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Multistressed families in Singapore: A focus on transnational families

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1. Introduction

Many families, when faced with multiple stressors, become overwhelmed, ill-equipped and inadequate to care and provide for their children. Over time, this may lead to family dysfunctioning (Ng, 2013). In Singapore, the government has been committed to helping these multistressed families (MF) defined as families “...who experience multiple or severe problems that adversely affect the well-being of the family” (Ministry of Community Development Youth & Sports, 2009). However, within this group of MF families, a subgroup of transnational families that are experiencing multiple stressors has been growing in numbers in recent years due to an increase in transnational marriages in the Asian region. Since transnational families have certain unique family characteristics that are different from other MF, this makes MF in the Singapore context a heterogeneous group with implications for local social work practice and service-delivery to help these families. Yet, there is a general lack of research on the characteristics of MF and their family functioning. Therefore, this paper aims to understand the characteristics of MF in Singapore by examining how the transnational MF are different from the broader group. We also give attention to understanding how the children in these families are coping with the problems by examining the characteristics of the children in these families, their coping, and their levels of resilience. Finally, we consider how family problems and functioning in MF are associated with youth resilience.

Many low-income families do not experience economic hardship in isolation; they face multiple issues – a “piling-up” of stressors – that overwhelm their abilities to respond and to function (McCubbin & Patterson, 1983). A study on low-income families in Singapore found a high prevalence of multiple stressors such as low education, single parenthood, health and mental health problems, criminal history, and children’s health and behavior problems (Ng, 2013). The compounding effect of these stressors overwhelms the abilities of these families to function (LaMont, 2014; Ng, 2013). In her study on MF, LaMont (2014) found that internally, these families are likely to be characterized by poor family functioning, marital problems, parenting stress, and weak parent–child relationships. Externally, they live in environments that lack resources to support their needs or multiple system barriers exist that hinder them in accessing these resources. Help for these MF, therefore, has to attend holistically to their multiple issues and should not solely focus on financial goals because these families have “poor functioning systems in many areas with little ability to compensate”

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Strategies to help MF should also consider their ecological context in which environmental factors may play a role in causing or perpetuating problems. The delivery of services to help these families, when not carefully planned or coordinated, may be one such factor.

In most societies including Singapore, families are expected to provide for the needs of their children. However, for MF in Singapore, they often are overwhelmed, stressed out and feel inadequate to provide for their children (Ministry of Community Development Youth & Sports, 2009; Ng, 2013). When they seek help from the community, they are not helped because help systems are uncoordinated, inflexible, or complex (Ministry of Social and Family Development, 2015). When service delivery is fragmented and uncoordinated, families may be bounced from one agency to another to get what they need (Leon, 1999); Very often, they have to return repeatedly to the help system because resources provided to them are often short-term, if not ineffective. These families may become even more vulnerable when help seeking turns out to be frustrating and disempowering for them (Leon, 1999).

The Singapore government recognizes the difficulties faced by this group of families and has taken several measures to address the issues. In 2009, the government set aside SG$100 million (US$76 million) over 5 years to improve the help provided to these MF families (Ministry of Community Development Youth & Sports, 2009a, 2009b). The “Strengthening Families Together” (SFT) program in 2014 was another key initiative by the government to improve service-delivery in helping MF (Ministry of Social and Family Development, 2015). This program was initiated because of the needs of MF who faced system barriers due to uncoordinated and short-term help provision, and who returned to help systems repeatedly because of multiple family problems and needs. It has three major objectives: (1) improve multistressed families’ access to resources using a whole-of-government approach; (2) raise developmental prospects for the children of these families; and (3) better align the range of government assistance to these families. Social workers are trained to work holistically with these families and to advocate with systems for resources that meet their complex and inter-connected needs. The casework in SFT takes a systemic approach that considers multiple factors and that through improving inter-agency collaborations (e.g. school, housing, job placement, welfare), these families will ultimately benefit from the resources they need and receive (see Section 2 for program eligibility).

There has been little research that examines the characteristics of this group of MF in Singapore and perhaps elsewhere in Asia, and their level of family functioning. The findings from limited number of local studies so far are not sufficient for developing evidence-informed service delivery and practice with them. Furthermore, in recent years, the increase in transnational families who also faced multiple barriers to resources has added complexity to the service delivery and practice with MF in Singapore. Transnational marriages (also known as cross-national or international marriages) between Singapore citizens and foreigners have increased in recent years. In 2013, 30% of all marriages here were between a Singapore citizen and a foreign spouse – up from 23% percent in 2003 (Ministry of Social and Family Development, 2014). Almost 8 out of 10 transnational marriages in 2010 were between a Singaporean man and a foreign bride (Yeoh, Chee, & Baey, 2013). Many of these Singaporean men were blue-collar workers of low education who married younger foreign women from poor families in lower-income countries in Asia, such as Indonesia, Vietnam, Myanmar and China (Cheng, Yeoh, & Zhang, 2015; Yeoh et al., 2013; Yeoh, Chee, & Vu, 2014).

In Singapore, foreign wives who marry a Singaporean man do not automatically qualify themselves to reside in Singapore unless they obtain a relevant immigration pass such as a long-term visit pass (Ministry of Social and Family Development, 2014). The type of immigration visit pass issued by local authorities determines these women’s duration of stay and their eligibility to work and for healthcare subsidies. Obtaining citizenship is important to these women. Yet, there is a weak relationship between getting a visit pass and citizenship because these foreign wives are not guaranteed citizenships or permanent residency with their visit pass. Since citizenship entitles them to government subsidies and schemes, foreign wives cannot take advantage of resources potentially beneficial to the family (Yeoh et al., 2013). Foreign wives, for example, cannot own public housing. Only since 2013, Singaporean husbands with foreign wives can purchase new public apartments with government housing grants (Housing Development Board, 2018; Sumita, 2013). Foreign wives who are unable to work add burden on their single-income Singaporean husbands (Chia, 2013; Today, 2012).

