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## Expatriate Adolescents' Resilience: Risk and Protective Factors in the Third Culture Context

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## **Abstract**

Expatriate children and adolescents typically spend several of their formative years moving from country to country, frequently having to adapt to new cultures, making new friends, and fit into new school systems. It has been established in literature that such frequent changes may cause increased and prolonged risk of developing internalizing behavior problems such as depression and anxiety. However, little is still known regarding which protective factors serve as buffer towards the increased risk within the expatriate demographic. This study examined risk and protective factors among a group of expatriates, adolescents, and their parents, originating from 21 countries on five continents. Adolescent resilience was established through measuring risk and protective factors within three domains (i) individual, (ii) family, and (iii) school/community. In particular, the results indicated that adolescents' sense of coherence, positive family climate, and satisfaction with school and friends, each predicted resilience significantly above other demographic factors. Interestingly, higher number of international moves did not predict adolescents' resilience. The results imply that a coherent identity, high self-esteem, sense of "Third Cultural" group belonging, paired with a robust family environment, would promote resilience in the expatriate population. This may in turn serve as a buffer towards the negative effects caused by a stressful, transient upbringing.

*Keywords:* Resilience, risk and protective factors, stress, families, adolescents, adaptability, third culture kids, expatriates, third culture individuals

## **Expatriate Adolescents' Resilience: Risk and Protective Factors in the Third Culture Context**

Over the last decade many industrialized countries have experienced a rising waves of migrants, from across the globe. In addition, the increased globalization leads companies and organizations to send a constantly escalating number of their employees abroad. Even though the numbers vary across nations, about 2-5 percent of the population from industrial countries are estimated to move abroad sometime during their lives (Finaccord, 2014). In 2017, the total number of adult expatriates exceeded 66 million globally (Finaccord, 2018) which equals about 25 percent of the world immigrant population. As a result, an unprecedented number of children and adolescents find themselves leading international lives, as they follow their parents from country to country, spending many of their formative years outside their passport country (Cockburn, 2002; Davis et al., 2010; Gerner & Perry, 2000). Consequently, during their formative years, these young people frequently must adjust to new school systems, new cultures, to new languages, and by each international move, having to leave friends and support network behind (Hoersting & Jenkins, 2010; Schaetti & Ramsey, 1999; Van der Zee et al., 2007).

The children of such business expatriates have commonly been referred to as either expatriate children, Third Culture Kid (TCK) or Third Culture Individual (TCI), (Davis et al., 2010; Pollock & Van Reken, 2001; Useem, 1973). A TCI could be defined as "a person who has spent a substantial portion of his or her formative years outside the nation of origin, forming bonds to numerous cultures and countries, without having a strong sense of belonging to any of them" (Fail et al., 2004; Pollock & Van Reken, 2001). Hence, a TCI would identify most strongly with other individuals with similar international, or "third cultural", upbringing and background (Fail et al., 2004; Ittel & Sisler, 2012; Pollock & Van Reken, 2001). When looking at cultural identity of a TCI, typically, he or she is both impacted by his/her home culture or "first culture", and secondly, after having moved abroad the TCI is in addition impacted by the host country/countries' culture, referred to as the "second culture". Even though impacted by both first and second cultures, TCIs seem to most strongly be impacted by the commonly shared culture of those with similar internationally mobile/global nomadic lifestyle. This "culture between culture" has been referred to as "the third culture" (Pollock & Van Reken, 2001). Having such cross-cultural experience and identity have significant, and many times lifelong impact on the lives of most children and adolescents brought up internationally (Hoersting & Jenkins, 2010). Previous studies on expatriates have mainly been focused on the repatriation issues (Austin & Jones, 1987; Davis et al., 2013; Gerner & Perry, 2000; Hoersting & Jenkins, 2010; Maholmes, 2012; Peterson & Plamondon, 2009; Selmer & Luring, 2014), or the adaptation of adult TCIs into the society and workforce (Selmer & Lam, 2003; Van der Zee et al., 2005; Weeks et al., 2010). However, psychological research on how TCKs fair while moving between countries is yet to be called abundant (Peterson & Plamondon, 2009).

## **Risk and Protective Factors in the Expatriate Context**

The associations between stressful family events and maladaptive behavior in children is well established in literature (Garmezy & Masten, 1991, Jackson et al., 2003). Mainly these studies have focused on family risk factors and negative life events, such as divorce between parents or caretakers, death of a parent or a sibling, family violence, sexual abuse, immigration, or low socioeconomic status. Several studies on the TCI demographic have pointed to the increased risk of such a lifestyle during a child's or adolescent's formative years, leading to feelings of cultural homelessness (Davis et al., 2013; Hoerstin & Jenkins, 2010; Pollock & Van Reken, 2001), loss of belonging and as a result, prolonged grief (Davis et al., 2013; Melles & Frey, 2014; Moore & Barker, 2012; Pollock & Van Reken, 2001; Selmer & Luring, 2014; Weeks et al., 2010) along with added risk of internalizing and externalizing behavioral problems (Cockburn, 2002; Davis et al., 2013; Hoerstin & Jenkins, 2010; Pollock & Van Reken, 2001; Wiese, 2010).

In contrast to general and demographic-specific risk factors, a number of protective factors for TCI have also been suggested. One of the most salient protective factors would be a warm and supportive family climate, buffering the negative impact of an uncertain and unfamiliar environment. In addition to this, a positive family interaction combined with a general optimistic attitude, support network, good family communication and routines & rules are important (Black & Lobo, 2008; Luthar et al., 2000; Masten, 2001; Von Eye & Schuster, 2000).

