

Preschool Teachers' Resilience and Their Readiness to Develop Resilience to Young Children in a Chinese Context

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Abstract

Resilience is defined as a “positive adaption in the face of risk or adversity” (Wright, Masten, & Narayan, 2013). Both the teachers’ resilience and their readiness to develop preschool children’s resilience were examined in the Hong Kong context (n=196). Results from the K-means cluster analysis indicated that Hong Kong preschool teachers had a relatively high level of resilience, with family being a significant contributing factor. These teachers were generally ready to foster children’s resilience and showed relatively high support for programs on developing children’s resilience (PDCR). The main effects of preschool teachers’ resilience and institutional climate supportiveness were identified. Institutional climate tended to affect highly resilient teachers more in terms of their willingness to implement PDCR. These findings provide insights and directions for developing early childhood resilience programs. .

Key words : resilience, preschool teacher, preschool children, Chinese

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Introduction

As society evolves, the intelligence quotient (IQ) is no longer the only determinant of life success. In the late 20th century, the concept of the emotional quotient (EQ) became popular. Researchers and educators have begun to turn their attention toward the adversity quotient (AQ), commonly known as resilience.

Resilience and early childhood

Resilience is defined as a “positive adaption in the face of risk or adversity” (Wright, Masten, & Narayan, 2013). Rather than purely a personality trait, it is a process and a multidimensional construct (Henderson & Milstein, 2003; Luthar et al., 2000; Khanlou & Wray, 2014) that can be learned or acquired at any point in life. It also serves as protective factors such as positive family relationships and connectedness, caring and attentive educational settings, supportive peer relationships, positive and high expectations, opportunities for healthy risk taking, meaningful involvement, and supportive social and cultural values (Benard, 1991; Beyond Blue Ltd., 2017).

While studies of resilience have indicated the importance of promoting child and youth school engagement, mental health and its ability to serve as a life-long buffer to potential threats to well-being across time and transitions (Collishaw et al., 2016; Khanlou & Wray, 2014; Kasehagen et al., 2018), the majority of studies have focused on elementary or secondary school settings and were primarily been derived from the Western contexts. Until recent decade, the importance of early childhood resilience has gradually emerged (Masten & Gewirtz, 2006; Miller-Lewis et al., 2013; Luthar & Eisenberg, 2017; Beers, 2018).. For example, Miller-Lewis and her colleagues (2013) discussed that adversities were often deep-rooted family and social problems, and studying resilience in early childhood has the potential to guide the development of new evidence-based preventive programs which better prepare children to cope with current and future adversity. The team identified child-parent quality, child-teacher relationship, child self-concept and self-control as four potential resource factors that enable children to adapt positively to adversity; Similarly,

Beers's qualitative study (2018) revealed the important role of teachers' responsiveness to children's social emotional needs and home-school collaboration as two factors that facilitating the development of resilience when children were facing preschool transition. Further, Beers pointed out stability, consistency and attachment (to significant adults, peer or objects) are distinctive concerns regarding early childhood's resilience; taking a macro perspective, Luthar and Eisenberg (2017) pointed out a major shift in the direction of prevention science to focus on contexts in intervention development. In particular, caregivers and teachers should be considered not only in terms of how they affect children's functioning but as important dependent variables in themselves to manifest resilient adaptation. Our study specifically investigated the preschool teachers' factor.

Teachers are significant adults for preschoolers. Research such as Bailey, Zinsser, Curby, Denham, and Bassett (2013) as well as Sakellariou and Rentzou (2012) have reported that the quality of early interactions between preschool teachers and children affected and predicted children's overall development; Miller-Lewis, Searle, Sawyer, Baghurst, and Hedley (2013) found that higher quality preschool child-teacher relationship was associated with resilient mental health outcomes. Furthermore, Bouillet, Ivanec, and Miljević-Ridički (2014) looked into preschool teachers' resilience and teachers' readiness for building children's resilience in Croatia. They found that the general institutional climate and resilience of preschool teachers were two important aspects in promoting resilience in the early educational environment. In particular, preschool teachers who perceived themselves as more resilient indicated they were more competent in developing resilience in children. Moreover, preschool teachers who perceived their institutional climate as supportive felt that they were more competent at fostering resilience in children and more willing to implement programs related to the development of children's resilience.