It is important to note that transnational families are not a homogenous group and class differences do exist across these families. Families with better means and resources may be able to cope better even when restricted from activities (e.g. employment) or ineligible for resources (e.g. health subsidies, affordable housing) than those families with lesser resources but facing the same restrictions and inequalities. Indeed, an important concern in Singapore – also the focus of this paper – has been with the growing numbers of a group of transnational MF with poorer coping and means that are seeking help repeatedly from social services for multiple needs (Chia, 2013). This group of transnational MF is characterized by older Singaporean men in their 40s to 50s who hold blue-collar jobs, have low education levels, earn low incomes, and married to younger foreign wives (Chia, 2013). These families are stressed by multiple needs such as finances, housing, immigration, health, and employment. Many of these families also have marital problems arising from cultural differences, conflict in marital role expectations, and communication problems between the spouses (Cheng et al., 2015; Chia, 2013; Williams, 2007; Yeoh et al., 2013). Studies of transnational families in South Korea and Taiwan indicate that they have poorer family functioning, and more marital conflicts and family violence than local families (Lee, Park, Hwang, Im, & Ahn, 2014; Shin, Doh, Hong, & Kim, 2012; Yang & Wang, 2011). Currently, little is known about transnational MF in Singapore and this study fills this knowledge gap.

Since family is an important developmental context for youths, how the problems faced by MF affect the youths, especially for the youths in transnational MF, is a major concern (Reitz, Motti-Stefanidi, & Asendorpf, 2014). Two important groups of studies contribute to our understanding. Firstly, studies with immigrant families clearly indicate that immigration can be stressful for parents and their youths. The youths experience changes in their families, schools, neighborhoods, and peers. Youths, as a result of their or their parents’ immigrant status, are likely to encounter poverty, discrimination and prejudice (Belhadj Kouider, Koglin, & Petermann, 2014) and it subsequently affects their adaptation and well-being (Chapman & Perreira, 2005). Studies from North America and Europe on immigrant youths or youths of at least one parent who immigrated show that these youths were more likely to have mental and physical health problems, engage in illegal substance use and delinquency, experience low peer acceptance, and attain poorer academic and school functioning outcomes than local children (Belhadj Kouider et al., 2014; Belhadj Kouider, Koglin, & Petermann, 2015; Chapman & Perreira, 2005; Motti-Stefanidi & Masten, 2013). Secondly, studies with transnational families in South Korea and Taiwan also show that their youths have higher depression rates (Chun & Chung, 2011; Lin, Tung, & Hsieh, 2011), more externalizing and internalizing problems (Lee et al., 2014; Yang, Kuo, Wang, & Yang, 2014), and are likely to experience discrimination and prejudice (Chun & Chung, 2011). Many of these problems were a result of stressors occurring at the family level such as citizenship issues, financial difficulties, cultural differences, marital and family problems (Lee et al., 2014; Shin et al., 2012; Yang & Wang, 2011; Yeoh et al., 2013).

While youths of transnational families may face risks and problems, there are variations in how youths are impacted. One group of studies, indeed, show that in spite of the challenges faced by immigrant youths,
many were able to show positive adaptations in their new countries (Motti-Stefanidi & Masten, 2013). The resilience framework has been used to understand how these immigrant youths can positively cope with hardships, difficulties, and challenges (see Motti-Stefanidi & Masten, 2017). Resilience has been defined as the youths’ “capacity for adaptation to challenges that threaten the function or development of a dynamic system, manifested in pathways and patterns of positive adaptation during or following exposure to significant risk” (Motti-Stefanidi & Masten, 2017, pp. 20). Positive adaptation can take place externally like functioning well in school or keeping themselves crime-free, or internally in enhancement of self-efficacy, self-identity, emotional regulation or coping (Motti-Stefanidi & Masten, 2017). Moreover, resilience can be multidimensional and the development of self-efficacy, self-control, emotional-regulation and positive coping in these youths is likely to promote their academic achievement, social competence and well-being (Motti-Stefanidi & Masten, 2017; Swanson, Valiente, Lemery-Chalfant, & O’Brien, 2011).

Family context is the key to the development of resilience in youths. Studies indicate that family relationships, family members’ support and interactions among members are crucial to the development of youth competence and the promotion of adaptive educational, social, emotional, and behavioral functioning (Sheridan, Sjuts, & Coutts, 2013; Zolkoski & Bullock, 2012). According to bio-ecological theory, positive transactions between a youth and his/her family can support the development of resilience and help the youth to cope and respond adaptively to stressors (Bronfenbrenner, 1986; Motti-Stefanidi & Masten, 2017; Williams & Nelson-Gardell, 2012). On the other hand, stressors that families experience may weaken family functioning and adversely affect the youths (family stress theory). However, this has been criticized as overly deterministic (Jung, Fuller, & Galindo, 2012). Researchers have argued that when families experience stressors, certain family processes can help restore functioning or facilitate positive adaptations (Patterson, 2013). Studies with immigrant families found that parents can show resilience by producing positive parenting and strong family cohesion that buffer the effects of family stressors and adversities (Jung et al., 2012). The cultural concept of familialismo (Latin for the primacy of family), for example, among Latino immigrant families illustrates the protective nature of family for their youths (Chapman & Perreira, 2005).

Youths from MF need supportive parents who can help them cope with problems they face in school or with their peers. Youths of transnational families need guidance from their parents on issues of acculturation or discrimination. They all need a family that is cohesive to support their developmental needs while at the same time shows flexibility in meeting their needs for autonomy. Cohesion and flexibility are two central concepts of family functioning used for analyses in this paper because they match the youths’ developmental needs for relatedness and autonomy. One longitudinal study shows that immigrant families with high levels of family cohesion positively influenced changes in the youths’ self-efficacy and self-identity (Reitz et al., 2014). Youths of family with high levels of family flexibility are found to have higher self-esteem and self-efficacy, better positive conducts and academic achievements (Chapman & Perreira, 2005; Motti-Stefanidi, 2014). On the other hand, when there are high levels of conflicts in the family, youths’ self-esteem decreases and they have more conduct problems and psychological symptoms (Motti-Stefanidi, 2014).

