

Differences in student's year of study and social interaction anxiety: implications for social cohesion among undergraduate students of the University of Lagos.

Bolajoko I. Malomo¹, and Michael Opadoja²

^{1,2}Department of Psychology, University of Lagos

bolajokomalomo@yahoo.com

Abstract

Year of study and the level of social interaction anxiety may be related to several outcomes associated to the academic performance of students. This study thus set out to investigate possible differences in social interaction anxiety based on the years of study of students in the University of Lagos. This study adopted a cross sectional survey research design as data was obtained utilising self-report measures from students sampled from four different levels of study. 142 (54%) were male students while 121 (46%) were female students. The age of participants was between 16 years and 30 years. The number of participants across the levels indicate that 96 (36.7%), 80 (30.3%), 47 (17.8%) and 40 (15.2%) students represented 100, 200 300 and 400 level students respectively from six faculties in the University of Lagos. Two hypotheses were tested to explain students' year of study and their social interaction anxiety. The Social Interaction Anxiety Scale (SIAS) was administered to the participants. Thus, one-way ANOVA statistic was conducted to test the hypotheses. The results reveal statistical differences in social interaction anxiety exhibited by 100, 200, 300 and 400 level participants ($F(3, 269, = 2.969, P < .05)$). The results were discussed in relation to the achievement of social cohesion among undergraduate students.

Keywords: *Level of study, social interaction anxiety, social cohesion, university of Lagos students*

Introduction

The authors of the Social Interaction Anxiety Scale (SIAS), Mattick, and Clarke (1998) define social interaction as a feeling of "distress when meeting and talking with other people". Social interaction anxiety is a condition that affects many individuals (Rosenthal et al., 2007). Researchers have reported that people who are socially anxious are more likely to display behaviours that are not pro-social or socially inclined such as hostility and possibly aggression (e.g., Loudin et al., 2003; Storch et al., 2005). This is a situation that does not seem to encourage social cohesion on group basis; be it a school setting or the society at large.

According to O'Neil (2007), students who gain admission into the

university experience a life of freedom for the first time at resumption. This is especially true when parents and guidance are not present to direct and guide them. To corroborate this, Ngwenya (2004) further stated that first year students in the university face the challenges of new study habits and teaching methods. Therefore, these students need to adjust adequately to achieve academic success (Burgess et al., 2009; Adler et al., 2008), without which the consequences may lead to withdrawal from the university (Pillay, & Ngcobo, 2010; Abdullay et al., 2009)

The university environment is one that is characterised by various kinds of academic and non-academic activities that places a demand on students to interact with fellow students, their lecturers and other

people. Notable among the academic activities are classroom group assignments that require equal participation and input from every member of the group. Additionally, on other social basis, students interact in the halls of residences, cafeterias and at social events on their campuses. This is more evident and important when a new session commences and newly admitted students ask questions while trying to get familiar with their environment. cursory observation of group presentations and other activities that require group participation by students indicate that students experience and manifest a certain level of fear and increased level of anxiety in their class rooms. Such students show signs of inability to interact with their fellow students successfully and find it difficult to respond when asked to present their assignments orally or when asked to respond to questions from their lecturers. This may inherently affect their social interaction in the school environment and in the society at large. These experiences may be negate the natural inclination to belong and be active in a social setting (Ryan, &Deci, 2000).

Social interaction anxiety also manifests in fear of social situations that involve interactions with friends and new acquaintances within and outside a familiar terrain (Kashdan, 2004, Brown et al., 1997). People with social interaction anxiety may be evaluated by others as being shy (Russel, & Shaw, 2006), quiet, backward, withdrawn, inhibited, unfriendly, nervous, aloof, and disinterested. Paradoxically, people with social interaction anxiety want to make friends, be included in groups, and be involved and engaged in social situations or context but having social anxiety prevents them from being able to interact with others and do the things they want to do (Ryan, &Deci, 2000)

According to the Statistical Manual of Mental Disorder, 4th Edition Test Revision (DSM-IV-TR) (American

Psychiatric Association, 2000), the fear experienced due to social anxiety persists across one or more social situations where the person gets exposed to unfamiliar people or to possible scrutiny by others. Individuals with social interaction anxiety are of the opinion that they will do or say something humiliating or embarrassing that may draw negative evaluation by others (American Psychiatric Association, 1994). When avoidance of a social situation is not possible, the exposure to the social situation provokes anxiety, sometimes to the intensity required to induce a panic attack (Geangu& Reid, 2006). The manifestation of these symptoms interferes significantly with the daily activities of such individuals; sometimes also bringing disruptions to both their social and professional lives (Goudreau, 2011).

