# THE MEDIATION EFFECT OF SOCIAL CONNECTEDNESS BETWEEN BIG FIVE PERSONALITY TRAITS AND SOCIAL INTERACTION ANXIETY AMONG THIRD CULTURE KIDS IN BANGKOK

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**Abstract:** The study examined the association of social interaction anxiety (SIA), social connectedness (SC) and the big five personality traits in third culture kids in Bangkok. The purpose of the current study was to investigate the direct and indirect effect of the Big Five traits on SIA in TCKs, mediated by SC. The study employed Path Analysis via a set of multiple regressions for each of the five traits and Process Analysis to test the significance of mediation effect. A convenience sample of 123 TCKs, 78 girl and 45 boys of age 14-18 years, from the international school in Bangkok filled out questionnaire of Social Interaction Anxiety Scale (SIAS), Social Connectedness Scale-revised (SCS-R) and Big Five Inventory (BFI). Results showed that extroversion was a significant negative predictor with a direct and indirect effect on SIA, partially mediated by SC ( $\beta = -.19$ , 95% CI = -.33, -.09). Neuroticism was a significant positive predictor with a direct and indirect effect on SIA, partially mediated by SC ( $\beta$  = .21, 95% CI = .11, .32). Openness, conscientiousness and agreeableness showed no significant direct or indirect effect on SIA. Its shows that low sense of belonging and connection in introverted and neurotic adolescents exacerbates their concerns in social interactions, thus contributing towards making them socially anxious. Therefore, adolescent TCKs with low extroversion and high neuroticism can be protected against their natural vulnerabilities towards social interaction anxiety with the help of developing higher levels of social connectedness.

**Keywords:** Third culture kids (TCKs); Social Connectedness (SC); Social Interaction Anxiety (SIA); Big Five

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#### Introduction

In a world spiraling towards becoming a global village over the past few decades, a new category of children was acknowledged on the map of the social world. In the 1960s, the sociologists John and Ruth Hill Useem coined the term Third Culture Kids (TCKs) as the children that accompany their parents to live in countries other than their home country (Useem, 1999) during their developmental years such that these children develop a third culture to explicate an identity that is distinct from that of both the host country or the parents' home country (Pollock and Van Reken, 1999). TCKs have voiced distress over leaving established friendships, making new friends, and entering a new school environment (Sam, 2000; Vernberg & Randall, 1997), and have exhibited substantially more behavioral deviance such as anti-social disorder as compared to host children. They have shown the tendency to develop unhealthy social interaction patterns that they may sustain throughout their lives (Campbell, Bierman & Molenaar, 2015) such as locking themselves up in the house or even their rooms, keeping their headphones in their ears for hours in public and expressing less interest in speaking, avoiding social interactions (Stein et al., 2001). Their adjustment, interaction and mental health is dependent on the personality traits (Kotov, Gamez, Schmidt & Watson, 2010) and their intrapersonal factors like personality traits or social interaction anxiety are also related to one's quality of interpersonal relationships through social connectedness (Van Zalk & Van Zalk, 2014). Personality and social connectedness are important factors for explaining the social interaction anxiety (La Greca, & Harrison, 2005; Lee, Draper, & Lee, 2001). Thus, the purpose of this quantitative study is to examine the role played by SC between different personality traits and SIA of adolescent TCKs.

#### Literature Review

The following brief review of literature contains theoretical perspectives and empirical findings that demonstrate interrelationships among the key variables of personality traits, SIA and SC.

# Big Five Personality Traits

The Big Five Model summarizes the significant individual differences that help individuals adapt namely openness, conscientiousness, extroversion, agreeableness and neuroticism. These traits are the causal personality dispositions and an explanatory interpretation of the empirically derived Big Five taxonomy (Costa & McCrae, 1992a). For each trait of the Big Five Model there are two distinct, but correlated, aspects reflecting bipolar levels and every personality falls somewhere between the two extremes (DeYoung, Quilty & Peterson, 2007) such as, talkative and reserved in Extraversion, friendly and harsh in Agreeableness, orderly and messy in Conscientiousness,

calm and fearful in Neuroticism, and perceptive and ignorant in Openness (Goldberg, 1990).

### Social Interaction Anxiety (SIA)

This study focuses on SIA that is one aspect of the social anxiety disorder (Mattick & Clarke, 1998). It is the fear and avoidance of meeting, interacting, and expressing oneself with others in social interaction. SIA is also viewed as to be the generalized social anxiety where as social phobia is the term used for situation anxiety such as performance anxiety.

## Social Connectedness (SC)

SC is a stable individual difference that reflects the awareness and internalized experience of interpersonal closeness in relationships with family, friends, strangers, community, and society (Lee & Robbins, 1995). It can be conceptualized as the way an individual views his or her self in relation to the social world, as emotionally connected or disconnected. And can be described as the ability to feel comfortable within a social context larger than family or friends.