In summary, there is a general lack of studies on MF in Singapore especially with a group of transnational families experiencing multiple stressors. Our descriptive study aims to (1) examine the socio-demographic profile and family functioning of MF and their youths, with (2) a special attention to the transnational MF families. Since current studies on MF mostly focus on dysfunctional family processes and negative youth outcomes, we also (3) explore the associations between family characteristics including adaptive family functioning, and the resilience of their youths. We hypothesize that (a) the transnational MF families are different from the non-transnational MF families on various socio-demographic and socioeconomic features such as age difference between spouses, family income, number of needs, employment, family functioning, and youth resilience; and (b) higher family cohesion, higher family flexibility, higher family income, and fewer system needs will be positively associated with higher youth resilience.

2. Methods

2.1. Participants

Our study examines a sample of 206 families who participated in the ‘Strengthening Families Together’ government-funded national pilot scheme in Singapore. This pilot scheme aimed to help families with multiple needs due to system barriers that prevented them from accessing help. Families who sought help from 11 community-based social service centers across the country during the period between February 2014 to December 2015 were assessed by social workers for eligibility for the scheme. Families were eligible for the scheme if they were assessed to experience at least three system barriers in accessing help based on the system needs form (described in measures below), have at least one child aged 21 and below, and a monthly family income below SGS1900 (US$1500; income eligibility criteria for government assistance schemes). The pilot operated in the period 2014–2016. This study was part of a larger evaluation study of the pilot program. This paper uses a cross-sectional approach to analyze the baseline data collected from the families at recruitment. Only parents and their children between age 12 and 21 provided data for the study. Families were referred by local social service agencies to the pilot. A team of staff from the government ministry was responsible for initial screening and subsequent referral of families that met the inclusion criteria.

The pilot scheme recruited 206 families, with a total of 288 parents and 198 youths (see Tables 1 and 3). The sample comprised of 60% (n = 124) non-transnational families and 40% (n = 82) transnational families. Out of 288 parents, 60% (173) were parents from non-transnational families and 40% (115) were from transnational families. Out of 198 youths, 144 (73%) were from non-transnational families and 54 (27%) were from transnational families. Since recruitment was done on a family basis, parents can be either father or mother or both, and youths can be siblings from the same families.

2.2. Procedures

All available parents in each family and their children aged 12–21 completed the baseline survey immediately after informed consent was obtained from the parents and the youths. Youths and their siblings participated in the research because they received services as part of the pilot scheme. Consent procedures were reviewed and approved by the Institutional Review Board of The National University of Singapore.

The surveys were printed on papers and provided to the participants by the caseworkers assigned to the families. The surveys were then self-administered and took < 30 min to complete. Surveys were provided in English, Chinese, and Malay languages according to the preference of the participants. Cash vouchers of SGS20 were given to incentivize participants’ completion of surveys. The research team was primarily involved with study design and data analysis. We were not involved in survey administration and interventions to ensure participants confidentiality and research independence. Completed surveys were sent back to the research team and stored securely in the university. De-identified data were kept in a research computer and all the survey forms were destroyed immediately after the completion of the pilot scheme.
2.3. Measures

2.3.1. Demographic information

Every parent participant provided sociodemographic information such as age, gender, marital status, education level, and current occupation. We also obtained information on the family composition, family income, and gender and age of the children.

2.3.2. Youth's functioning in school and involvement with police

Two items measured the youth's level of functioning in school. The first item looked at the youth's level of school truancy using a nominal level of measurement with 0 indicating “Not in school all or most of the time”, 1 “In school some of the time”, and 2 “In school all or most of the time”. The second item indicated if the student has problems in their academic performance using a dichotomous scoring: 0 “Yes, has problems” and 1 “No, has no problems”. One item measured the youth's involvement with police using a dichotomous scoring: 0 “Yes, youth is in trouble with the police” and 1 “No, youth is not in trouble with the police”. These items were reported by the caseworkers of the families.

2.3.3. System needs

Ten items in the system barriers module of the “Family advocacy and support tool” (FAST) Singapore version 1.2 (Lyons, 2014) were used to measure the level of system needs and system types in the families. FAST is the family version of the “Child and Adolescent Needs and Strengths” (CANS) group of planning and outcome management tools (Lyons, 2014). The purpose of FAST, which is a communimetric tool, is to capture a shared view on the needs and strengths of the individual and the family in the community. The tool was originally developed to address the needs of families who are at risk of child welfare problems and 1 “No, has no problems”. One item measured the youth's involvement with police using a dichotomous scoring: 0 “Yes, youth is in trouble with the police” and 1 “No, youth is not in trouble with the police”. These items were reported by the caseworkers of the families.

2.3.4. System needs

Ten items in the system barriers module of the “Family advocacy and support tool” (FAST) Singapore version 1.2 (Lyons, 2014) were used to measure the level of system needs and system types in the families. FAST is the family version of the “Child and Adolescent Needs and Strengths” (CANS) group of planning and outcome management tools (Lyons, 2014). The purpose of FAST, which is a communimetric tool, is to capture a shared view on the needs and strengths of the individual and the family in the community. The tool was originally developed to address the needs of families who are at risk of child welfare
involvement. The 10 items in the system barriers measure the families’ access to 10 types of system needs: employment, child care services, educational services, financial assistance, health services, housing, legal services, mental health, student care services, and training/job skills upgrading. The items were rated by the social workers of the families based on a 4-point scale ranging from: 0 “The family has access to ...”; 1 “The family has some access to ...”; 2 “The family has limited access to ...”; 3 “The family has no access to ...”. The responses in each item are tailored to the relevant system type. If the family does not have the need for a system type, the item will be indicated as “not applicable”. In this study, to indicate if a system type was a need or not a need for the family, we recoded the item into two levels using cut-off at score 1: scores at 2 or 3 were indicated as “Yes – a need for the family” while scores at 0 or 1 were indicated as “No – not a need for the family”. We then calculated the number of system needs in each family.