Social interaction anxiety has drawn numerous research interests among social and clinical psychologists but focusing on students. This is because firstly, anxiety manifests, and is common among late adolescent years (Tassin, Reynaert, Jacques &Zdanowicz, 2014; Herringer et al., 2013); the age students are admitted into the university. Secondly, in the university environment, interaction with fellow students is inevitable. Thus, various demographic (de Beurs, Deirdre, &Wollmann, 2014; Enochs, Austin, & Roland (2006), social (Okpilike, 2012) and personality variables (Mohammed, 2013) have been studied in relation with social interaction anxiety. For instance, a study of Chinese adolescents by Peng, Lam, and Jin (2011), studied potential risk factors for social interaction anxiety. It was revealed in their study that psycho-social factors such as family income, self-esteem and hostility were significantly related to social interaction anxiety among their participants. Also in the study of Herringer et al. (2013), girls are at a greater risk of experiencing any form of anxiety disorder. A review of these studies and those of O'Neil (2007); Ngwenya (2004) reveals

that a gap still exist in literature which requires the study of the social anxiety of students across the years of study before graduation. This study therefore aims to identify the differences in the social interaction of students across the years spent in the university.

Student's year of study is defined in this study as the first, second, third or fourth year in the university. Year of study, also referred to as the level of study in the University of Lagos relates to the current academic year of the students. Students commence their undergraduate degree programmes at the 100 level, after which they proceed to 200, 300, 400 and sometimes 500 level depending on the course the students are studying. Some individuals who see themselves in a new environment are more socially anxious than those who have been in that environment and are familiar with it. Thus, students in 100 level are new in the University and unfamiliar with the University environment. Such students are therefore expected to experience a greater social interaction anxiety compared to other levels of study. It can also be predicted that students in the 200, 300 and 400 level, or those that have spent more years in the University will experience less social interaction anxiety compared to 100 level students. The cognitive behavioural model of Heimberg, Juster, Hope, and Mattia (1995) explains this better.

This study is hinged on the cognitive behavioural model by Heimberg, Juster, Hope, and Mattia (1995). This model does not actually present a new attempt at explaining people's reactions at social settings; rather, it integrates various results from research studies and existing models. The model is based on the assumption that there is a predisposition to develop social anxiety, which may be inherited or produced by factors at childhood or from the adolescent environment (Kift, 2010; Herringer et al., 2013). These factors tend to sensitize the

person to threatening aspects of social encounters. For instance, during childhood socialisation process, a socially anxious parent, an environment filled with perfectionist standards (Villiers, 2009), or overprotection and isolation from social contacts may produce interaction anxiety. Adolescents may also be exposed to negative peer groups or heterosexual experiences that may affect interaction in social situations. This hypothesis is supported by Hudson, and Rapee (2000). Heimberg et al. (1995) view these experiences as a set of beliefs that increases the probability of a person approaching social situations apprehensively or attempt to avoid them. These beliefs include the assumption that social encounters are dangerous to one's self-esteem, and that the only way to avoid negative outcomes is to strive for perfection. As a consequence, the person will anticipate humiliation, embarrassment and rejection and experience increased arousal before and during the social situation. The increased arousal then provides the person with further evidence of danger and may lead him or her to feel anxious to the extent that the anxiety will become visible to others.

Up until now, there is a dearth of studies on differences in the amount of social interaction anxiety exhibited by students of all levels of study in the University. Instead, ample studies abound on freshmen (first year students) and their social interaction anxiety (eg. Campbell, Bierman, & Molenaar, 2016). The general assumption may be that after the first year in the university, students would have overcome the challenges posed by social interaction anxiety. However, this assumption requires empirical confirmation which this study has set out to investigate. The authors of this study therefore sought to identify any possible link between students' level of study and their social interaction anxiety. This objective is essential because it will provide a comprehensive understanding of when, and

how long social interaction anxiety manifests among undergraduate students and how it could be managed to reduce hostility, social withdrawal tendencies and behaviours that do not promote social cohesion.