## Personality and Social Interaction Anxiety

In a linear regression study, social anxiety has shown to have positive correlation with neuroticism, negative with extraversion, and weaker relationships with agreeableness, openness, and trust (Kaplan, Levinson, Rodebaugh, Menatti & Weeks, 2015). Low Neuroticism was found to be an independent predictor of higher levels of social anxiety. At higher levels of agreeableness, low openness shows to be uniquely predictive for higher levels of social anxiety symptoms (Łakuta, 2019).

### Social Connectedness & Social Interaction Anxiety

Positive social connections are negatively related to social anxiety (Van Zalk & Van Zalk, 2014) and fundamentally, social anxiety is a product of the belief that one's impression will lead others to devalue, avoid, or reject them. People with a greater sense of SC are able to enter into social situations and engage with others more eagerly and easily (Lee & Robbins, 1998).

## Personality Traits and Social Connectedness

A recent study investigated predictors of SC derived from Facebook. Extraversion, and Openness significantly predicted SC through Facebook (Grieve & Kemp, 2015). Agreeableness has been associated with an overwhelmingly positive impact on interpersonal relationships via friendliness, warmth, and sociability it entails (Harris & Vazire, 2016).

Conscientiousness exerts small but positive impact on friendship formation and satisfaction (Selfhout et al., 2010).

#### Social Connectedness as a Mediator

SC, the mediator in the present study, is conceptualized as primarily subjective in nature. It is theorized that individuals low in connectedness engage in dysfunctional interpersonal behaviors as a protective mechanism against social rejection (Lee, Draper, & Lee, 2001). Also, SC as a mediator of the relationship between extraversion and well being explained that it allows extraverts to maintain well being across different social situations (Lee, Dean & Jung, 2008).

# Conceptual framework

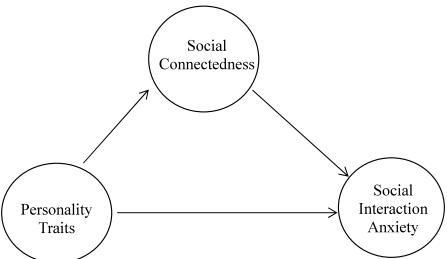


Figure 1. Conceptual Framework of the Study

#### Methods

## Research Design

The study employed path analysis via multiple regression analysis with process analysis to analyze the mediation effect of SC on the relationship between the predictor variables i.e., the personality traits and the dependent variable i.e., SIA.

#### *Participants of the Study*

The participants of the study were the 14-18 year old students in the middle and high school of International schools in Bangkok, who have experienced living in country/countries other than their and their parent's passport country.

# Sample Size

The required sample size was determined to be 98 participants through G\*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007) with significance level at 0.05, power at 0.80, and effect size at 0.15 (small) for all five predictor variables. In order to increase the power and external validity of the obtained findings, the sample size was increased to 123 participants.

#### Data Collection

The researcher completed the data collection process with 145 samples collected from three schools and two parent groups and upon detailed examination found 22 questionnaires to be invalid dues to obvious error in completion or criteria fulfillment. Informed consent was obtained from parents of the participants.

#### Research Instruments

The instrument consisted of a self-report, four parts, questionnaire to measure and assess the demographic characteristics, personality traits, SC and SIA.

## Big Five Inventory (BFI)

The "Big Five" Personality Traits were measured by using the 44-item Big Five Inventory (John and Srivastava, 1999) that assesses five personality traits (openness, conscientiousness, extroversion, agreeableness and neuroticism) using a five-point Likert scale ranging from Strongly Agree to Strongly Disagree. Cronbach's alpha, in the present study, were .86 for Extroversion, .77 for Agreeableness, .73 for Conscientiousness, .82 for Neuroticism and .72 for Openness.

## Social Connectedness Scale-Revised (SCS-R)

The SCS-R is comprised of 20 items assessing experiences of closeness in interpersonal contexts, as well as difficulties establishing and maintaining a sense of closeness (Lee, Draper, & Lee, 2001). Ten items are negatively worded while the remaining is positively worded. The SCS-R uses six-point Likert scale (strongly disagree to strongly agree). The Cronbach's alpha reliability, in the present study was 0.91 for SCS-R.

#### Social interaction Anxiety Scale (SIAS):

The Social Interaction Anxiety Scale (SIAS), developed by Mattick and Clarke was utilized to measure social interaction anxiety with 20 items, 17 negative items and 3 positive items, using Likert scale with five-point rating (strongly agree to strongly disagree). The Cronbach's alpha reliability, in the present study was 0.91 for SIAS.

## **Findings**

## Demographic Profile of Participants

The demographic profile of the data is based on 123 valid completed questionnaires. The results from the descriptive analysis indicated that 78 girls and 45 boys of age 14-18 years participated. The number of transitions from one country to the other during their life of each participant varies from zero to eight. The participants were from 37 countries and 15 were dual nationals.