Resilience in Chinese culture

Cultural factors play an important role in understanding resilience (Shek, 2004). Indeed, recent research on resilience has suggested that despite the common resilience factors across different cultures, the expression, interpretation, and mechanism of those resilience

factors may work differently depending on the context and culture (Ungar, 2011; Ni, Li, & Zhao, 2014).

In fact, the concept of resilience has long been presented in Chinese culture and education throughout history. In its 5,000-year history, the Chinese nation has undergone changes in successive dynasties, which has required a lot of adaptation. Both “danger” (危) and “opportunities” (機) are included in the Chinese phrase “crisis” (危機). Being the two core philosophies in Chinese education, both Confucianism and Taoism have mentioned similar characteristics of the contemporary concept of resilience. According to Taoist theory, the proverb “huò fú xiāng yī” (禍福相依) suggests the relativity of things, which that reminds people to adopt a flexible mindset and think beyond misfortune; “Tiān xià mò róu ruò yú shuǐ, ér gōng jiān qiáng zhě mò zhī néng shèng” (Nothing in the world is weaker and softer than water. When it comes to overpowering the hard and strong [things], water is second to none) (天下莫柔弱於水，而攻堅強者莫之能勝) also suggests the importance of being flexible and adaptive in the face of challenges. Besides, Confucianism emphasizes the importance of personality cultivation and developing one’s potential to cope with adversities; consider the proverb “You zhì zhè shì jìng chéng” (where there is a will, there is a way) (有志者事竟成). Also, teacher is more than a person passing on the literacy, he/she is one who cultivates morality and dispels confusion, “Shī zhě, suǒ yǐ chuándào, shòuyè, jiěhuò yě.” (“On Teaching” by Tang dynasty scholar Han Yu). (師者，所以傳道、受業、解惑也). All of these demonstrate the importance of resilience in Chinese culture and the important role of teachers.

Resilience in Hong Kong preschool context

The care of young children has long been viewed as the responsibility of the family (Wong & Rao, 2015), and learning at school was highly performance-oriented and structured in general (Opper, 1992a). With the global awareness and increasing evidence of the importance of early childhood education in the 1990s, the Hong Kong government launched an education reform in the mid-1990s. Since then, “child-centeredness” (i.e. developing the individual qualities of a child rather than providing a generalized

information or training by way of prescribed subject matter) and “holistic development” (i.e. learning that combines an individual's mental, physical, social, emotional and spiritual growth instead of just learning the subject matter) were considered as the two core areas of Hong Kong preschool education. Kindergartens places key emphasis on “nurturing children’s holistic development.”

In recent years, the government emphasized resilience as an important component in holistic development of students (Education Bureau, 2017). While most of the primary effort and resources were given to elementary, secondary and tertiary education (e.g., Shek, 2010; Wong et al., 2009; Siu, 2009), it has begun to gain attention in preschool education too (e.g., Lau et al., 2010; The Education University of Hong Kong, 2017). For example, at The Education University of Hong Kong’s conference (2017) on children’s soft skills, resilience was identified as one of the soft skills which fosters whole child development and requires more attention in pre-school education, research and home education.

With recent education reforms to enhance professional competence among early childhood teachers, scholars such as Wong and Rao (2015) observed that Hong Kong teachers, while acknowledging the importance of child-centered learning and have tried to implement recommendations made by official guidelines, their actual practices often reflect traditional value of more teacher-oriented learning. Classrooms had long remained highly structured and curricula academically focused (Rao et al., 2009).

About the present study

Bouillet et al.’s (2014) identified the general institutional climate and resilience of preschool teachers as two important aspects in promoting resilience in the early educational environment. With the unique cultural context, it is worth investigating whether such findings are similar to another culture, say among Chinese Hong Kong teachers. Previous research suggested that culture context plays a role in the factors which influences kindergarten teachers’ subjective well-being. For example, Benevene and colleagues (2018) found that Hong Kong kindergarten teachers were more satisfied in pay and promotion, but less in supervision, operating condition, co-worker relationship, nature of work and

communication comparing with their Italy counterpart, and suggested having more resilience as a possible reason why Hong Kong teachers had less mental health complaints despite of their lower self-esteem in comparison to their Italian colleagues. Hence, this present study looked into teachers' resilience and the connection between teachers' own resilience and their readiness for fostering preschool children's resilience.