Thus, the authors of this study postulated two hypotheses. Firstly, we hypothesise that 100 level students will significantly obtain a higher score on social interaction anxiety compared to students in 200, 300 and 400 levels. Therefore what we expect is that students in 400 level will obtain the lowest score on social interaction anxiety followed by students in 300, 200 and 100 levels.

Method

This present study adopted and utilised the cross sectional survey research design. The setting for this study was the University of Lagos Nigeria, situated in Akoka-Yaba, the mainland part of Lagos on 802 acres of land. The University of Lagos is among the Federal Government Universities established in 1962 with student enrolment of not less than 40,000. Currently, there are 12 Faculties with several departments offering various courses at undergraduate and postgraduate levels. The faculties from which the participants were sampled using multi-stage sampling techniques are: faculties of social sciences, arts, education, law, sciences and engineering.

The initial instrument of data collection was administered to two hundred and eighty student participants from the six faculties. These faculties were randomly drawn by balloting from the twelve faculties in the university. Out of the survey instrument administered, two hundred and sixty-three were returned completely filled. This represents a return rate of 94 per cent. Purposive and convenience sampling technique were used to select the participants from the various departments in the six faculties selected. The reason for this is because of the peculiar nature of the study as the authors focussed on the four

levels of study from 100 level to 400 level. From the participants, 142 (54%) were male students while 121 (46%) were female students. The age of participants was between 16 years and 30 years. The number of participants across the levels indicate that 96 (36.7%), 80 (30.3%), 47 (17.8%) and 40 (15.2%) students represented 100, 200 300 and 400 level students respectively from six faculties in the University of Lagos.

The research instrument utilized in this study to measure social interaction anxiety was the Social Interaction Anxiety Scale (SIAS) developed by Mattick and Clarke (1998). The scale specifically assesses anxiety experienced mainly while interacting with other people. The reliability of the SIAS is supported by Crombach's (1990) alpha internal consistency of .93. The hypothesis of this study was tested with a Oneway analysis of variance (ANOVA) statistic.

Results

The objective of this study is to investigate if students of 100 level will report a higher level of social interaction anxiety compared to students of 200, 300 and 400 levels in six faculties of the University of Lagos. The authors hypothesised that 100 level student participants will report a higher score on social interaction anxiety compared to 200, 300 and 400 academic level students.

Table 1: Showing Mean and Standard Deviation of Social Interaction Anxiety reported by 100, 200, 300 and 400 academic level students

Levels	N	\bar{X}	SD
100	96	27.35	14.55
200	80	25.03	10.47
300	47	28.02	13.73
400	40	20.92	11.30

The result presented in table 1 reveal the mean values on social interaction anxiety for 100 level participants ($M=27.35$ $SD=14.55$), 200 level participants ($M=25.03$, $SD=10.47$), 300 level participants ($M=28.02$, $SD=13.73$) and 400 level participants ($M=20.92$, $SD=11.30$). The mean values reveal that 400 level participants obtained the lowest score on social interaction anxiety compared to 300 level, 200 level and 100 level participants. In relation to our first hypothesis where we stated that 100 level students will significantly obtain a higher score on social interaction anxiety compared to students in 200, 300 and 400 levels, we conclude that the hypothesis was partially accepted. This is because 100 level students obtained a higher score compared to only 200 and 400 level students, but obtained a lower mean score on social interaction anxiety compared to 300 level

students. The results in table 1 also reveal that the scores on social interaction anxiety did not decrease as the number of years spent in the university increases. The second hypothesis which stated that the scores obtained on social interaction anxiety by participants will decrease as the years spent in the university increases was also partially accepted. 100, 200, 300 and 400 level participants obtained 27.35, 25.03, 28.02, 20.92 mean values respectively.

The authors went further to test if there is a statistically significant difference in the means obtained by all the levels. This was confirmed from the ANOVA analysis in table 2. Table 2 reveals that the significant level is 0.032 (i.e., $p = .032$), which is below 0.05, a value that indicate statistical differences in social interaction anxiety exhibited by 100, 200, 300 and 400 level participants ($F(3, 269) = 2.969$, $P < .05$)

Table 2: One Way ANOVA on Social Anxiety among 100, 200, 300 and 400 academic level students

	Sum of square	Df	Mean Square	F	Sig.
Between Groups	1462.231	3	487.410	2.969	.032
Within Groups	42676.724	260	164.141		
Total	44138.955	263			

$P < .05$

To further confirm this assertion, a multiple comparisons analysis was conducted using the Tukey post hoc test. This is revealed in table 3.