### Correlations among the Variables

A Pearson product-moment correlation coefficient was computed to assess the Correlations.

Table 1: Correlation between All the Variables of the Study (N=123)

Table 1. Correlation betw	een Aii i	ne vari	uvies vj ii	ne sinay	$(1\sqrt{-1}23)$	
Variable	1	2	3	4	5	6
1.Openness	1					
2.Conscientiousness	.20**	1				
3.Extoversion	.12	.07	1			
4.Agreeableness	.04	.24*	12	1		
5.Neuroticism	.07	16	37*	11	1	
6.Social Connectedness	.02	.13	.51*	.09	46*	1
7.Social Interaction Anxiety	09	15	62*	.00	.49*	57*

Note: \*\*p < .05, \*p < .001

The results indicated a significant negative correlation between SIA and extroversion (r = -.62, p < .001); SIA and SC (r = -.57, p < .001) whereas a significant positive correlation between SIA and neuroticism (r = .49, p < .001). The results also showed a significant positive relationship between extroversion and SC (r = .51, p < .001) and a significant negative correlation between neuroticism and SC (r = -.46, p < .001).

# Path Analysis Via Multiple Regression to Test the Hypothesis

Path analysis was performed with SPSS where five separate mediation analyses were performed through a set of multiple regressions for each of the five personality traits. Also, the significance of the indirect effect was tested with Hayes Process macro (2012) using a percentile bootstrap estimation approach with 5000 samples, executed with the Process macro Version 3.4.1.

# <u>Mediation of social connectedness between openness and social interaction</u> anxiety:

Regression analysis was used to examine the hypothesis that social connectedness mediates the effect of openness on social interaction anxiety.

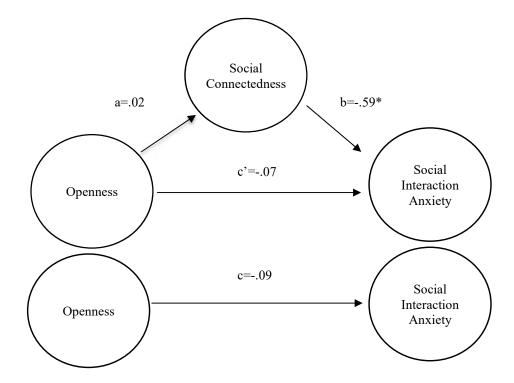


Figure 2. Path Model of the Direct and Indirect Effect of Openness on Social Interaction Anxiety being Mediated by Social Connectedness.

The results indicate that Openness is not a significant predictor of SIA and SC.

Table 2. Mediation effect of Social Connectedness on the Relationship between Openness, and Social Interaction Anxiety (N=123)

Predictor	В	se	β	p	t	beta 95% CI (LL, UL)	$\mathbb{R}^2$
Model l							
Openness	11	.11	09	.34	96	33, .11	.01
(Criterion variable: SIA)							
Model2							
Openness	09	.09	07	.32	99	27, .09	
Social Connectedness							
(Criterion variable: SIA)	56	.07	59	.00*	-7.94	70,42	.34
Openness							
(Criterion variable: SC)	.03	.12	.02	.79	.26	20, .26	.00
Indirect Effect							
(Process Macro)		.05	02			11, .09	

Note: \* p < .001. SIA: Social Interaction Anxiety; SC: Social Connectedness

# <u>Mediation of social connectedness between conscientiousness and social interaction anxiety:</u>

Regression analysis was used to investigate the hypothesis that SC mediates the effect of conscientiousness on SIA.

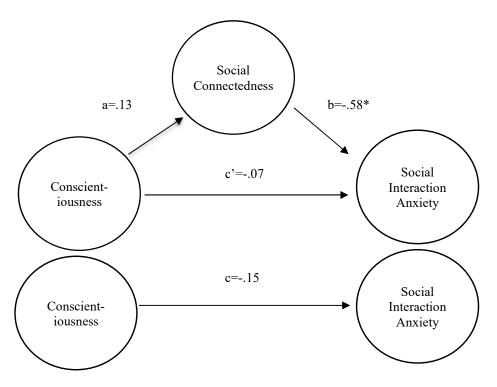


Figure 3: Path Model of the Direct and Indirect Effect of Conscientiousness on Social Interaction Anxiety being Mediated by Social Connectedness.

The results indicate that Conscientiousness is not a significant predictor of SIA and SC.