There is also evidence of positive long-term outcome for TCI population. For instance, young adults with a Third Cultural background have shown to display higher degrees of interpersonal sensitivity along with social and emotional sensitivity, compared to their domestic peers (Lyttle et al., 2011; Peterson & Plamondon, 2009; Sam & Virta, 2003). In addition, Lytte et al. (2011) found no correlation between third culture individuals' negative affect, number of years spent abroad, and number of languages learned. Simultaneously, adults who have spent a significant amount of their formative years abroad, score higher in acceptance and understanding of other cultures compared to their monocultural peers (Gerner & Perry, 2000). Further, instead of being culturally confused, TCIs have been found to be high in multicultural identification (Moore & Barker, 2012). These findings raise the question whether the hardship experienced as a TCK growing up between countries would result in the individual becoming more resilient?

## **Conceptualizing Resilience in a Third Culture Context**

Resilience is usually understood as the ability to resist or bounce back from adversity (Bonanno et al., 2010; Masten, 2001; Tedeschi & Calhoun, 1995). Hence, research on resilience seeks to explain why certain individuals or group of individuals fare better than others, given the same amount of risk and protective factors (Masten, 2001; O'Connell et al., 2009, Rutter, 2007). Resilience increases individuals' survival and protective processes by

buffering the negative effects of risk factors and enable adolescents to cope in different contexts under stress (Brotman et al., 2003; Ungar, 2011). Thus, in the present study, resilience is defined as the ability of young people to maneuver their way through crisis situations or stressful events, to find the resources they need in order to cope with these situations, and to negotiate for these resources to be provided in meaningful manners (Ungar, 2011)

Table 1.

*Risk and Protective Factors (Adapted from O'Connell et al., 2009).*

<u>Risk Factors</u>	<u>Domain</u>	<u>Protective Factors</u>
Difficult temperament	Individual	Positive physical development
Low self-esteem		Academic achievement
Anxiety		High self-esteem
Antisocial behavior		Good problem-solving skills
Conduct disorders		Intellectual development
Extreme need for approval and social support		Engaged and connected to two or more of the following: school, peers, activities, athletics, religion, culture
Early substance use		
Parental depression	Family	Family provides structure, rules, & limits
Single-parent family		Supportive relationship with family members
Divorce		Clear expectations for behavior and values
Marital and family conflict		
Lack of parental/adult supervision		
Stressful events	School/ Community	Presence of mentors for support
Peer rejection		Opportunities for engagement within school and community
School or community violence		Positive norms
Poverty		Clear expectations for behavior
Community –level stressful events		Physical and psychological safety
School-level stressful events		
Poor academic achievement		

In order to grasp the concept of this multifaceted and quite complex construct, it can be useful to view it from an ecological perspective, where a number of risk-, and protective factors result in either high or low resilient outcomes (Jenkins, 2008). Typically, low resilience would strongly correlate with a higher level of internalizing and externalizing behavior problems, and correspondingly higher levels of resilience would correlate with lower levels of such behavior problems (Black & Lobo, 2008). Based on previous studies of the expatriate demographic, which most commonly found internalizing problems as negative outcome within this population (Davis et al., 2013; Pollock & Van Reken, 2001), this was considered to measure negative outcomes within this study as well. Further, such risk and protective factors can be divided into three different domains; the individual, the family, and the

school/neighborhood/environment, which is the theoretical approach taken in this study (O'Connell et al., 2009). Table 1 provides an overview of risk and protective factors, across populations. However, for the purpose of this study those factors hypothesized being most relevant to a non-clinical TCI population, were included.

In this study resilience is defined as the ability of young people to maneuver their way through crisis situations or stressful events, to find the resources they need in order to cope with these situations, and to negotiate for these resources to be provided in meaningful manners (Ungar, 2011).

### **Theoretical Model**

Growing up in an environment characterized by frequent moves, little or no control over which school, or country the young person will be facing next would clearly be stressful to most individuals. Literature has shown that exposure to stressful family and society events are both linked to a heightened risk of maladaptive behavior in young people (Rutter, 2007). International moves with loss of family support system, and added stress factors when adjusting to new culture, societies and languages, counter for such enhanced family and contextual stress (Limberg & Lambie, 2011). In addition, such general risk factors are expected to correlate negatively with resilience. This includes factors such as low socioeconomic status, parental conflict, family violence, single parent household, low parental education level, deviant peers, along with lack of support in all three domains mentioned in Table 1 (Conger et al., 1992; Conger et al., 1993; Conger et al., 1999; Flourin et al., 2010; Gardner et al., 2008; Letourneau et al., 2011; Wadsworth & Santiago, 2008). Theoretically, a higher degree of risk factors in an adolescent's or child's life would result in an increased risk of developing externalizing or internalizing problems (Black & Lobo, 2008; Brent & Weersing, 2008).

As illustrated in Table 1, these risk factors may be buffered by the presence of protective factors, both interpersonal, family or society dependent (Black & Lobo, 2008; Jenkins, 2008; Van der Zee et al., 2007). Whyman et al. (1992) found that stable family environment and positive relationship with parents predicted positive adjustment in children exposed to heightened stress. Furthermore, an allowing family atmosphere (which is intellectual- cultural directed), providing structure and fair discipline combined with a sense of coherence have been suggested as resilience enhancing factors (Antonofsky & Sagy, 1986; Jackson et al., 2003).

### **Current Study**

As previous research on the expatriate demographic most commonly has focused on risk factors associated with a transient lifestyle (e.g., Pollock & Van Reken, 2001), this study endeavours adding to the literature by examine which factors promote resilience within the demographic.