. Table 3: Multiple Comparisons of Means and

(I) Levels	(J) Levels	Mean (I-J)	Sig.

	200levels	2.31302	.233
100levels	300levels	-.67076	.769
	400levels	6.42552*	.008
	100levels	-2.31302	.233
200levels	300levels	-2.98378	.206
	400levels	4.11250	.099
	100levels	.67076	.769
300levels	200levels	2.98378	.206
	400levels	7.09628*	.011
	100levels	-6.42552*	.008
400levels	200levels	-4.11250	.099
	300levels	-7.09628*	.011

*. The mean difference is significant at the 0.05 level.

In table 3, the Tukey post hoc analysis reveal that among the levels, there was only a significant difference between students of 100 level and those of 400 levels (27.35, 11.30, $P=.008$). Additionally, though not hypothesised, a significant difference was revealed between students of 300 level and students of 400 level ($P=.011$). There was no statistical significant difference between students of 100 level and students of 200 level ($P=.233$); students of 100 level and 300 level ($P=.769$).

Discussion

This study examined the differences in students' level of study and their social interaction anxiety and its implication for social cohesion among undergraduate students in the University of Lagos. The hypothesis stated that 100 level students will significantly obtain a higher score on social interaction anxiety compared to students in 200, 300 and 400 levels. Based on the result, we partially accepted this hypothesis. This is because 100 level students obtained a higher mean score compared to only 200 and 400 level students, but obtained a lower mean score on social interaction anxiety compared to 300 level students. This result can be explained in the light of the assertion made by Carstensen, Isaacowitz, and Charles (1999) where it was argued that when people do not have options to choose the places they go, they may experience more social anxiety in anxiety inducing settings. The 100 level students are new in the university environment and would be

expected to interact with strangers. Moreover, most of the activities they must attend as students are important to their academic success. Hence, irrespective of the social anxiety they are expected to experience in any group assignment or gathering, they have no other option but to be there. This will further aggravate their social anxiety level. Another support and explanation for the result in table 1 has to do with the challenges faced by students transiting from high school to the university. According to Yousaf (2015), such students experience a low level of self-esteem due to the transition. This further compound the problem of social anxiety due to the inadequacies and discomfort new students experience in a new environment and with so much freedom at their disposal that they may not be able to handle.

A lower mean score on social interaction anxiety was obtained by 200 level students compared to 300 level students. Specifically, there was no

statistical difference in the social interaction anxiety of 100 and 300 level students. The question then is why would students in 200 level obtain a lower mean score on social interaction anxiety compared to students in 300 level who are in their third year? There are mixed reports on the pattern of social anxiety growth rate across a person's life. While some researchers reported a decrease in anxiety as age increases (Campbell, 1996), others (Cicetti, 2010) reported that anxiety increases with age due to life challenges associated with growing up. This may be the case with our participants. But according to Kessler et al. (2005) study, it was affirmed that social anxiety disorder is prevalent among younger age groups. The explanation for the result obtained for 200 level students who obtained a lower score on social interaction anxiety compared to 300 level students may be related to factors such as family background and self-esteem (Baldwin, & Hoffmann, 2002), parenting style (Ho, 1987), and personality factors (Chronis-Tuscano et al. (2009). This implies that irrespective of the years spent in the university, students may still exhibit social interaction anxiety. Hence, this explanation also applies to the result on the second hypothesis which stated that social interaction anxiety will reduce with increasing years in the University. This result is not in tandem with the assertion made by Kashdan (2007) who suggested that social anxiety symptoms decrease with increasing years. But on the other hand, Campbell (1996) affirmed that social anxiety does not increase with age. Ferrari (1986), in a review of some studies, reported a general decline in the number of fears reported by children, but that an important consideration is the type of fear expressed.

The main contribution of this study lies in the confirmation that social interaction anxiety is not only a challenge to newly admitted students in the university, but that it affects students across

all levels of study. This information is relevant to the management of tertiary institutions. The outcome of this study is useful to instructors and teachers who should be aware of, and understand the possibility that some students' may face challenges with interacting with other students. This is not to advocate for the elimination of group assignments or group activities on campuses, but the awareness that some students are vulnerable is sufficient to identify such students and intervene in assisting them emotionally.