Table 3. Mediation effect of Social Connectedness on the Relationship between Conscientiousness, and Social Interaction Anxiety (N=123)

Predictor	В	se	β	p	t	beta 95% CI (LL, UL)	$R^2$
Model1	-	.1	-		-		.0
Conscientiousness	.19	1	.15	.09	1.69	41, .03	2
(Criterion variable: SIA)							
Model2	-	.0	-	.03	-		
Conscientiousness	.09	9	.07	1	1.00	27, .09	

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Predictor	В	se	β	p	t	beta 95% CI (LL, UL)	$R^2$
Social Connectedness	-	.0	-	.00	-		.3
(Criterion variable: SIA)	.55	7	.58	*	7.75	69,41	5
Conscientiousness (Criterion variable:		.1					.0
SC)	.18	2	.13	.14	1.49	06, .41	2
Indirect Effect		.0	-				
(Process Macro)		5	.08			17, .01	

Note: \* p < .001. SIA: Social Interaction Anxiety; SC: Social Connectedness

# <u>Mediation of Social Connectedness between Extroversion and Social</u> Interaction Anxiety:

Regression analysis was used to investigate the hypothesis that SC mediates the effect of extroversion on SIA.

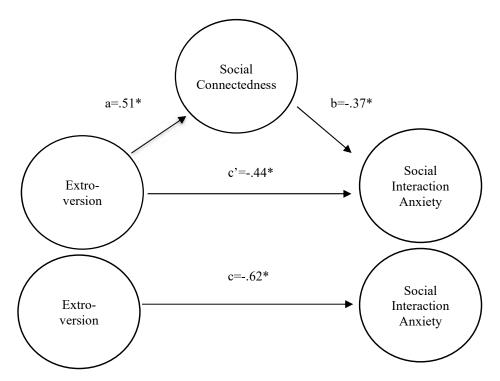


Figure 4. Path Model of the Direct and Indirect Effect of Extroversion on Social Interaction Anxiety being Mediated by Social Connectedness.

Results of this model indicated that Extroversion is a significant predictor of Social Connectedness ( $\beta$ = .51, se = .07, p< .001) (path a), and that Social Connectedness has a significant positive relation with Social Interaction Anxiety ( $\beta$  = -.37, se = .072, p< .001) (path b). For the direct effect,

Extroversion is a significant predictor of Social Interaction Anxiety after controlling for the mediator, Social Connectedness ( $\beta$  = -.44, se = .07, p< .001) (path c') that is lower than the total effect where Extroversion is a significant predictor of Social interaction anxiety ( $\beta$ = -.62, se = .06, p< .001) (path c). The results support the mediation hypothesis (F (2,120)=56.4, p< .001, R<sup>2</sup> = .48), with approximately 48.4% of the variance in Social Interaction Anxiety being accounted for by the predictor and mediator. The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples and 95% level of confidence, implemented with the Process macro Version 3.4.1. These results indicated the indirect coefficient is significant,  $\beta$  = -.19, se = .06, 95% CI = -.33, -.09. Since the confidence intervals do not include a zero, the indirect effect is statistically significant. As shown in Table 4

Table 4. Mediation Effect of Social Connectedness on the Relationship between Extroversion, and Social Interaction Anxiety (N=123)

Predictor	В	se	β	p	t	beta	$R^2$
						95% CI	
						(LL, UL)	
Model1	.55	.06	.62	.00*	-8.71	68,43	.26
Extroversion							
(Criterion variable: SIA)							
Model2	39	.07	44	.00*	-5.73	52,25	
Extroversion							
Social Connectedness	35	.07	37	.00*	-4.80	4920	.48
(Criterion variable: SIA)							
Extroversion	.47	.07	.51	.00*	6.48	.33, .62	.26
(Criterion variable: SC)							
Indirect Effect		.062	19			33,09	
(Process Macro)							

Note: \* p < .001. SIA: Social Interaction Anxiety; SC: Social Connectedness

# <u>Mediation of social connectedness between agreeableness and social</u> interaction anxiety:

Regression analysis was used to investigate the hypothesis that SC mediates the effect of agreeableness on SIA.

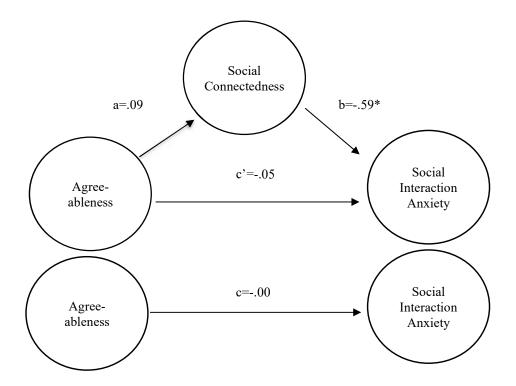


Figure 5: Path Model of the Direct and Indirect Effect of Agreeableness on Social Interaction Anxiety being Mediated by Social Connectedness.

The results indicate that Agreeableness is not a significant predictor of SIA and SC.