Method

Participants

A convenience sample was used in this study. A total of 240 questionnaires were distributed to teachers working in preschool settings. Two hundred and fifteen teachers completed and returned the questionnaires. The return rate was 89%. Nineteen questionnaires were discarded because of incomplete responses. Hence, the sample used for the following analysis consisted of 196 participants, including 93.8% female, 6% male, and 0.2% undeclared. Demographic details of the participants were shown in Table 1.

In terms of age, the majority of participants (117, i.e., 59.7%) was between 21 and 30, 37 participants (18.9%) were between 31 and 40, 25 participants (12.8%) were between 41 and 50, 15 participants (7.7%) were above 50, 1 participant (0.5%) was under 20, and 1 participant (0.5%) was of unknown age. With reference to teaching experience, the majority of participants (94, i.e., 47.9%) had 5 years or less, 30 participants (i.e., 15.3%) had 6-10 years, 10 participants (i.e., 5.1%) had 11-15 years, 14 participants (i.e., 7.1%) had 16-20 years, 26 participants (i.e., 13.3%) had over 20 years, and 22 participants (i.e., 11.2) had unknown durations of experience. Regarding education background, the majority of participants (113, i.e., 57.7%) held bachelor's degrees, 8 participants (4.1%) held postgraduate degrees, 68 participants (34.7%) held higher diplomas, 4 participants (2.0%) lacked a relevant education background, and 3 participants (1.5%) had unknown education backgrounds.

Table 1a. *Participants' age frequency distribution*

Age Range	Frequency	Percent
≤ 20	1	0.5
21-30	117	59.7
31- 40	37	18.9
41- 50	25	12.8
> 50	15	7.7
Unknown	1	0.5

Note: N=196

Table 1b. *Participants' teaching experience frequency distribution*

Years of Teaching Experience	Frequency	Percent
≤ 5 years	94	47.9
6-10 years	30	15.3
11-15 years	10	5.1
16-20 years	14	7.1
> 20 years	26	13.3
Unknown	22	11.2

Note: N=196

Table 1c. *Participants' education background frequency distribution*

Education Background	Frequency	Percent
Higher diplomas	68	34.7
Bachelor's degrees	113	57.7
Postgraduate degrees	8	4.1
Lacked a relevant education background	4	2.0
Unknown	3	1.5

Note: N=196

Measures

Resilience Scale for Adults (Friborg et al., 2003, 2005) is a 33-item self-report inventory with a 7-point scale with a semantic differential format including negative and positive attributes at each end. The five dimensions of resilience measured are (1) *Personal*

Competency (ten items), (2) *Social Competence* (six items), (3) *Family Cohesion* (six items), (4) *Social Resources* (seven items), and (5) *Structured Style* (four items). *Personal Competency* refers to confidence in one's own abilities and judgments, self-efficacy and realistic expectations (e.g., "When something unforeseen happens, I always find a solution") ; *Social Competence* contains items measuring levels of social warmth and flexibility, ability to establish friendships, and the positive use of humor (e.g., "New friendships are something I make easily"); *Family Cohesion* measures whether values are shared or discordant in the family and whether family members enjoy spending time with each other, have an optimistic view of the future, have loyalty toward each other, and have the feeling of mutual appreciation and support (e.g., "My family is characterized by healthy coherence"); *Social Resources* measure availability of social support, whether they have a confidante outside the family (such as friends or other family members that appreciate and encourage them), and whether they may turn to someone outside the family for help if needed ("When needed, I have always someone who can help me"); and *Structured Style* measures the preference of having and following routines, being organized, and the preference of clear goals and plans before undertaking activities (e.g., "I am at my best when I have a clear goal to strive for"). Higher scores indicate higher levels of protective factors of resilience. Studies demonstrated adequate reliability ($\alpha > 0.76$) and cross-cultural construct validity of the scale (e.g., Friborg, Martinussen, & Rosenvinge, 2006; Hjerdal, Friborg, Braun, Kempnaers, Linkowski & Fossion, 2011).

Questionnaire on the Readiness of Preschool Teachers for Developing Children's Resilience (Bouillet et al., 2014) is a 27-item self-reporting inventory with a 7-point Likert scale (1=not true at all, 7=very true). The five dimensions of readiness measured by this scale are (1) *Competences* (e.g., "My education adequately prepared me to encourage preschool children's resilience"), 8 items, (2) *Supportive Attitudes* - (e.g., "Resilience development programs help teachers in their professional development"), 6 items; (3) *Willingness* (e.g., "The development of children's resilience is not my job"), 6 items; (4) *Institutional Climate* (e.g., "The general attitude in my kindergarten is that we have too much work already to deal with special programs"), 4 items; and (5) *Conditions* (e.g., "Good director's leadership and an expert team in the kindergarten are needed for successful implementation of the resilience development programs"), 3 items. This measure

was constructed following the model of The Questionnaire Assessing Teacher Perceived Support for and Attitudes about Social and Emotional Learning (Schultz et al., 2010). The factor analysis of these five interpretable factors, as reported in Boillet et al. (2014) explained 54.80 per cent of total variance.