Hence, this study examines risk and protective factors among 15 – 19 years old adolescent expatriates and to establish which factors impact resilience in the Third Culture context. Adolescent expatriates were defined as those adolescents who had the spent two

years or more of their childhood or youth outside their passport country or parents' passport country. Resilient outcome was defined as higher degrees of adolescent positive adaptation in the absence of higher levels of internalizing behavior problems. Further, this study aimed to explore whether there were any specific factors that predict resilience in the TCI population and if so, will these differ between TCI from different nations or continents and across older and younger adolescents.

## Method

### Participants

The participants in this study were mainly recruited via international expatriate network groups on Facebook. In addition, Junior and Senior students at an American international school in the Netherlands participated. In order to be included in the study the participants had to be between 15 and 19 years old and having had spent at least two years outside their passport country. Written consent was obtained from the parents/legal guardian of all adolescent participants.

The data was collected via an online survey distributed to the participating adolescents and to their primary caregivers. The questionnaire, which was available in English, was kept open for three weeks during the month of March 2016. In total, 123 adolescents (together with one of their parents) from 21 countries and five continents answered the survey. The parental portion of the survey consisted of 71 items and took approximately 10 minutes to complete, and the somewhat longer adolescent section, consisting of 123 items, took about 20 minutes to complete. Three pairs of adolescents and parents were excluded as they were lacking the required international experience. Out of the remaining 120 participants 39% ( $n = 47$ ) were of Swedish descent, 25% ( $n = 30$ ) were of European descent (excluding Swedes), 25% ( $n = 30$ ) were of North American descent (US and Canada), and 11% ( $n = 13$ ) were from other regions (e.g., South America, Australia, and Asia). For the purpose of statistical analysis, the participants from "other regions" were added to the North American group. It is worth noting that even though expatriate families of all nationalities were invited to participate in the study, the response frequency among Swedish nationals was significantly higher than from families of any other background. This was an unintended effect, possibly since both the first author (at the time of data collection) and the second author were associated with a Swedish university. The adolescent participants were relatively evenly divided with respect to gender ( $nf = 55.8\%$ ), however, among the participating parents a majority were mothers ( $nf = 89.2\%$ ). All demographic data is presented in Table 2 and Table 3.

### Material

In this study six different adolescent scales and three parent scales were used to measure contrasting aspects of adolescent's risk and protective factors, resilient or non-resilient outcomes, along with parents' family impact on adolescents' resilient or non-resilient outcome. Some of these scales were aggregated into composite scales in manners

described below. One scale measuring family functioning (SCORE-15) was administered to both parents and the adolescents in order to capture broader facets of the construct. For better understanding, some measures along with their subscales are presented below. However, for the purpose of this study only the full scales were used for statistical analysis. The scales are organized according to the domain-specific approach taken in this study (compare Table 1).

### ***Individual Domain Scales***

Initially, data from two scales was captured to measure risk and protective factors within this domain as follows:

#### ***Sense of Coherence Scale (SOC) (Antonovsky, 1986) .***

The full 29-item original Orientation to Life scale (Antonovsky, 1986) was administered to the adolescent participants. The scale measures the construct on three aspects: Comprehensibility (11 items, e.g., "When you talk to people do you have a feeling that they don't understand you?"); Manageability (10 items, e.g., "Has it happened that people whom you counted on have disappointed you?"); Meaningfulness (8 items, e.g., "Do you have the feeling that you don't really care about what goes on around you?"). For the purpose of this study the full scale was used. The items were measured on a 7-point Likert scale ranging from 1 (Never) to 7 (Always), and where higher scores indicate higher sense of coherence. The scale has proven to have good validity and high internal consistency ( $\alpha = 0.93$ ) (Eriksson & Lindström, 2006). The internal consistency of the scale in the current study was also high ( $\alpha = 0.94$ ).

#### ***Rosenberg Self-Esteem Scale (RSES), (Rosenberg, 1965)***

The construct self-esteem was measured with the RSES with 10 items (e.g., "I feel I have a number of good qualities" and "I am able to do things as well as most other people"). The items were rated on a 4-point scale ranging from 1 (Strongly disagree) to 4 (Strongly agree), where higher scores indicate higher self-esteem. The scale, administered to the adolescent participants only, has demonstrated a robust test-retest validity  $\alpha=0.85$  and reliability ranging from  $\alpha = 0.72$  to  $0.87$  in previous studies (Olsson et al., 2009; Schmitt & Allik, 2005), and the internal consistency for the instrument in this study was good ( $\alpha = 0.85$ ).

#### ***Beck's Depression Inventory (BDI) (Beck, Steer & Brown, 1996)***

The participating adolescents' internalizing behaviors were measured by the BDI with 19 items covering four dimensions: self-view, optimism, emotions, and somatic responses on a 5-point Likert scale ranging from 1 (Not Affected) to 5 (Highly Affected), and where higher scores indicate higher levels of depression. The BDI has proven to have a high validity in both clinical and non-clinical samples, with a high internal consistency (Basker et al., 2010; Beck, Steer & Cabin, 1988; Kendall, Hollon, Beck, Hammen & Ingram, 1987). In the current study, the reliability was acceptable at  $\alpha = 0.79$ . Initial exploration of this scale found it non-normally distributed and with low variance, reflecting the fact that 92% of the adolescents scored within the 14% range of the lowest points of the scale, indicating non-depressive to



mild depressive mood. According to the DSM-V (American Psychiatric Association, 2013) such scores would not qualify for intervention. The remaining 8% of the adolescent scored quite high, indicating moderate to severe depression. To rectify the non-normality of the distribution, the BDI was transformed into a dichotomous variable: 0 (medium/high depression) and 1 (no/low depression).

### ***Family Domain Scales***

Initially one indicators of family climate (i.e., SCORE-15) were derived from parent and adolescent responses, followed by two scales administered to the parent participants only. Finally, a scale measuring perceived family finances was administered to the adolescent participants.