Table 5. Mediation effect of Social Connectedness on the Relationship between Agreeableness and Social Interaction Anxiety (N=123)

Predictor	В	se	β	р	t	beta	$R^2$
						95% CI	
						(LL, UL)	
Model1	00	.11	00	.97	03	22, .21	.00
Agreeableness							
(Criterion variable: SIA)							
Model2	.06	.09	.05	.51	.65	12, .23	
Agreeableness							
Social Connectedness	56	.07	59	*00	-7.97	70,42	.35
(Criterion variable: SIA)							
Agreeableness	.11	.12	.09	.34	.95	12, .34	.01
(Criterion variable: SC)							
Indirect Effect		.05	05			14, .03	
(Process Macro)							

Note: \* p < .001. SIA: Social Interaction Anxiety; SC: Social Connectedness

<u>Mediation</u> of social connectedness between neuroticism and social interaction anxiety:

Regression analysis was used to investigate the hypothesis that SC mediates the effect of neuroticism on SIA.

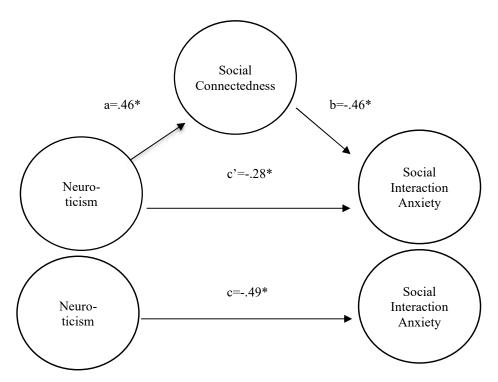


Figure 6. Path Model of the direct and Indirect Effect of Neuroticism on Social Interaction Anxiety being Mediated by Social Connectedness.

Results indicated that Neuroticism is a significant predictor Social Connectedness ( $\beta$ = -.46, se = .06, p< .001), and that Social Connectedness is a significant predictor of Social Interaction Anxiety ( $\beta$  = -.46, se = .08, p< .001). For the direct effect, Neuroticism is a significant predictor of Social Interaction Anxiety after controlling for the mediator Social Connectedness ( $\beta$  = .28, se = .071, p< .001), that is lower than the total effect where Neuroticism is a significant predictor of Social Interaction Anxiety ( $\beta$ = .49, se = .07, p< .001) (path c). The results support the mediation hypothesis (F (2,120)=41.31, p< .001, R<sup>2</sup> = .41), with approximately 41% of the variance in Social Interaction Anxiety being accounted for by the predictor and mediator. The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples, implemented with the Process macro Version 3.4.1. The results indicated the significance of indirect coefficient,  $\beta$  = .21, se = .05, 95% CI =

.11, .32. Since the confidence intervals do not include a zero, the indirect effect is statistically significant. As shown in Table 6

Table 6. Mediation Effect of Social Connectedness on the Relationship between Neuroticism. and Social Interaction Anxiety (N=123)

Predictor	В	se	β	р	t	beta	$R^2$
						95% CI	
						(LL, UL)	
Model1	.44	.07	.49	.00*	6.26	.30, .58	.24
Neuroticism							
(Criterion variable: SIA)	)						
Model2	.26	.07	.28	.00*	3.6	.12, .40	
Neuroticism							
Social Connectedness	43	.08	46	.00*	-5.75	5828	.40
(Criterion variable: SIA)							
Neuroticism	43	.08	46	.00*	-5.7	59, -28	.21
(Criterion variable: SC)							
Indirect Effect		.05	.21	•	•	.11, .32	
(Process Macro)							

Note: \* p < .001. SIA: Social Interaction Anxiety; SC: Social Connectedness

#### **Discussion**

The purpose of the study is to examines the direct and indirect effect of the big five personality traits i.e., openness, conscientiousness, extroversion, agreeableness and neuroticism, on social interaction anxiety, being mediated by social connectedness in the adolescent thirds culture kids in Bangkok. This quantitative study aims to examine the role played by social connectedness for adolescent TCKs with different personalities and their social interaction anxiety. It focuses on the adolescent TCKs as the population for research, as they are more vulnerable with the lack of social connectedness due to cultural differences, unfamiliar surroundings and frequent new situations.