2.3.4. Family functioning

Since family functioning is a multifaceted concept, this study used the “Family Adaptability and Cohesion Evaluation” scale version IV (FACES IV; Olson, Gorall, & Tiesel, 2006) to assess the perceived quality of family functioning among parents. The FACES IV scale – based on the circumplex model of marital and family systems – conceptualizes family functioning with two dimensions: cohesion and flexibility. According to the model (Olson et al., 2006), cohesion refers to the degree of emotional bonding among family members. Flexibility is the ability of the family to change its role relationships, family rules, and power structure in response to changes in circumstances. FACES IV consists of 42 items divided into six scales that measure healthy to unhealthy levels of cohesion and flexibility. For cohesion, the three sub-scales are balanced cohesion, enmeshed, and disengaged. For flexibility, the three sub-scales are balanced flexibility, rigid, and chaotic. Parents were asked to rate their level of agreement to each item using a 5-point Likert scale (1 ‘strongly disagree’ to 5 ‘strongly agree’). Examples of items include cohesion (“Family members feel very close to each other”) and flexibility (“Our family tries new ways of dealing with problems”). A recent validation study of FACES IV indicated that the six scales have high levels of concurrent, construct, and discriminant validity (Olson, 2011). For scoring, two scores – cohesion ratio and flexibility ratio – were calculated using the scoring method as recommended in the manual (Olson et al., 2006). These two ratio scores are useful because they indicate the level of functional versus dysfunctional behavior in the family. The ratio scores range from 0 to 10, with 1 indicating an equal amount of balance vs. imbalance in the system with most scores ranging from 0 to 2. The higher the ratio score over 1, the more balanced or healthy the family; conversely, the lower the ratio score below one, the more unbalanced the system.

2.3.5. Resilience of youth

The resilience of youth was measured using the “Singapore Youth Resilience Scale” (SYRESS). SYRESS was validated with a normative sample of Singapore youths (n = 190, M = 190.55, SD = 22.58). (Lim, Broekman, Wong, Wong, & Ng, 2011). Resilience has been considered as multidimensional (Zolkoski & Bullock, 2012) and similarly conceptualized in our study. The scale has 50 items and youths reported their level of agreement on a 5-point Likert scale ranging from 1 (never) to 5 (always). Two examples of such statements are: “I can accept it when things are uncertain” and “I allow other people to help me when I need it”. Scoring is done by summing up all items and the scores can range from 50 to 250 with higher scores denoting higher resilience. The scale has 10 domains, each with acceptable internal consistency: (1) Perseveration/Commitment (8 items, Cronbach α = 0.882); (2) Positive Self-Image/Optimism (7 items, α = 0.830); (3) Relationship/Social Support (5 items, α = 0.768); (4) Humor/Positive Thinking (3 items, α = 0.813); (5) Emotional Regulation (5 items, α = 0.810); (6) Spirituality/Faith (6 items, α = 0.859); (7) Personal Confidence/Responsibility (6 items, α = 0.808); (8) Personal Control (2 items, α = 0.399); (9) Flexibility (5 items, α = 0.607); and (10) Positive Coping (3 items, α = 0.835).

All standardized instruments in this study were originally developed in the English language. For this study, professional translators helped in the translation and back-translation of all scales to Chinese and Malay languages. Refinements to the translation were done after pilot testing with participants.

2.4. Data analyses

The sociodemographic and profile variables of the families were compared between non-transnational and transnational MF using either Student’s t-test or Chi-square test (both two-tailed) depending on the variable’s measurement level (see Tables 1 & 3). Statistics for FACES IV and SYRESS were compared between non-transnational and transnational families using the mean scores of parents (for FACES cohesion and flexibility ratio) or youths (for SYRESS) for each family (see Table 4). Doing this avoids violation of the assumption of independence of observations in the Student’s t-test. Pearson’s product moment correlation was used to test the associations among numerical variables (see Tables 2 & 5).

Since the sibling youths in this study are nested within their family, the assumption of independence of errors in ordinary least square regression is violated (Snijders & Bosker, 1999). A multilevel linear model (MLM) with random intercept, therefore, was fitted to examine the association of youth resilience and the child and family variables. Our analysis structured the data in a 2-level hierarchical data structure with individual variation at Level 1 and family variation at Level 2. Level 1 variables included youth gender and youth age. Level 2 variables included family measures (family income, number of system barriers in the family, and the two dimensions of family functioning i.e. cohesion and flexibility). Failure to employ multilevel modeling techniques for
analyses could result in an incorrect estimation of predictors of youth resilience (Raudenbush & Bryk, 2002). The MLM allowed us to include both fixed and random effects and thus, to estimate variance components at the family and individual level (Snijders & Bosker, 1999). The intraclass correlation coefficient (ICC) was calculated to examine the proportion of variance in youth resilience outcomes explained by the family cluster effect (Snijders & Bosker, 1999). ICC ranges from 0 to 1. If there is no statistical dependency, all of the variance would be expected to lie among individuals, and the ICC would be zero or close to zero. Conversely, for high statistical dependency data, the largest proportion of variance would lie among groups, and so the ICC would be closer to 1. Since ICC is the same as variance partition coefficient in a simple multilevel model, an ICC value of 0.2 means that 20% of the variation is between-groups and 80% within-group. The proportion of variance explained at the individual and family levels ($R^2$, individual & $R^2$ family) was computed using Snijders and Bosker (1999)’s formula.