### ***SCORE-15 Index of Family Functioning and Change (Stratton, Lask, Bland, Nowotny, Evans, Singh et al., 2014)***

This scale was completed by both adolescents and one of their parents/guardians. The scale is composed of 15 items assessing family processes within three subscales; (i) "strength and adaptability"; (ii) "overwhelmed by difficulties", and (iii) "disrupted communication". Questions regarding strength and adaptability measures family positive communication, problem-solving and warmth. Questions concerning overwhelmed by difficulties measures feelings of overwhelm and defeat by life's difficulties, and lastly questions regarding disrupted communication measures to what degree family members feel safe to express their opinions, are honest to each other, as well as perceived family hostility levels. Items were rated on a 5-point Likert scale (1 = Describes us very well, 5 = Describes us poorly), where higher scores indicate higher family functioning. The scale has a good reported internal consistency ( $\alpha = 0.89$ ) and a good validity in clinical and non-clinical samples (Stratton et al., 2014). In the present study, internal consistency was good for adolescent ( $\alpha = 0.82$ ) and for parent ( $\alpha = 0.84$ ). Parents' and adolescents' scores on the scale were significantly correlated, showing a similar experience of family functioning from both the parent and adolescent perspectives.

### ***Alabama Parent Questionnaire (APQ-9) (Frick, 1991)***

Furthermore, to capture another aspect of family climate, the parents completed the short form of the APQ-9 measuring parenting skills with nine items and within three different domains: (i) "positive parenting"; (ii) "inconsistent discipline"; and (iii) "poor supervision". Questions for positive parenting assess parent's positive feedback and involvement with their children, questions for inconsistent discipline concern lifting restrictions earlier than agreed, and questions for poor supervision are about allowing kids to break curfews and go out with friends, unknown to the parents. The items of this scale were rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Always) where higher scores indicate more positive family climate. The scale has a good reported internal consistency ( $\alpha = 0.68 - 0.72$ ) (Essau et al., 2006) as well to have adequate validity (Elgar et al., 2007). The internal consistency for the parent report of this study was also fairly good ( $\alpha = 0.77$ ).

***Social Support Questionnaire (SSQ), (Sarson, Sarason, Shearin & Pierce 1983)***

Parents perceived social support was another dimension of parents' ability to provide positive parenting (Whittaker et al., 2011). Parents were asked to complete a shorter form of the SSQ. It consists of 20 items asking the number of friends and family members a person can count on for help in major decision-making and for personal support in crises situations. The items were rated on a 6-point scale ranging from 1 (No one) to 6 (10 or more persons). The scale has been found to have good criterion validity (Sarson, Basham, Shearin & Pierce, 1987). The internal consistency for the scale in this study was fairly good ( $\alpha = 0.69$ ).

Together, the family domain scales used, make up important aspects of family protective factors (Walsh, 1996; Whittaker et al., 2011). The two scales measuring different perspective of family climate (i.e., SCORE-15, parent and child), were combined into the Family Climate Composite Scale (FCCS). Likewise, a Positive Parenting Composite Scale (PPCS) was created from the Positive Parenting Scale and the Social Support Scale. The moderate correlation between the scales making up the PPCS indicate that all likely reflect a valid measurement of the construct "positive parenting" without inflating the measure due to shared perspective. Exploration analysis of the FCCS and the PPCS found them to be approximately normally distributed.

***Perceived Economic Situation (after Conger et al., 1999)***

This scale was included in the domain of family factors, even though being categorized as a community factor by O'Conner et al. (1999). As the participants of this study mainly consist of highly educated, middle class families, perceived economic status would be more related to family structures, expectations and parenting practice than a definite poverty measure. The scale, measures participants' perceived financial situation/socio-economic status on three items (e.g., "How well do you think you get by on your monthly income?"; "Do you feel you have enough money for recreational activities over the year?"). The scale ranges from 1 ("Strongly disagree") to 5 ("Strongly agree"), where higher scores indicate perceived positive financial situation. Internal consistency for the scale was good,  $\alpha = .81$ . Due to the relatively few items of this scale (3), inter-item correlation was also controlled for (Briggs & Cheek, 1986), suggesting a quite strong relationship among the items: mean inter-item correlation = 0.61 with values ranging from 0.49 to .081.

**School and Society Domain Scale*****School Adjustment/Friend Support Scale (after Conger et al., 1999)***

This scale, administered only to the adolescent participants, includes six items regarding perceived affability and support from teachers and friends (e.g., "My friends are kind"; "I have good grades", "My teachers are supportive"). The items were rated on a 5-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree), where higher scores indicate a more positive adjustment to school and more supporting friendships. The full scale has been demonstrated to have adequate reliability and validity (Conger et al., 1999), and within the present sample, the scale showed good internal consistency ( $\alpha = 0.79$ ).

## **Resilient Outcome Measures**

### ***The Resilience Scale (Wagnild & Young, 1993)***

This scale, administered to the adolescent participants, consists of 25 items assessing resilience within five aspects: equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness. Questions measuring equanimity concerns a person's ability to take things in stride, the aspect perseverance includes questions regarding the ability to continue in life despite major setbacks, self-reliance measures to what extent a person trust in himself, questions about meaningfulness measures a person's sense of reason to live & meaning to life, and finally existential aloneness confers feelings of freedom, aloneness, and uniqueness. The items were rated on a 7-point scale ranging from 1 (Totally disagree) to 7 (totally agree), and where higher scores indicate higher levels of resilience. The scale has proven to have good construct validity and high reliability ( $\alpha = 0.91-0.93$ ) (Eriksson et al., 2006; Lundman et al., 2007; Wagnild & Young, 1993). High internal consistency was observed in the current sample, ( $\alpha = 0.91$ ).