#### Openness, Conscientiousness & Agreeableness

It was hypothesized that openness, conscientiousness have a direct and indirect effect on SIA of TCKs in Bangkok mediated by social connectedness. The results from the study do not provide sufficient evidence to support the hypotheses. The results indicated that there is no significant direct or indirect effect of openness, conscientiousness and agreeableness on SIA mediated by social connectedness. The previous researches have shown mixed results with weak or non-significant results of these associations (Kaplan et. al., 2010, Łakuta, 2019). The possible explanation for this might be that theoretically, by characteristics, openness is strongly reflective of ideas, aesthetics, fantasy, action and feelings (Costa & McCrae, 1992a) and intellectualism, idealism and adventurousness (John, Naumann & Soto 2008) which do not seem to be

instrumental when it comes to identifying SIA or SC. The high scores in this dimension signify being imaginative, adventurous, broad interests, and daring where as low scores signify being more comfortable with familiar and traditional experiences, data driven and close-minded (John & Srivastava, 1999). Similarly, conscientious people are characterized as being goaloriented and persistence (Costa & McCrae, 1992a). High scores on this dimension signify being organized, responsible and reliable where as low scores signify carelessness, sloppiness, and inconsistency in their approach (John & Srivastava, 1999). Therefore, to be given an anxiety-inducing social situation, it may not come in as effectual because this doesn't bother central characteristics of openness. Another potential reason for such mixed results, given in literature, is a repeated focus on higher-order factors in the absence of examining lower-order facets (Kaplan et. al., 2010) in the hierarchical model of personality. And it may also be a lack of focus on interaction between traits (Łakuta, 2019) when examining relationships. Therefore, facet level or interaction focused studies may yield better results of correlation.

#### Extroversion

It was hypothesized that extroversion has a direct and indirect effect on social interaction anxiety of TCKs in Bangkok, such that the higher the score on extroversion, higher will be the score on social connectedness and lower will be the score on social interaction anxiety. The results from the study support the hypothesis and are consistent with previous research where extroversion has been found to be a significant negative predictor of social anxiety in diverse populations (Kaplan et. al., 2010, Łakuta, 2019). This can be explained by the fact that high self-confidence, curiosity, sociability and being energetic, as the main characteristics of extravert people, makes them to be not afraid of being evaluated by others (John, Naumann, & Soto, 2008), and makes them valiant enough to face new and unknown interactions. Therefore, normally the extraverts experience less social anxiety. Also, in the current study social connectedness significant association with extroversion, which is also in line with previous related studies. Extroversion appears to play the most positively significant role in the social aspects such as social connectedness through Facebook (Grieve & Kemp, 2015) and high-quality friendships through emotional closeness (Wilson, Harris & Vazire., 2015) as they are known to initiate interactions easily, look at their interaction partners more, are less selfconscious, make impressions of being more talkative and are overall relaxed individuals in social interaction (Back et al., 2011). Process Analysis in the present study supported the mediation hypothesis. It can be inferred that extraverted adolescents TCKs take advantage of social opportunities and develop affirming relationships with others in their surroundings, resulting in the satiation of the need for belonging and connection which in turn protects

them against social interaction anxiety. Social connectedness has shown to be negatively related to social anxiety (Lee, Dean & Jung, 2008) and shown to reduce social anxiety as well (Ashida & Heaney, 2008) such that it allows extraverted individuals to maintain low anxiety across varying social interactions.

#### Neuroticism

It was hypothesized that neuroticism has a direct and indirect effect on social interaction anxiety of TCKs in Bangkok, such that the higher the score on neuroticism, lower will be the score on social connectedness and higher will be the score on social interaction anxiety. The results from the current study support the hypothesis and are in line with previous research according to which emotional instability of neurotic people is an independent positive predictor of high levels of social anxiety (Kaplan et. al., 2010; Łakuta, 2019). Neuroticism being contrary to adjustment and emotional stability makes such people experience higher levels of anxiety since they stay worried, feel unsafe and nervous (Costa & McCrae, 1992a). Moreover, neurotic people also expose themselves more to tensions related to negative misunderstandings and misinterpretations of events. Hence, neurotic adolescent may evaluate situations negatively because of their pessimistic views. This makes them to always be afraid of negative evaluations that are considered as the main element of social anxiety. Additionally, the current study finds neuroticism to have a significant negative relationship with social connectedness. This is also consistent with previous studies where emotional stability in neurotic people is discovered to be associated with Facebook social connectedness (Grieve & Kemp, 2015) and high neuroticism is associated with having a smaller friendship network (Harris and Vazire, 2016). They struggle both with starting and maintaining relationships, because of their low self-esteem and negative affect (Back et al., 2011).

#### Mediating Effects of Social Connectedness

The results also show that adolescent TCKs with low extroversion and high neuroticism can be protected against their natural vulnerabilities towards different levels of social interaction anxiety with the help of developing higher levels of social connectedness. In other words low sense of belonging and connection in introverted and neurotic people exacerbates their concerns in social interactions, thus contributing towards making them socially anxious.

## Implications of the Study

This study has implications for both research and practice. It gives statistical evidence of the significance of social connectedness for adolescent TCKs experiencing social interaction anxiety due to their personality constraints.

