai, China. Social Psychiatry and Psychiatric Epidemiology, 44(10), 815–824.
- Wu, L., & Chen, H. (2010). Research on the structure equations model building of income and happiness index. *Chinese Rural Economy*, 1, 63–74.
- Wu, Y.-L., Chen, J., Yang, L.-S., Ding, X.-X., Yang, H.-Y., & Sun, U.-H. (2015). Change and associated factors of self-esteem among children in rural China: A two-year longitudinal study. *Psychology, Health & Medicine, 20*(8), 879–888.
- Xing, Z. (2011). A study of the relationship between income and subjective well-being in China. *Sociological Studies*, 1, 196–219 (245–246).
- Xu, L. (2010). The study on social inclusion for the peasant workers' children during the process of education in city. Academic Forum, 1, 197–201.
- Yuen, G., & Lam, M. S. (2017). Mothers' experiences of a voucher scheme within the context of Hong Kong's early education: Issues of affordability and justice. *Children and Youth Services Review*, 82, 185–194. http://dx.doi.org/10.1016/j.childyouth. 2017.09.030.
- Zeng, S. (2008). The study on the happiness of migrant children. China Youth Study, 9, 37–41.
- Zhang, L., & Shen, J. (2011). The relationship between left-behind rural children's subjective well-being and their belief in a just world. *Chinese Journal of Special Education*, 6(78–82), 88.
- Zhang, N. (2009). The influence of social support on students' subject well-being in migrant children's' school. *Journal of Shanxi Normal University (Social Science Edition)*, S2, 103–105.
- Zhao, C., Wang, F., Li, L., Zhou, X., & Hesketh, T. (2017). Long-term impacts of parental migration on Chinese children's psychosocial well-being: Mitigating and exacerbating factors. Social Psychiatry and Psychiatric Epidemiology, 52(6), 669–677. http://dx.doi. org/10.1007/s00127-017-1386-9.
- Zhou, S., & Cheung, M. (2017). Hukou system effects on migrant children's education in China: Learning from past disparities. International Social Work, 60(6), 1327–1342.