## **Procedure and Data Analysis**

Data were collected using an electronic survey (Qualtrics). The survey was divided into two parts: (i) parents and (ii) adolescents. Prior to commencing the questionnaire, the participants were asked to read the participant information letter. The parents were given a link to the survey divided into two sections, as mentioned above. Prior to progressing to the survey questions, each parent had to consent to participating as well as give consent for his/her adolescent to participate in the study. The parents were advised to hand the questionnaire over to their son/daughter upon completing the parent portion of the study, and not to attend the latter part of the study. To our best knowledge the participating adolescents were allowed privacy when taking the survey. Prior to commencing the second part of the survey, the adolescents too had to consent to participate in order to continue the survey.

The participants answered demographic questions regarding age, gender, education, nationality, and number of international moves. The remaining scales were then presented in the domain specific order previous described. Participants were debriefed in writing after the survey was concluded. No monetary reward was given. The raw data was cleaned and analyzed using Excel and IBM SPSS 23.0. Initially a correlation analysis was conducted, follow by a hierarchic regression analysis. Finally, an analysis of variance (ANOVA) was employed to compare resilience between the demographic groups and between older & younger adolescents. Data was gathered adhering to the aspects of informed consent and confidentiality, and further stored and handled in accordance with The National Swedish Research Council's (Vetenskapsrådet) stipulations 2016.

## Results

### Demographics

In this study nationality was recoded to create a trichotomous variable, representing where in the world the family would rate themselves to belong; North America, Sweden, and Europe (except Sweden). Due to statistical reasons and after preliminary descriptive statistics, the 11% of the sample belonging to the category “rest of the World”, was deferred to the North American category. The frequencies of demographic categories for parents and adolescents are presented in Table 2 and Table 3. Descriptive statistics of all the predictor and outcome variables for both parents and adolescents are presented in Table 4. Preliminary analyses were performed to ensure normality, linearity, and homoscedasticity. The descriptive statistics are presented in Table 4. The relative numbers in the right column of Table 4 show the percentage of adolescents scoring high within the different scales, indicating high

Table 2  
*Demographic Frequencies – Parents*

Variables and levels	N	% of sample
<i>Parent Gender</i>		
Male	13	10.8
Female	107	89.2
<i>Age</i>		
36-45 years of age	45	37.5
46-55 years of age	72	60.0
56-65 years of age	3	2.5
<i>Marital Status</i>		
Married	110	91.7
Single	1	0.8
Divorced/Living w. new partner	9	7.5
<i>Family Composition</i>		
Only biological/adopted children	111	92.5
Both biological and stepchildren	9	7.5
Only spouse's biological children	-	-
<i>Education Completed</i>		
One parent	28	23.3
Both parents Graduate Degree	92	76.7
<i>Cross-Cultural variables</i>		
Nationality of spouses – Same	101	84.2
Nationality of spouses – Diff.	19	15.8
<i>Number of international moves</i>		
Low (1-3)	39	32.5
High (4 or more)	81	67.5
<i>Perceived Family Income</i>		
Good or very good	91	75.8
Challenged or poor	29	24.2

protective factors. The cut-offs were being made in accordance with each scale's specific high/low point cut-off, suggestions by its respective author.

Prior to the regression analysis, Spearman's product-moment correlation analysis was conducted among the variables to determine the interrelations of the variables used (Table 6). As shown in Table 5 self-esteem was strongly, positively, and significantly associated with resilience  $r = .55$ ,  $n = 120$ ,  $p < .01$ . Likewise, family climate (adolescent) was moderately, positively, and significantly associated with resilience,  $r = .37$ ,  $n = 120$ ,  $p < .001$ , School/friend satisfaction showed small but highly significant association with resilience  $r = .21$ ,  $n = 120$ ,  $p < .001$ , and Sense of Coherence was also strongly, positively, and highly significantly

Table 3  
*Demographic Frequencies – Adolescents*

Variables and levels	N	% of sample
<i>Gender</i>		
Male	53	44.2
Female	67	55.8
<i>Age</i>		
15-16	69	57.5
17-19	51	42.5
<i>Family Composition</i>		
Living with both biological parents	106	88.4
Living with one biological & one stepparent	13	10.8
Living with one single parent	1	0.8
<i>Number of International Moves</i>		
Low (1-3)	48	40.0
High (4 or more)	72	60.0
<i>Perceived Family Income</i>		
Good or very good	89	74.2
Challenged or poor	31	25.8

Table 4.  
*Descriptive Statistics Parents and Adolescents, n = 120, (P) = Parents, (A) = Adolescents*

Variable	Mean	SD	Skewness	Kurtosis	Percentage above cut-off
Family Climate (P)	4.27	.49	-.48	-.57	-
Family Support (P)	4.61	2.10	.32	-.66	-
Positive Parenting (P)	36.31	4.01	.39	-.27	-
Moves – total (A)	4.63	2.87	.62	-.73	-
Family Climate (A)	4.14	.58	-.60	-.10	95
Sense of Coherence (A)	147.45	23.42	-.15	-.84	81
School/Friends Sat (A)	4.05	.54	-.54	.67	87
Depression (A)	.60	.46	-.03	-1.35	8
Self-Esteem (A)	2.10	.49	.06	-.07	93
Resilience (A)	95	95	95	95	95

associated with resilience  $r = .51$ ,  $n = 120$ ,  $p < .001$ . Note that although many of the variables were significantly related, none appeared to be high enough to indicate multicollinearity problems (see table 5).

Preliminary analyses were performed to ensure normality, linearity, and homoscedasticity. The relative numbers in the right column of Table 4 show the percentage of adolescents scoring high within the different scales, indicating high protective factors. The cut-offs were being made in accordance with each scale's specific high/low point cut-off, suggestions by its respective author.