Developing social connectedness is the key to help such TCKs by focusing on its five dimensions described as feelings of closeness, shared identities, valuing the relationships, feeling socially involved as well as cared for and accepted (Hare Duke, Slade, Dening & Oliveira, 2019), with interventions such as peer support in school, support groups and building community networks. Focusing on the enrichment of social connectedness is of particular importance in the context of TCKs, as their frequent transitions cause loss of friendships, familiar support systems and belongingness. Practitioners, at schools, can make use of interventions to enhance social connectedness such as facilitating newcomer TCKs by assigning a partner/buddy from home country who supports them in their settling phase and helps develop connections and friendships with others with out immobilizing levels of social anxiety (Andersen, Rønningen & Løhre, 2019). Counselors can encourage their adolescent TCK clients to be more socially active by participating in sports and other team based activates (Hoye, Nicholson & Brown, 2012). Teachers can form "term teams" for socially anxious students that can work on group projects for a few months to an academic year in a group the feel a part of, with peer support (Andersen, Rønningen & Løhre, 2019; Hoye, Nicholson & Brown, 2012).

## Limitations of the Study

Firstly, as all the information was based on self-report measures, there is a chance of self-reporting biases or even dishonest or overrated responses. Although the informed consent forms mentioned that results would be anonymous and treated with strict confidentiality, some participants might have reported with a biased approach. Secondly, due to Covid-19 pandemic, the questionnaire administration mode may have been a limitation in the data collection procedure, as two different forms of test administration i.e. the paper-pencil format and online format may have influenced the over all data. Thirdly, convenient sampling was utilized for this study in a few international schools, which may not be a true representation of the TCK population. Fourthly, the scales used in this study are constructed in the western context and the population of the current study is multicultural. There could have been limitation of understanding the language and its context for some participants, as English is not the first language of all participants and their language proficiency may vary and affect the understanding of the statements. Finally, the research design employed (path analysis) was descriptive and correlational, not experimental. In essence, the path analysis results can only be interpreted in terms of their relationships and not in terms of causality.

#### Recommendations for Future Research

The future researches can take the following recommendations to deal with

the limitations of this study and achieve better results. Firstly, a true random sampling from a larger sample size may better represent the population and help detect weaker relationships based on gender and nationality based subgroups, hence providing more accurate mean values, identifying outliers that could skew the data in a smaller sample and providing a smaller margin of error. Secondly, under better circumstances employing a homogeneous mode of test administration and data collection can prevent any such biasing effects on the quality of the data. Replicating the same procedure at multiple international schools with the help of school administration can help remove such effects. Thirdly, keeping in view the diversity of TCKs, future researches might employ qualitative research methods to examine how TCKs describe social connectedness and social interaction anxiety based on their individual experiences. This will also allow the researcher to evaluate the data in view of the cultural differences among the respondents. Lastly, the data can be made more concrete and conclusive if future researchers conduct studies within other settings such as other metropolitans around the world to cater for crosscultural comparisons and other societal and communal facilitations or constraints.

#### Conclusion

In this research, the results of the statistical analyses indicated that in dealing with TCKs, it is important to be aware of the role of extroversion and neuroticism when working with issues involving social interaction anxiety. In sum, this study answered the research questions and concluded that extroversion and neuroticism showed significant direct and indirect effect on social interaction anxiety being mediated by social connectedness whereas openness to experience, conscientiousness and agreeableness showed a non-significant direct and indirect effect on social interaction anxiety being mediated by social connectedness.

#### REFERENCES

- Ashida, S., & Heaney, C. A. (2008). Differential associations of social support and social connectedness with structural features of social networks and the health status of older adults. *Journal of Aging Health*, 20 (7), 872-893. http://doi:10.1177/0898264308324626
- Andersen, M., Rønningen, G., & Løhre, A. (2019). Listen to the voices of the students! The role of peers in academic and social school connectedness. *Nordisk Tidsskrift For Pedagogikk Og Kritikk*, 5(0), 147. http://doi: 10.23865/ntpk.v5.1333
- Campbell, C., Bierman, K., & Molenaar, P. (2015). Individual Day-to-Day Process of Social Anxiety in Vulnerable College Students. *Applied*

- *Developmental Science*, 20(1), 1-15. http://doi: 10.1080/10888691.2015.1026594
- Costa, P., & McCrae, R. (1992a). *Normal personality assessment in clinical practice: the NEO personality inventory*. Psychological Assessment 4, 5–13.
- DeYoung, C., Quilty, L., & Peterson, J. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal Of Personality and Social Psychology*, 93(5), 880-896. http://doi: 10.1037/0022-3514.93.5.880
- Faul, F., Erdfelder, E., Lang, A.G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*, 175-191.
- Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229. http://doi:10.1037/0022-3514.59.6.1216
- Grieve, R., & Kemp, N. (2015). Individual differences predicting social connectedness derived from Facebook: Some unexpected findings. *Computers in Human Behavior*. http://doi:51. 10.1016/j.chb.2015.04.034.
- Hare-Duke, L., Dening, T., de Oliveira, D., Milner, K., & Slade, M. (2019). Conceptual framework for social connectedness in mental disorders: Systematic review and narrative synthesis. *Journal Of Affective Disorders*, 245,188-199. https://doi.org/10.1016/j.jad.2018.10.359
- Harris, K., & Vazire, S. (2016). On friendship development and the Big Five personality traits. *Social And Personality Psychology Compass*, 10(11),647-667. https://doi.org/10.1111/spc3.12287
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf
- Hoye, R., Nicholson, M., & Brown, K. (2012). Involvement in sport and social connectedness. *International Review for The Sociology of Sport*, 50(1),3-21. https://doi.org/10.1177/1012690212466076
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.
- John, O. P., Naumann., L.P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 114-158). New York, NY: Guilford.