Items of both questionnaires were translated to Chinese for the purpose of this study. Backward translation was also adopted to ensure word accuracy and overall meaning of the original items. The translation was done by a group of research assistants with background in psychology and language.

Procedure

Data collection started after obtaining ethical approval from the Research Ethics Committee of the university where the researcher was in. Copies of the questionnaires were distributed to the schools based on a convenience sample. Informed consent was obtained before the start of the data collection process. Teachers were asked to complete the questionnaires on a voluntary basis and leave their completed forms in a collection box at the school. A research assistant went to the schools to collect the completed and the blank forms.

Results

Preschool Teachers' Resilience

Results from the descriptive data show that teachers had a relatively high level of resilience on all of the measured dimensions (compared with the theoretical average scale result of 4). Their scores in the five dimensions were *Personal Competency* ($M=5.32$, $SD=0.86$), *Social Competence* ($M= 4.98$, $SD= 0.92$), *Family Cohesion* ($M= 5.65$, $SD= 0.90$), *Social Resource* ($M= 5.47$, $SD= 0.79$), and *Structured Style* ($M=5.33$, $SD= 0.86$), respectively. In particular, they scored highest in *Family Cohesion* and lowest in *Social Competence* (see Table 2). The internal consistency of the five subscales for the current

Table 2. *Descriptive indicators of Hong Kong preschool teachers' resilience dimensions*

Dimensions of resilience	M	SD
<i>Personal Competency</i>	5.32	0.86
<i>Social Competence</i>	4.98	0.92
<i>Family Cohesion</i>	5.65	0.90
<i>Social Resource</i>	5.47	0.79
<i>Structured Style</i>	5.33	0.86

Note: N=196

study group were 0.96 (*Personal Competency*), 0.91 (*Social Competence*), 0.93 (*Family Cohesion*), 0.90 (*Social Resource*), and 0.86 (*Structured Style*).

Preschool Teachers' Readiness to Foster Children's Resilience

The results from the current sample show that preschool teachers were generally ready to foster children's resilience. In particular, they had relatively highly supportive attitudes toward children's resilience programs; *Supportive Attitudes* had the highest score out of the five dimensions. Nevertheless, teachers were less willing to take charge of implementing those programs, which scored the lowest. Their scores in the five dimensions were *Competences* ($M=4.78$, $SD=0.98$), *Supportive Attitudes* ($M= 5.65$, $SD= 0.71$), *Willingness* ($M=4.47$, $SD= 1.01$), *Institutional Climate* ($M= 4.80$. $SD= 1.19$), and *Conditions* ($M=4.93$, $SD= 0.99$), respectively (see Table 3). The internal consistency values of the five subscales for the current study group were 0.94 (*Competences*), 0.87 (*Supportive Attitudes*), 0.76 (*Willingness*), 0.83(*Institutional Climate*), and 0.65 (*Conditions*), respectively.

Table 3. *Descriptive indicators of the readiness of Hong Kong preschool teachers for developing children's resilience*

Factors	M	SD
<i>Competences</i>	4.78	0.98
<i>Supportive Attitudes</i>	5.65	0.71
<i>Willingness</i>	4.47	1.01
<i>Institutional Climate</i>	4.80	1.19
<i>Conditions</i>	4.93	0.99

Note: N=196

Relationship between preschool teachers' resilience and readiness to foster children's resilience

The results show that participants' total scores on their resilience and readiness to foster children's resilience were significantly inter-correlated ($r = .42$).