Table 5.

*Adolescent Resilience Impact Factors*

Variable	1	2	3	4	5	6	7	8	9
1. Number of Moves									
2. Family Climate- Parents	.10								
3. Family Climate- Adolescents	.06	.66**							
4. Self-Esteem	.02	.38**	.53**						
5. Sense of Coherence	-.10	.24**	.51**	.69**					
6. Social Support	-.02	.08	.09	.02	.06				
7. Parenting skills	.02	.34**	.29*	.14*	.16	.70			
8. School/Friends Satisfaction	-.03	.38**	.41**	.48**	.48**	.06	.21*		
9. Depression	.23	-.36*	-.42**	-.47**	-.52**	-.38	-.11	-.36*	
10. Adolescents' Resilience	-.12	.21	.37**	.55*	.51**	.05	.07	.21**	-.52**

\* $p < .01$ , \*\* $p < .001$

### Risk and Protective Factors for Adolescent Resilience

To examine the multivariate relation between adolescent resilience and its possible predictors including risk (e.g., depression) and protective factors (e.g., positive parenting, and social support), a 4-step hierarchical regression analysis was employed. The variables were entered according to the domain specific theoretical approach previously described. Step one included the demographic covariates (i.e., age, gender, and number of international moves). In the second step, the family domain factors (i.e., positive parenting, perceived family climate and adolescents' perceived family income) were entered. At the third step, the school/society domain factor (i.e., school adjustment/friend support) variable was entered. Finally, at step four, the individual domain specific risk and protective factors were added, adolescents' depressive scale and the sense of coherence scale. Lower scores on the depression scale is known to increase the risk of adolescents' internalizing behavioral problems. The results of the hierarchical regression are shown in Table 6. None of the demographic factors (gender, age group, or number of international moves) significantly

predicted the adolescent resilience in the first model. However, all three of the following models (family factors in Step 2, school/society factors in Step 3, and individual factor in Step 4) significantly increased the  $R^2$  in each step, suggesting that factors in all three domains contributed to adolescent resilience. In Model 2 the family factors explained 22% of the variance in the data:  $R^2$  change = 0.22,  $F(6, 113) = 5.42$ ,  $p < .001$  and in Model 3, school/friend satisfaction explained an additional 7% of the variance in measured resilience;  $R^2$  change = 0.07,  $F(7, 112) = 6.73$ ,  $p < .001$ .

Lastly, in Step 4, the individual factors significantly predicted adolescent resilience, explaining additional 24% of the variance;  $R^2$  change = 0.24,  $F(9, 111) = 5.22$ ,  $p < .001$ . However, the variable depressive mood was non-significant at this step. As shown in Table 6, the final model accounted for approximately 54% of the variance in the data. Indicating that variables from all three domains, (i.e., family climate, sense of coherence, and satisfaction with school & friends), significantly predicted the outcome, when controlling for demographic variables.

To further seek to explain adolescent resilience, parents' level of education was tested through a t-test of independent samples. However, there was no significant difference in scores for parents' education levels on adolescents' resilience.

Furthermore, a two-way between-groups analysis of variance was conducted to explore any significant impact of parents' marital status and parents' perceived family income on adolescents' resilience. The univariate analysis of variance measuring interaction effects between parents' marital status, parent's perceived economic status on adolescents' resilience. The interaction effect between family economy and resilience was not statistically significant, neither were the main effects for marital status nor family income.

Moreover, to test whether a higher number of international moves would be associated with lower levels of measured adolescent's resilience, a two-way between-groups analysis of variance was employed, measuring high and low number of moves within the adolescent sample, comparing this to measured resilience, higher number of moves ( $n=48$ ) lower numbers of moves ( $n=72$ ). Higher number of moves, as explained by four or more international moves. No statistically significant difference was found between the two groups, on the effect on resilience.

Lastly, to explore the relationship between expatriate adolescents' resilience and the impact of nationality and age, a two-way between-groups analysis of variance was conducted. Participants were, as mentioned above, divided into three groups: The North America ( $n=42$ ), Sweden ( $n=47$ ), and Europe (except Sweden), ( $n=31$ ). The interaction effect between nationality and age was not statistically significant, however, there was a statistically significant main effect for nationality  $F(2, 114) = 8.68$   $p < .001$ , showing a medium effect size (partial eta squared = 0.13). Post-hoc comparisons using Bonferroni correction, indicated that the mean score for the North American nationality group ( $M = -0.16$ ,  $SD = 0.61$ ) was significantly different from the Swedish nationality group ( $M=0.32$ ,  $SD=0.63$ ). The European age group ( $M = -0.14$ ,  $SD = 0.54$ ) differed significantly from the Swedish nationality group, but not from the North America nationality group. Moreover, a statistically significant main effect was identified for age;  $F(1, 114) = 4.36$ ,  $p = .04$ . Where the younger age group scoring higher in resilience than the older.