The STATA/SE, version 14 statistical software package was used for all the analyses. This paper worked on the baseline data. Analysis of the longitudinal data is underway and will be reported in a separate paper.

### 3. Results

Table 1 summarizes the profile of MF comparing non-transnational and transnational families. The age of fathers from non-transnational families ($M = 41.5$, $SD = 9.8$) was significantly different from transnational families ($M = 46.1$, $SD = 10.4$): $t(171) = -2.16$, $p < .05$. When we compare the age between fathers and mothers, the age difference between spouses in non-transnational families ($M = 3.8$, $SD = 6.1$) was significantly different from transnational families ($M = 8.2$, $SD = 10.0$): $t(84) = 2.53$, $p < .01$. This indicates that local husbands in transnational families are older with larger age differences with their foreign wives.

The total family income was significantly different between non-transnational families ($M = 772$, $SD = 618$) and transnational families ($M = 546$, $SD = 599$): $t(204) = 2.61$, $p < .01$. However when the number of family members is taken into account, the family income (i.e. family income per capita) did not show differences because the family size in non-transnational families ($M = 4.52$, $SD = 2.09$) was significantly different from transnational families ($M = 3.87$, $SD = 1.71$): $t(204) = 2.34$, $p < .05$. Specifically, non-transnational families ($M = 3.04$, $SD = 1.91$) had more children on average than transnational families ($M = 2.44$, $SD = 1.42$): $t(204) = 2.44$, $p < .05$. The educational levels of parents across both groups of families are low with the highest education level of parents in most families at secondary school and below (non-transnational families 81%, transnational families 88%). Pearson chi-square test indicates that there is a statistically significant relationship between types of families (non-transnational or transnational) with fathers’ employment status: $\chi^2(2, 97) = 7.34$, $p < .05$. Fathers of transnational families are more likely to be unemployed (43%; c.f. with non-transnational 18%) while fathers of non-transnational families are more likely to be employed (63% c.f. with transnational 41%). A high percentage of MF, regardless of non-transnational (60%) or transnational families (62%), have a marital status that is divorced, widowed or single and unmarried. To put a context to these sample statistics, we obtained population demographics from the Singapore census for comparison. In 2014, 49% of Singaporean residents had secondary level of education or lower (Department of Statistics Singapore, 2017b). The median monthly household income of a resident employed household in 2014 was S$8292 (US$6267) or S$2380 (US$1799) accounting for household size. The marital status of resident population aged 15 and over was 40.5% for divorced/separated, widowed or single (Department of Statistics Singapore, 2017a).

The number of the unmet system needs in each family as reported by the social worker is significantly different between non-transnational families ($M = 1.7$, $SD = 0.12$) and transnational families ($M = 3.1$, $SD = 0.15$): $t(204) = -7.61$, $p < .001$. Transnational families, as expected, have more unmet system needs than non-transnational families due to higher system barriers (for e.g. failing to meet citizenship criteria of assistance schemes). However, there are commonalities as well as variations in the types of system needs among the families. For e.g., many non-transnational families and transnational families have similar unmet needs for financial assistance (non-transnational 43%, transnational 40%) and housing (non-transnational 51%, transnational 43%). However, a high percentage of transnational families have needs for employment (56%), health (51%), and training/job upgrading skills (70%). To understand the connections among system needs, we computed Pearson product-moment correlation coefficients to analyze the associations among types of system needs (see Table 2). The need for employment or services that can enable them to obtain employment in the community was positively correlated with needs for job skills upgrading ($r(177) = 0.74$, $p < .001$) and needs for financial assistance ($r(187) = 0.15$, $p < .01$). Employment was also positively correlated with the need for affordable or available health services ($r(179) = .45$, $p < .001$). This indicates that health status among MF, particularly among transnational families, is poor and one of its impact is on their employability. There is a negative correlation between employment and housing ($r(178) = -0.11$, $p < .05$) likely because government rental housing for the low-income families has a monthly household income eligibility criteria of S$385.45 and below (Housing Development Board, 2015). When families’ incomes are above this criterion, they have one less key resource for housing needs.

Table 3 shows a summary of the key sociodemographic indicators of youths across the two groups of families. There are no significant differences between youths of non-transnational families or transnational families across the five indicators. In our sample of MF, there are more males (53% in non-transnational, 54% in transnational) than females (47% non-transnational, 46% transnational). The mean age of youths is 15.7 ($SD = 2.72$) years for non-transnational families and 15.4 ($SD = 2.3$) years in transnational families. Most youths are functioning well in school in terms of low academic problems (82% non-transnational, 70% transnational) and healthy school attendance (90% non-transnational, 80% transnational). Most youths are also not in trouble with the police (93% non-transnational, 87% transnational).

We then compared the family functioning of non-transnational families with transnational families (see Table 4). There were no significant differences found between both groups in either cohesion or flexibility sub-dimensions of family functioning as measured using FACES IV. Next, we compared resilience scores between youths of non-transnational families and transnational families using a local validated tool (SYRESS). The total resilience (a summation of 10 domains of functioning) was statistically significantly different ($M = 3.77$, $SD = 3.04$) than that of transnational ($M = 3.8$, $SD = 2.9$) youths (see Table 5). The results indicate that youths from non-transnational families are more resilient than those from transnational families (see Table 6).
resilience) and each of the 10 domains of resilience did not show significant differences across both groups of youths. However, youths of transnational families have higher resilience scores than non-transnational counterparts (i.e. more resilience) in all the dimensions except for positive coping. We also compared their respective total resilience scores with that of the normative sample reported in the scale validation study (Lim et al., 2011). We found no significant difference in total resilience scores between groups (M = 189.23, SD = 23.50) and the normative youths (M = 190.55, SD = 22.58); (t(221) = 0.31, p = .76); However, the resilience of youths from non-transnational families (M = 183.47, SD = 20.82) was significantly lower than that of the youths from the population (M = 190.55, SD = 22.58); (t(252) = 2.21, p < .05).