- Kaplan, S., Levinson, C., Rodebaugh, T., Menatti, A., & Weeks, J. (2015). Social Anxiety and the Big Five Personality Traits: The Interactive Relationship of Trust and Openness. *Cognitive Behavior Therapy*, 44(3),212-222. http://doi: 10.1080/16506073.2015.1008032
- Kotov, R., Gamez, W., Schmidt, F., & Watson, D. (2010). Linking "big" personality traits to anxiety, depressive, and substance use disorders: A meta-analysis. *Psychological Bulletin*, *136*(5), 768-821. http://doi: 10.1037/a0020327
- La Greca, A., & Harrison, H. (2005). Adolescent Peer Relations, Friendships, and Romantic Relationships: Do They Predict Social Anxiety and Depression? *Journal Of Clinical Child & Adolescent Psychology*, *34*(1), 49-61. http://doi: 10.1207/s15374424jccp3401\_5
- Łakuta, P. (2019). Personality Trait Interactions in Risk for and Protection against Social Anxiety Symptoms. *The Journal Of Psychology*, *153*(6),599-614. https://doi.org/10.1080/00223980.2019.1581723
- Lee, R., & Robbins, S. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity. *Journal of Counseling Psychology*, 45(3), 338–345. http://doi: 10.1037/0022-0167.45.3.338
- Lee, R., Dean, B., & Jung, K. (2008). Social connectedness, extraversion, and subjective well-being: Testing a mediation model. *Personality And Individual Differences*, 45(5), 414-419. http://doi: 10.1016/j.paid.2008.05.017
- Lee, R., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal Of Counseling Psychology*, 48(3), 310-318. http://doi: 10.1037/0022-0167.48.3.310
- Lee, R., & Robbins, S. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance scales. *Journal Of Counseling Psychology*, 42(2), 232-241. http://doi: 10.1037/0022-0167.42.2.232
- Mattick, R.P. & Clarke, J.C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behavior research and therapy.* 36. 455-70.
- Pollock, D., & Van Reken, R. (1999). *Third Culture Kids: The experience of growing up among worlds*. Yarmouth, Maine: Intercultural Press.
- Sam, D. (2000). Psychological Adaptation of Adolescents with Immigrant Backgrounds. The *Journal of Social Psychology*, *140*(1), 5-25. http://doi: 10.1080/00224540009600442
- Selfhout, M., Burk, W., Branje, S., Denissen, J., van Aken, M., & Meeus, W. (2010). Emerging Late Adolescent Friendship Networks and Big Five

- Personality Traits: A Social Network Approach. *Journal Of Personality*, 78(2),509-538. http://doi: 10.1111/j.1467-6494.2010.00625.x
- Stein, M., Fuetsch, M., Müller, N., Höfler, M., Lieb, R., & Wittchen, H. (2001). Social Anxiety Disorder and the Risk of Depression. *Archives Of General Psychiatry*, 58(3),251. http://doi: 10.1001/archpsyc.58.3.251
- Useem, R. H. (1999). Third Culture Kids: Focus of major study—TCK "mother" pens history of field. Retrieved October 22, 2019, from www.tckworld.com/useem/artl.htlm
- Vernberg, E., & Randall, C. (1997). Homesickness after relocation during early adolescence. In M. Van Tilburg & A. Vingerhoets (Eds.), Home is where the heart is: The psychological aspects of permanent and temporary geographical moves (pp. 165–180). Tilburg, the Netherlands: Tilburg University Press.
- Van Zalk, N., & Van Zalk, M. (2014). The Importance of Perceived Care and Connectedness with Friends and Parents for Adolescent Social Anxiety. *Journal Of Personality*, 83(3),346-360. http://doi: 10.1111/jopy.12108
- Wilson, R., Harris, K., & Vazire, S. (2015). Personality and Friendship Satisfaction in Daily Life: Do Everyday Social Interactions Account for Individual Differences in Friendship Satisfaction? *European Journal of Personality*, 29(2),173-186. http://doi: 10.1002/per.1996