Table 6.  
*Multiple Hierarchical Regression Model Predicting Adolescents' Resilience*

Steps	Model 1 <i>B (SE) at entry</i>	Model 2 <i>B (SE) at entry</i>	Model 3 <i>B (SE) at entry</i>	Model 4 <i>B (SE) at entry</i>	<i>t</i> Final	<i>R</i> <sup>2</sup>	<i>F</i>	$\Delta R^2$	$\Delta F$
<b>1. Demographic factors</b>						.01	.33	.01	0.33
Gender	-.01 (.16)	-.04 (.14)	-.04 (.12)	-.03 (.11)	-.49				
Age	-.08 (.16)	-.01 (.15)	.01 (.12)	.03 (.12)	-.41				
Moves	.03 (.10)	.04 (.09)	.06 (.09)	.02 (.07)	.23				
<b>2*. Family Factors</b>						.22	5.42**	.21	10.43**
Family Climate C.S.		.47 (.09)	.36 (.10)	.22 (.08)	2.88**				
Positive Parenting C.S.		-.03 (.10)	-.05 (.10)	-.06 (.08)	-.86				
Perceived Family Inc. (T)		-.04 (.17)	-.01 (.16)	-.07 (.14)	-1.06				
<b>3*. School/ Community Factors</b>			.31 (.09)	.10 (.08)	1.26**	.30	6.73**	.07	11.52**
School & Friends Satisfaction									
<b>4*. Individual Factors</b>				.02 (.24)	.26				
Depression									
Sense of Coherence				.58 (.08)	6.66**	.54	14.24**	.24	28.83**

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001. Note: Gender (1=male 0=female); Age (1=older 0=younger); Moves (1=high 0=low); Depression (0=low 1=high)



## Discussion

The result of this study provides evidence that positive family climate, high self-esteem, high sense of coherence, paired with adolescents' satisfaction with school, teachers, and friends are variables that positively impact resilience within the international expatriate context. Furthermore, several studies have highlighted the risk of increased stress caused by various contextual factors, e.g., lack of social support (Brotman et al., 2003; Gardner et al., 2008; Flouri et al., 2010; Martinez-Torteya et al., 2009). Such risk factors appear abundant within

the expatriate populations. Yet, this study suggests that a good family climate, supported by underlying positive parenting structure, in turn contributing to adolescent self-esteem, might buffer these risks. Such relationships may explain a higher resilient outcome. One possible reason to why these associations would be more common among TCI would be the loss of social support network from the home country impacting families to become more tightly-knit when in a foreign environment. Secondly, several studies have pointed to the importance of a strong social support network for positive family outcome (Black & Lobo, 2008; Weeks et al., 2010; Wiese, 2010). Even though the expatriate family would move frequently between countries, the TCI belonging has shown to be strong, and may replace the social support network left behind in the home country (Lyttle et al., 2010; Peterson & Plamondon, 2009). As evident from the demographic overview, a very high percentage of the participating adolescents scored high on protective measures as on resilience outcome measures, despite the unpredictable and transient environment they live in.

Furthermore, results from the hierarchic regression showed, beside the demographic factors included in this study, variables from all three domains contributed to explain expatriate adolescent resilience. These results indicate the importance of a domain-oriented approach to understanding resilience in the TCI context. However, higher number of international moves did not reach significance in any of the initial analysis, nor in the main multiple regression analysis. This is interesting as the transient upbringing faced by TCI has been highlighted as a main risk factor for this population (Davis et al., 2013; Hoerstin & Jenkins, 2010; Pollock & Van Reken, 2001). Hence, an increasing number of moves would be expected to positively correlate with an increase in risk factors present, e.g., increased internalizing behavior problems and prolonged grief (Davis et al., 2010; Davis et al., 2013; Gerner & Perry, 2000; Nathanson & Marcenko, 1995; Pollock & Van Reken, 2001; Weeks et al., 2010). Instead, our results are in line with findings of Moore and Baker (2012) stating that rather than displaying risk factors such as cultural confusion, TCIs scored high in multicultural identity, associated with high adaptation ability and resilience to change.

To further understand expatriate adolescent resilience, parental impact was explored. Previous research has shown correlation between higher educated parents and resilience in their offspring (Conger et al., 1993; Conger et al., 1999; Jenkins, 2008). In this study, all participants had at least one parent with a post-graduate degree, however, this factor (i.e., parent's highest education) did not significantly contribute to explain the variation in the data.

These results suggest that parents' higher education might mediate resilience rather than directly impacting it, especially in the expatriate context. It can be reasoned that those highly educated parents may more easily educate themselves, also in the field of positive parenting, a factor that has been shown to directly impact resilience (McCubbin & McCubbin, 1988; Prevatt, 2003; Schofield et al., 2014).

Moreover, as socioeconomic status and parents' marital status are both well documented factors affecting internalizing behaviors and resilience outcomes (Conger et al. 1999; McCubbin & McCubbin, 1988), the impact of these were further explored. However, the result of the iterations showed no significant association with neither perceived family income nor parents' marital status on adolescent resilience. This could be due to the low variation in the sample, mainly consisting of middle-class families. However, it must be considered, since positive parenting and positive family environment were significant explanatory variables on adolescents' resilience, the causal direction of these relationships cannot be established here. Most likely, a positive family environment would also be low in conflicts and as such providing a good foundation for positive parenting and a pleasant family climate. However, further investigations into the impact and directions of these relationships would be necessary for deeper understanding.

These findings indicate that in the absence of risk factors such as divorce, single parent household, and perceived poor financial situation, variables such as positive parenting, high sense of coherence and self-esteem, combined with good peer- and teacher support become paramount for enhancing resilience among third-culture adolescents. Van der Zee et al. (2007) concluded in their study that expatriate children who were securely attached, and those belonging to families with high levels of cohesion, communication, and adaptability, also fared much better in the international context than did their less securely attached peers. This study suggests, partially in line with other, more recent studies that the outcome of an expatriate upbringing is not as troublesome as the mainstream literature on the subject suggest (Moore & Baker, 2012). Instead, the study by Van der Zee et al. (2007) points to the importance of a stable family climate, positive parenting, a sense of group belonging, and satisfaction with school and friends for expatriate adolescents to thrive. Findings which are similar to those of the present study.