Pearson product-moment correlation coefficients were computed to assess the relationship among family and individual indicators (see Table 5). There was a significant positive relationship between family income and the number of system needs: r(177) = 0.17, p < .05 and r(177) = 0.23, p < .01. Flexibility in family functioning was positively related to youth resilience (r(177) = 0.17, p < .05); Cohesion, however, was not significantly related to youth resilience.

Table 6 shows the results from the use of MLM to analyze the factors associated with youth resilience while accounting for the family clustering effects. Since predictors are centered, the intercept of 182.52 indicates the average youth resilience score for a female of average age 16 years, who is from a family with an average income of US$771 and experiencing on average two system needs, and with average family cohesion and flexibility at 1.5 and 1.6 respectively. This intercept has a between-family variance of 198.23 (or SD = 14.10). The ICC indicates the amount of variance in youth resilience scores that was explained by the family cluster effect. As shown in Table 6, the ICC of 0.39 indicates that family cluster effect explained 39% of the variability in youth's total resilience scores. The likelihood ratio test is used in this analysis to compare the multilevel linear model with a linear regression model and results show that multilevel linear model fits the data significantly better than a linear regression model that does not take into account the family cluster effect. The results indicate that the gender of youth was a significant predictor of higher youth resilience with male youths having a significantly higher resilience score than female youths. While family-level flexibility ratio was a significant predictor of youth resilience, family cohesion, as well as other family-level factors such as family

### Table 4

**Family functioning and youth resilience by types of families.**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Non-transnational</th>
<th>Transnational</th>
<th>p</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M, SD</td>
<td>M, SD</td>
<td></td>
<td>LL, UL</td>
</tr>
<tr>
<td><strong>FACES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohesion ratio</td>
<td>1.44, 0.65</td>
<td>1.59, 0.62</td>
<td>.994</td>
<td>−0.33, 0.026</td>
</tr>
<tr>
<td>Flexibility ratio</td>
<td>1.52, 0.66</td>
<td>1.62, 0.63</td>
<td>.31</td>
<td>−0.28, 0.089</td>
</tr>
<tr>
<td><strong>SYRESS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>183.47, 20.82</td>
<td>189.23, 23.50</td>
<td>.22</td>
<td>−15.02, 3.5</td>
</tr>
<tr>
<td>Perseverance/Commitment</td>
<td>30.89, 4.12</td>
<td>31.72, 4.54</td>
<td>.37</td>
<td>−2.64, 0.99</td>
</tr>
<tr>
<td>Positive self-image/Optimism</td>
<td>26.69, 3.59</td>
<td>27.47, 4.42</td>
<td>.35</td>
<td>−2.44, 0.87</td>
</tr>
<tr>
<td>Relationship/Social support</td>
<td>18.74, 2.96</td>
<td>19.30, 2.67</td>
<td>.36</td>
<td>−1.78, 0.66</td>
</tr>
<tr>
<td>Humor/Positive thinking</td>
<td>10.70, 1.90</td>
<td>11.23, 2.41</td>
<td>.23</td>
<td>−1.43, 0.35</td>
</tr>
<tr>
<td>Emotional regulation</td>
<td>17.46, 3.09</td>
<td>18.09, 3.23</td>
<td>.35</td>
<td>−1.97, 0.70</td>
</tr>
<tr>
<td>Spirituality/Faith</td>
<td>23.61, 3.38</td>
<td>24.53, 4.21</td>
<td>.25</td>
<td>−2.48, 0.65</td>
</tr>
<tr>
<td>Personal confidence/Responsibility</td>
<td>21.80, 3.23</td>
<td>22.75, 3.03</td>
<td>.17</td>
<td>−2.29, 0.40</td>
</tr>
<tr>
<td>Personal control</td>
<td>4.84, 1.34</td>
<td>5.14, 1.23</td>
<td>.29</td>
<td>−0.85, 0.26</td>
</tr>
<tr>
<td>Flexibility</td>
<td>17.37, 2.86</td>
<td>17.64, 2.97</td>
<td>.66</td>
<td>−1.50, 0.96</td>
</tr>
<tr>
<td>Positive coping</td>
<td>11.37, 1.70</td>
<td>11.35, 1.60</td>
<td>.97</td>
<td>−0.69, 0.72</td>
</tr>
</tbody>
</table>

Note. CI = confidence interval; LL = lower limit; UL = upper limit. The p-values are based on t-test (two-tailed).

### Table 5

**Correlations between study variables.**

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SYRESS total score</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Youth gender*</td>
<td>0.123</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Youth age</td>
<td>0.0905</td>
<td>0.0262</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Family income</td>
<td>−0.0929</td>
<td>0.0554</td>
<td>−0.0844</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Number of system needs</td>
<td>0.160</td>
<td>0.101</td>
<td>−0.00514</td>
<td>0.318***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Cohesion ratio</td>
<td>0.0596</td>
<td>0.157</td>
<td>−0.0735</td>
<td>0.171</td>
<td>0.204***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>7. Flexibility ratio</td>
<td>0.171</td>
<td>0.00684</td>
<td>−0.152</td>
<td>0.233***</td>
<td>0.212***</td>
<td>0.599***</td>
<td>1.00</td>
</tr>
<tr>
<td>M</td>
<td>186.78</td>
<td>−</td>
<td>15.56</td>
<td>1015.62</td>
<td>2.01</td>
<td>1.51</td>
<td>1.58</td>
</tr>
<tr>
<td>SD</td>
<td>23.60</td>
<td>−</td>
<td>2.60</td>
<td>876.77</td>
<td>1.52</td>
<td>0.67</td>
<td>0.58</td>
</tr>
<tr>
<td>Range</td>
<td>129–238</td>
<td>−</td>
<td>12–21</td>
<td>0–3000</td>
<td>0–6</td>
<td>0.51–3.85</td>
<td>0.48–3.87</td>
</tr>
</tbody>
</table>

Note. Sample consists of families with non-missing youths' and family scores.