Furthermore, to explore the teachers' perceived competence, supportive attitudes, and willingness to implement programs for developing children's resilience (PDCR) in relation to their own resilience and the level of perceived institutional support, univariate analyses of variance were conducted. The independent variables were 1) preschool teachers' resilience and 2) supportiveness of the institutional climate. With regard to teachers' self-ratings on the five dimensions of resilience, k-means cluster analysis was conducted to find groups in the data (Trevino, 2016; Bouillet, et al, 2014). Cluster analysis revealed that two clusters of teachers differed significantly in their resilience (with participants from one cluster being significantly more resilient than those from the other cluster), and two clusters of teachers differed significantly in their levels of perceived institutional support (with participants from one cluster significantly perceiving more institutional support than those from the other cluster). Hence, teachers were grouped in to "less resilient teachers" and "more resilient teachers" groups in the resilience category and "less supportive institutional climate" and "more supportive institutional climate" groups in the supportiveness of institutional climate category, respectively.

Table 4 presents the main effect of preschool teachers' resilience on their perception of their own competence for developing children's resilience and their supportive attitudes toward PDCR. Moreover, the main effect of institutional climate supportiveness was obtained for supportive attitudes toward PDCR and willingness to implement those programs. There were no interaction effects between resilience and institutional climate. Figure 1 to 3 present the average results for competence, supportive attitude, and willingness to implement resilience programs with regard to preschool teachers' resilience and supportiveness of the institutional climate.

The results indicate that more resilient teachers perceived themselves as more competent for developing children's resilience, and also held more supportive attitudes toward children's resilience programs. Those participants who perceived their kindergartens as

more supportive held more supportive attitudes toward children’s resilience programs and were more willing to implement those programs. Interestingly, for less resilient teachers, the institutional climate tended to play a more important role in affecting their perception of competence for developing children’s resilience. Conversely, the institutional climate tended to affect highly resilient teachers more in terms of their willingness to implement PDCR.

Table 4. *Main effects of preschool teachers’ resilience and supportiveness of institutional climate*

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	Competences for Implementation of PDCR ^a	Supportive Attitudes about PDCR	Willingness to Implement PDCR
1. Preschool Teachers’ Resilience	17.94**	4.13*	0.23
2. Supportiveness of Institutional Climate	2.73	28.93**	69.06**
1 x 2	1.38	0.43	3.21

Notes. *p< 0.05, **p< 0.01; ^a Programmes for Developing Children’s Resilience

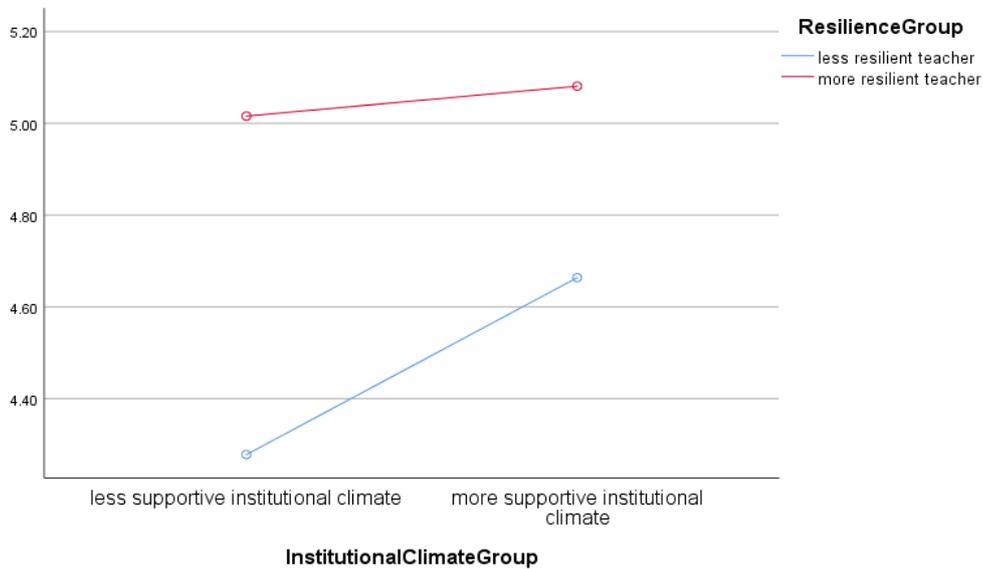


Figure 1. Preschool teachers’ perceived competence for implementing programmes for developing children’s resilience with regard to their resilience and institutional climate supportiveness