Lastly, to further understand adolescent resilience in the third culture context, the three nationality groups; North American, European, and Swedish were compared on age and resilience. The result found age to be a significant factor, where all groups but the North American showed higher levels of resilience in the younger age group, compared to the older. These findings are in line with previous research, especially within clinical psychology and psychiatry (APA, 2013; Rutter, 2007). Older adolescents are expected to show higher levels of internalizing and externalizing behavior problems, factors that highly and negatively correlate with resilience. Also, these findings are in line with findings from the international, longitudinal study Health Behaviour in School-aged Children (HBSC) (Inchley et al. et al., 2020; Folkhälsomyndigheten, 2018a; Folkhälsomyndigheten, 2018b). In addition, a significant main effect for nationality was found, where the North American group generally scored the lowest on resilience for both age groups, except for the older European adolescents. Both age groups of adolescents with Swedish background scored significantly

higher than any other group, with the highest points of resilience measured among the younger Swedish adolescents. A study conducted by the SOM Institute and Gothenburg University (Solevid, 2016) on the 660,000 Swedes living outside of Sweden, found that 51 percent of the expatriate Swedes reported being very happy with their lives. This can be seen in relations to the mono-cultured group of Swedes (living in Sweden), where 38 percent reported being very happy with their lives (Solevid, 2016). The results from the SOM Institute may serve as one explanation to the higher scores of the Swedish participants in this study. However, the fact that the number of Swedish participants was relatively high compared to the two other groups, may be another important explanatory factor. Whether these relations would be the same for mono-cultured North Americans and Europeans, is outside the scope of this study.

In summary, it can be noted that when comparing data from the HBSC study/Sweden among 11-, 13-, and 15-year-olds (Folkhälsomyndigheten, 2018), there are demographic similarities between the mainly domestic (88%) Swedish participants of the HBSC study and the multicultural participants of the current study. This allows us to look at some similarities and differences between those adolescents with expatriate background and those of domestic background. For example, out of the 4,215 15-year-old participants from the Swedish study, 69% lived with both their parents, compared to 80% in the current study. In the HBSC study 97% said they had good or very good SES, compared to 72% in the current study. However, when it comes to internalizing behavior problems, about 40% of the girls and 20% of the 15-year-old boys in the HBSC study stated low mood, irritation, nervousness, and insomnia as common problems. In the current study on TCIs only 8% scored as having serious internalizing problems as mentioned above. Likewise, when it comes to measures of facets of resilience, in the main HBSC study self-efficacy is measured alongside self-esteem. Both measures are highly correlated with resilience (; Berry & West, 1993; Rutter; 1987, Sagone et al., 2020; Schwarzer & Warner, 2016; Werner, 1982), and hence, interesting as an approximate comparison measure to results from the current study. In the Swedish HBSC study approximately 75-80% of the 15-year-olds scored high in self-efficacy and self-esteem, whereas 95% of the TCI participating in this study scored high or very high on resilience (Folkhälsomyndigheten, 2018).

Even though these results shall be interpreted with caution, as they are based on similar measuring tools but not the exact same, they are interesting. As the relative difference is quite large, it might indicate a possible difference between adolescents growing up domestically and those growing up in a third-cultural context, both with respect to internalizing behavior problems as to resilience. However, more research is needed to clarify whether such relationships can firmly be established.

### **Limitations and future studies**

One of the limitation of this study is its cross-sectional design, and hence, its inability to produce data from which casual inference can be drawn. This becomes especially problematic when researching children's and adolescents' development, as time is a crucial component when explaining the impact of developmental contexts such as family, friends,

and school environment. Therefore, and to gain further understanding about these associations a longitudinal approach would be necessary and recommended.

Another limitation to this study was the overrepresentation of mothers (89.2%) in the study. This could potentially have impacted the outcome of perceived family climate and positive parenting provided. However, as the results on these two variables highly correlated between the participating parents and adolescents, we believe the results to be a fair representation of how both parents and adolescents perceived parenting and family climate alike.

An additional problem with using convenience sample recruited from various Facebook groups, was exposure to the desired population. Most of the Facebook groups targeted had several thousand members, and consequently when an item was posted on the wall of these groups, it would be current for, at best, a couple of hours. After that all post disappear in the enormous flow of other posts and comments. This might have impacted the make-up of the participant pool, increasing the risk of having a participant pool that does not fully represent the underlying population studied.

A further limitation of this study, linked to the above-mentioned mean of recruiting participants, was the problem with parental consent necessary when doing research with a minor (Swedish Research Council, 2011; Fraser et al., 2004). To ensure parent consent, only one questionnaire was used. This questionnaire was divided in two sections, one for the parent and one for the adolescent. Even though the adolescents were advised to be given full privacy when completing their portion of the questionnaire, and were tasked with submitting the form upon completion, there were no research means to verify this as the questionnaires were completed in each participant's private home. This could potentially have caused some adolescents to experience less privacy when answering the questions, which in turn may have compromised the honesty of their replies.

Finally, this research calls for more studies on the expatriate population, especially with respect to the psychological impact such upbringing entails. We have offered some indication of which factors possibly would increase resilience in individuals growing up outside their passport countries. However, larger, and preferably longitudinal studies are needed to robustly confirm such associations. Further, as the participants of this study were largely composed of middle/upper-middle-class families, for the purpose of further studies, it would be valuable to include underprivileged migrants alongside those of expatriate background.

Despite these caveats, this study offers several potential implications for how to strengthen resilience in groups exposed to a high number of risk factors due to the loss of support network and social context, such as immigrant and refugee populations. Factors such as expatriate adolescents' understanding about themselves, behaviors of their family and friends, and positive feelings of being able to impact their own lives (i.e., a good sense of coherence) paired with positive support from teachers and peers were the most salient resilience factors in this study. Besides focusing on providing support for acute problems, preventive and systematic work to strengthen resilience would most likely be highly beneficial to vulnerable groups such as children and adolescents growing up in multiple cultures across the world.

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