* Youth gender: 0 = female, 1 = male.

* p < .05.

** p < .01.

*** p < .001.

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income and the number of system needs experienced by families were not significant predictors of youth resilience. The R^2 calculated using the formula of Snijders and Bosker (1999) indicates that the predictors fitted in this model explained 10% of the variance of the youth resilience score at the individual level and 11% at the family level.

### 4. Discussion and application to practice

The system needs of MF are often multifaceted, involving different government or non-government units. Apart from personal motivation to improve, removing system barriers experienced by families is considered one of the most important areas of work if the services rendered are to be effective. In Singapore, concerns with a group of MF and with the recent increase in a group of transnational families facing multiple needs warrant a systematic study that can help inform policy and practice.

The results of our study indicate that MF, in general, have low levels of resources or what some researchers called “financial, human and social capital” (Campbell & Parcel, 2010; Ma, Wong, Lau, & Pun, 2009) to meet their multiple needs. A high percentage of the parents had low education levels and were either unemployed or employed in part-time jobs. Many families do not have dual-parent support because of divorce, incarceration and other reasons. When compared to population-level demographics in the Singapore census, we see that these families are considerably poorer than average families and lacking in resources. These findings are also consistent with previous research on low-income families from a work-support program in Singapore (Ng, 2013). Resources, when available and accessible, are key to families’ adaptation to adversities and stressors because economic resources (for e.g. income, employment), human resources (education, health) and social resources (dual parents) can be used by families to address their needs (Campbell & Parcel, 2010; Ma et al., 2009). Indeed, resources have been found to distinguish families who do well in the face of multiple stressors from those that are struggling (family stress theory; Jamison, Ganong, & Proulx, 2017).

It is noteworthy that the problems and needs presented by families are interconnected in a complex web; for example need for employment with need for job training and health services. An implication is that programs to help these families will require holistic assessment of the families’ needs in relation to their circumstances. To improve the level of resources for these families also requires looking at the system barriers that are ‘blocking’ their access. The common notion of helping these families to raise their income should be part of the arrayed services as increased income is likely to be associated with more system needs, as the increased income may disqualify or reduce the subsidies that are means-tested, making them trapped in the awkward cycle of working hard to earn more but eventually have to spend more due to the cut-back in subsidy level of services. It will require perhaps a separate study to look into how efforts to motivate these families will not eventually disincentivize them from making improvement.

These system barriers commonly present themselves as lack of provision, conflicting institutional practices, restriction by policy criteria, organizational ‘red-tapes’ or lack of coordination between services and departments. To successfully help these families would often go beyond personal empowerment and family counseling to include connecting families to services, bridging service gaps, and advocating for more inclusive policies (especially for transnational families).

In comparing transnational with non-transnational MF, the results are in line with media representation. Transnational families have (1) local fathers who are older in age, (2) wider age difference between spouses, (3) lower family income, and (4) more system needs. However, what was not expected was the higher percentage of unemployed fathers in transnational MF and their greater need for health services. One possible explanation is that given the older age of the fathers in transnational MF, they are more likely to have health problems that reduced their employability in the labor market. One implication of these differences is that programs to help MF need to recognize that transnational MF have substantially different structural and sociocultural characteristics from non-transnational families, and thereof, the need to tailor relevant interventions to meet their specific needs. Transnational MF also require more help because of their higher number of needs and lower levels of resources. While the Singapore government has encouraged and in certain circumstances required transnational couples to attend marriage preparation programs

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Coefficient (Standard error)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>182.52 (2.61)&lt;sup&gt;***&lt;/sup&gt;</td>
<td>[177.39–187.64]</td>
</tr>
<tr>
<td>Youth gender&lt;sup&gt;a&lt;/sup&gt;</td>
<td>6.47 (3.27)&lt;sup&gt;⁎⁎&lt;/sup&gt;</td>
<td>[0.07–12.87]</td>
</tr>
<tr>
<td>Youth age</td>
<td>0.98 (0.64)&lt;sup&gt;⁎&lt;/sup&gt;</td>
<td>[−0.29–2.24]</td>
</tr>
<tr>
<td>Family income</td>
<td>−0.0044 (0.0024)</td>
<td>[−0.009–0.0003]</td>
</tr>
<tr>
<td>Number of system needs</td>
<td>2.57 (1.41)</td>
<td>[−0.18–5.33]</td>
</tr>
<tr>
<td>Cohesion ratio</td>
<td>−4.25 (3.72)</td>
<td>[−11.54–3.04]</td>
</tr>
<tr>
<td>Flexibility ratio</td>
<td>9.99 (4.31)&lt;sup&gt;⁎&lt;/sup&gt;</td>
<td>[1.55–18.43]</td>
</tr>
</tbody>
</table>

Note. Sample consists of families with non-missing youths’ and family scores.

<sup>a</sup> Youth gender: 0 = female, 1 = male.
<sup>⁎</sup> p < .05.
<sup>⁎⁎</sup> p < .01.
<sup>⁎⁎⁎</sup> p < .001.
have moderated the impact of low resources on family functioning (Castillo, Welch, & Sarver, 2011). These positive family processes could have contributed to their children because they have better emotional maturity and assets. Some studies indicate that older fathers can be more involved (Yang et al., 2014). Yet, it is possible for transnational families betweenspouses (Chen et al., 2013; Lin et al., 2011; Yang et al., 2014). Cultural conflicts between spouses is constantly singled out as a risk factor (Yang et al., 2014). Yet, it is possible for transnational families to have positive family norms and processes that stem from the strong cultural heritage of the foreign mothers (Jung et al., 2012). Older fathers may be more experienced in life or have accumulated more assets. Some studies indicate that older fathers can be more involved with their children because they have better emotional maturity and more likely to identify their roles and responsibilities as fathers (Castillo, Welch, & Sarver, 2011). These positive family processes could have moderated the impact of low resources on family functioning (Jung et al., 2012; Lee, 2000; Ma et al., 2009). Current studies on immigrant families or transnational families in the Asian context have mostly taken a deficits- or dysfunctional-focused perspective in analyzing these families. Therefore, future studies that consider the strengths and resilience of these families from culturally sensitive and strengths-based perspectives can provide us with more solutions in helping these families than a deficits-focused or risk-focused perspective alone.