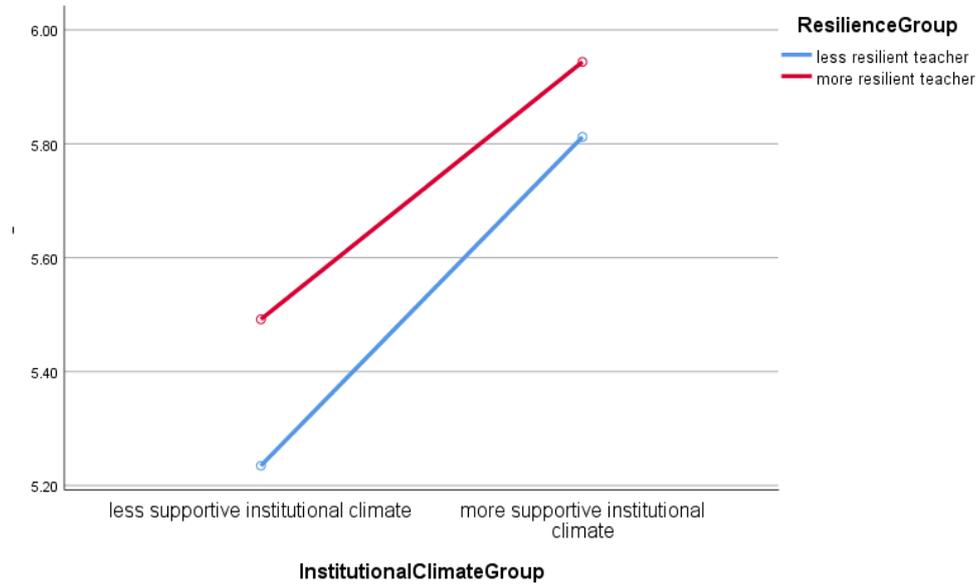


Figure 2. Preschool teachers' supportive attitudes towards implementing programmes for developing children's resilience with regard to their resilience and institutional climate supportiveness

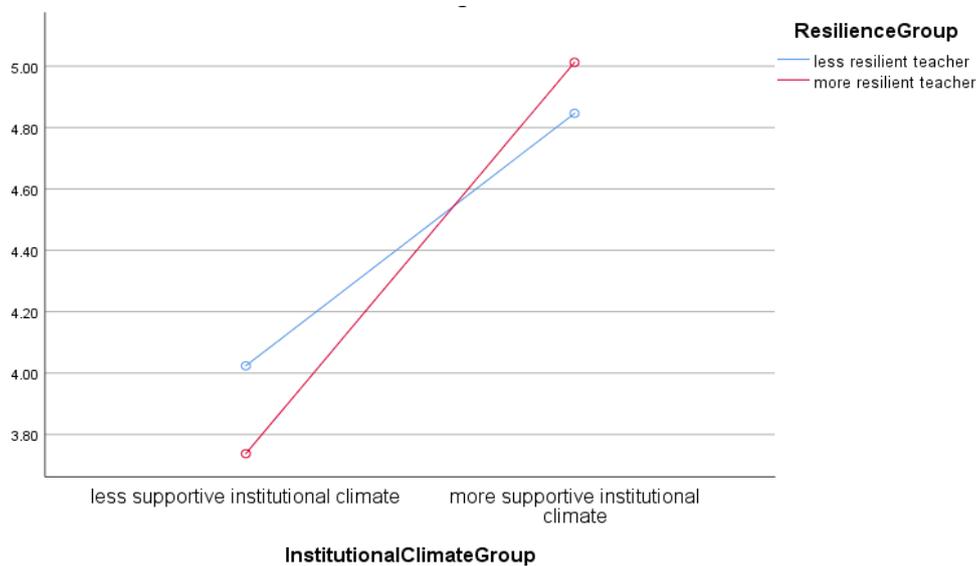


Figure 3. Preschool teachers' willingness to implement programmes for developing children's resilience with regard to their resilience and institutional climate supportiveness

Discussion

The present study investigated Hong Kong preschool teachers' resilience and the effects of the interaction between the teachers' resilience and institutional climate on their readiness for fostering children's resilience.

Hong Kong preschool teachers' resilience: Strengths and concerns

Hong Kong preschool teachers had a relatively high resilience in all of the measured dimensions, quite comparable with the resilience level of Croatia's preschool teachers in Bouillet et al. (2014). Except for *Social Competence*, Hong Kong preschool teachers scored above 5 in the other four dimensions of resilience, with the highest score in *Family Cohesion*. On the one hand, this reflected Hong Kong preschool teachers' general high resilience in the era of reform and challenges. This is a reassuring result, as teachers are role models for children and transmit their attitudes and emotions to the children and vice versa (Ylitapio-Mäntylä et al., 2012). Moreover, family is identified as a significant factor contributing to Hong Kong preschool teachers' resilience. Recent research on Chinese children and adolescents has also identified strong family relationships and support as cultural strengths for enhancing resilience (Ni, Li, & Zhao, 2014).