The poor level of resilience in the youths of non-transnational families confirms that the generally unfavorable environments and family functioning of MF were not conducive to the development of youth resilience. It is noteworthy that youths of transnational families have higher resilience scores (though not significant) than youths of non-transnational families in 9 out of 10 domains of SYRESS, though not reaching statistical significance. This concurs with extant studies showing that immigrant youths can be resilient in spite of the challenges faced (Moti-Stefanidi & Masten, 2013). It is possible also that these transnational youths were born in Singapore or have stayed here long enough to adopt the culture, language, and lifestyle of the host country (Tam & Lam, 2005).

Our study found that higher family flexibility significantly predicted higher resilience in youths. This underscores the critical role of family functioning in promoting the resilience of their youths (Sheridan et al., 2013; Zoloski & Bullock, 2012). Family cohesion, however, did not predict youth resilience, nor did family income and number of needs. These findings suggest that youths’ positive interactions with their families, not socioeconomic factors, is a critical contributor to their resilience. However, this has to be interpreted prudently since this study used a cross-sectional design though there is empirical support from prior studies (Li, Zou, Liu, & Zhou, 2014). Family income and system needs are likely to have affected directly or indirectly family functioning. It is unclear at this stage why family cohesion did not predict resilience. One possible explanation is that most of the youth participants in our study are at middle adolescence (age 15-17) and they are developing their autonomy and exercising their decision-making opportunities, independence, and power in relation to their families. Those families with higher flexibility can help facilitate this development of youths’ resilience. But families who maintain levels of cohesion that are developmentally appropriate for younger youths, may not be helpful in building the resilience of older youths whose developmental needs are different. Another possible explanation for the insignificant contribution of family cohesion may be related to the unique situation of military service in Singapore, where male youths at age 18 are required by law to enlist in the military for 2 years of national service. These youths have to live independently from their families and undergo military training that further promotes their independence and autonomy. Family functioning may change with the shifting developmental needs of their youths. These 2 years are expectedly an extension of patriarchal value of order and obedience, which is contrary to democratic family process. This study also confirms the usefulness of looking at distinct and multiple dimensions of family functioning such as family cohesion and flexibility in the Circumplex model (compared to unidimensional measures of family functioning) to understand its influence on children outcomes.

The Circumplex Model, which the FACES is based on, assumes that changes occur in the family over time and families can move in any direction that the stage of the family life cycle may require such as the raising and launching of adolescent children (Olson, 2011). High family flexibility, according to Olson (2011), is characterized by egalitarian leadership and a democratic approach to decision-making. Negotiations are open and actively include the youths. To encourage higher flexibility in these families from a Singapore context, parents could actively involve their youths in decision-making on family issues or in the negotiation of daily family tasks. Asian families, unlike Western families, are influenced by patriarchal values where elders dominate over the young (Kang & Kim, 2013). For both non-transnational and transnational MF, helping them to tap into their existing strengths or positive family processes stemming from cultural heritage can help increase their coping and problem-solving strategies that will help improve family flexibility.

Although male and female youths have been found to rely on different sets of protective factors to remain resilient in other studies (Hartman, Turner, Daigle, & Cullen, 2009), it is not the intention of this study to capture these gender-specific factors. In this study, male youths have significantly higher resilience than female youths controlling for family-level factors. The higher scores of resilience could be due to the military training as well as the monthly cash allowance that they receive for the training. The major thesis still holds: building up resource could have contributed to higher level of resilience (Motti-Stefanidi, 2014). At the same time, gender-specific socialization process (Lyttton & Romney, 1991) may also mean more support to males when they are valued more than females in Asian cultures. It will require further research into how family resource, both tangible and intangible, could be shared fairly to girls and boys.

Our study has several limitations. First, family functioning was reported by parents and not by the youths while resilience was reported by youths and not by parents. Since parents and youths may have different views, the interpretations of our results are limited to the perspectives of the individuals who provided the data. Second, our study used a cross-sectional design to address our research questions. A longitudinal study with both qualitative and quantitative designs may provide more insights on the relationship between family processes and the development of youth resilience. Finally, inferences made in this study are limited to associations rather than causality. Since individual-level factors accounted for slightly more than half of the total variance in the multilevel model, future studies should investigate other individual-level predictors such as temperament, self-esteem, coping, and intelligence that have been shown to predict resilience in youths (Zoloski & Bullock, 2012). We also expect that levels of social functioning and resilience could be different between immigrant youths and Singapore-born youths of transnational families depending on their level of acculturation. Future studies on these youths of transnational families could collect data on their citizenship, and the length of stay in Singapore and acculturation.
5. Conclusion

This study has clearly shown the disadvantaged position of transnational MF in the Singapore context. They have higher unemployment, older father age, and lower family income when compared to their counterparts who are also multi-stressed. Transnational MF obviously have more constraints and fewer resources to cope. Children of these families shall continue to be the focus of service so that these children and youths are no way left behind by their mainstream peers. This wish of every government will have to meet with more research and concerted effort to bring the vision real in any sense to these children of the multistressed families.

Declaration of interest

This research paper analyzed the baseline data from a consultancy project led by the leading author in the period 2014–2017, funded by the Ministry of Social & Family Development, Singapore.

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