On the other hand, the relatively lower score in *Social Competence* suggests the self-restraint characteristic of Hong Kong preschool teachers and may result from an environmental constraint. Hong Kong culture is influenced by both Chinese and British cultures; the Confucian encourages self-control (e.g., 克己服禮 "To subdue one's self and return to propriety"), whereas the traditional British tends to be emotionally reserved. As such, the self-restraint characteristic is understandable. Neither active socializing nor communication with strangers (the two items in which the Hong Kong preschool teachers scored the lowest) is a norm of Hong Kong culture, and the social circle of the preschool teacher population is relatively narrow. Self-restraint can be both protective and a risk factor for resilience. While moderate self-restraint helps to control impulses, too much self-restraint may hinder one's willingness to reach out for new opportunities, which is an

important competence contributing to resilience (Reivich & Shatté, 2002). In addition, the preschool teachers' deprivation of rest time might have weakened their social competence in relating to others and developing friendships. In fact, scholars have pointed out that while social and emotion competence (SEC) is an important factor in any educational setting, little attention has been paid to supporting teachers' SEC. For example, considering the lack of explicit pre- or in-service training aimed at teachers' personal development, the current educational system appears to assume teachers have the requisite SEC (Jennings & Greenberg, 2009).

Readiness of teachers to foster children's resilience fostering children's resilience

Results from this study indicated that Hong Kong preschool teachers were generally ready to foster children's resilience. In particular, they had relatively highly supportive attitudes toward children's resilience programs. The values of "child-centeredness" and "holistic development" seemed to have been implanted into the teachers' minds, as the connection between the holistic development and resilience as aforementioned. However, when it came to implementing the programs, teachers were less willing to be in charge, as reflected in the relatively low score in Willingness. This differs from Bouillet et al. (2014), who found similar scores in Supportive Attitudes and Willingness. There could be many reasons to this low score in Willingness. Possible reasons include teachers' reluctance to see this as their primary role (instead, they view it more as parents' responsibility), dense teaching schedule and priority on developing children's cognitive ability

Institutional climate determined willingness

With regard to the effects of the interaction between teachers' resilience and institutional climate on their readiness for fostering children's resilience, as in Bouillet et al. (2014), we found preschool teachers' resilience and institutional climate supportiveness to have the main effects. Nevertheless, the interaction patterns of the two factors differed slightly from Bouillet et al. (2014). In particular, as the more resilient teaching group, the institutional climate of Hong Kong preschool teachers was less likely to affect their perceived

competence for implementing PDCR than that of Croatian teachers, yet their willingness to implement PDCR was more sensitive to the institutional climate than that of Croatian teachers. This may reflect the down-to-earth character of Hong Kong preschool teachers: as they perceive less support from their institution, they intentionally place less effort in implementing PDCR, regardless of their supportive attitudes and competences in doing so. Hence, when Hong Kong preschool teachers have a certain level and awareness of resilience, institutional climate plays a key role in determining their willingness to implement PDCR. Previous research about Hong Kong preschool teachers' wellbeing and perceived school culture also showed that collegial support and collaboration tended to be strong factors in determining teachers' wellbeing (Wong & Zhang, 2014).

Conclusion and future directions

This was the first study conducted in Hong Kong of preschool teachers' own resilience and their willingness to foster young children's resilience. The study is significant in enriching the research on early childhood resilience in general and on resilience in the Chinese culture in particular. From a practical perspective, our study provides support for the efforts of the education reform in early childhood settings. It also provides insights and directions for Hong Kong education policy and early childhood resilience promotion.

Despite this study's contributions, one must be aware of its limitations when interpreting the results. First, the preschool teachers who participated in this study were based on a convenience sample; hence, the results may not be generalizable to other teachers and the whole kindergarten sector. Second, the self-report measures may not capture the characteristics of teachers' resilience and their real practices of fostering resilience in young children.

In view of these limitations, we recommend future qualitative research to address the underlying reasons for the current findings to gain a better understanding of teachers' protective and risk factors in their own resilience and the core concerns over the ways to foster resilience in young children.

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