The problems associated with social interaction will also inform concerned authorities on the reasons for absenteeism in classes. Do all students look forward to the next class where group participation is required? This will inform the need to assess students who are regularly absent from class on social interaction anxiety.

Based on the aforementioned, management of tertiary institutions should aim at adjusting the curriculum of undergraduate students in such a way as to accommodate inadequacies of students. For instance, regular counselling programmes should be built into the semester course work. This way, students will receive regular and close attention from professional and experienced counsellors.

Also, assessment of students' social interaction anxiety level should be taken at the point of admission. This is very crucial because at this point, majority of the students experience freedom for the first time. Thus, a timely intervention is necessary before the negative consequences of social interaction anxiety catch up with them. Each department should be empowered and encouraged to organise programmes that would take care of the psychological needs of the students.

Social cohesion in relation to students refers to the degree to which students interact with each other, share group goals and work together to meet these goals. It is therefore imperative to ensure that the group works smoothly as

one unit. To ensure that, every member of the group need contribute to the group's goal. This can be hampered by social interaction anxiety of members. Social cohesion is a function of social interaction, where no actual interaction exists, it might be difficult to observe cohesion or group coherence as it were. Students who manage to interact more among themselves may achieve greater academic and social goals and social cohesion is achieved, one that guarantees trust, similarities in values and openness to individual social needs and contributions. A Cohesive academic environment is more likely to develop a quality communication atmosphere in which students are more comfortable and as well encouraged to express their thoughts and feelings without any inhibition. Students become friendlier and cooperate with each other to bring out the best in them in terms of potentials and abilities regardless of their academic level of study and other related variables that may act as an impediment such as social interaction anxiety.

It is important to note here that the results of this research may not be generalized to a larger population. Hence, future studies with a larger population from various tertiary institutions are advised to enhance the generalizability of the study of the results. The research design used in this study is the survey design which has some limitations that the authors tried to control.

References

- Abdullah, M. C., Elias, H., Mahyuddin, R., & Uli J. (2009). Adjustment among first year students in a Malaysian university. *European Journal of Social Sciences*, 8(3), 496-505.
- Adler, J., Raju, S., Beveridge, A. S., Wang, S., Zhu, J., & Zimmermann, E. M. (2008). College adjustment in University of Michigan students with crohn's and colitis. *Inflammatory Bowel Disease*, 14(9), 1281-1286.
- American Psychiatric Association (2009). *Diagnostic and Statistical Manual of Mental Disorders – Test Revision (DSM-IV-TR)*. Washington, DC: American Psychiatric Association.
- Baldwin, S. A., & Hoffman, J. P. (2002). The dynamics of self-esteem: A growth-curve analysis. *Journal of Youth and Adolescence*, 31, 101-113.
- Brown, E. J., Turovsky, R., Heimberg, G., Juster, H. R., Brown, T. A., & Barlow, D. H., (1997). Validation of the social interaction anxiety scale and the social phobia scale across the anxiety disorders. *American Psychological Association*, 9(1), 21-27.
- Burgess, T., Crocombe. L., Kelly, J., & Seet, P. (2009). The effect of cultural background on the academic adjustment of first year dental students. *Ergo*, 1(2), 5-24.
- Campbell, M. A. (1996). Does social anxiety increase with age? *Australian Journal of Guidance and Counselling*, 6(1), 43-45.
- Campbell, C. G., Bierman, K. L., & Molenaar, P. C. M. (2016). Individual day to day process of social anxiety in vulnerable college students. *Applied Developmental Science*, 20(1), 1-15.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously- a theory of socio-emotional selectivity. *American Psychologist*, 54, 165-181.

- Cicetti, F. (2010). Anxiety may increase with age. Retrieved on 15/04/2018 from <http://www.livescience.com/8452-anxiety-increase-age.html>.
- Crombach, L. J. (1990). *Essentials of psychological testing*. 5th ed., Harper and Row, New York.
- Chronis-Tuscano, A., Degnan, K. A., Pine, D. S., Perez-Edgar, K., Henderson, H. A., Diaz, Y., Raggi, V. L., & Fox, N. A. (2009). Stable early maternal report of behavioural inhibition predicts lifetime social anxiety disorder in adolescence. *Journal of American Academy of Child Adolescent Psychiatry*, 48(9), 928-935.
- deBeurs, E., Tielen, D., & Wollmann, L. (2014). The Dutch social interaction anxiety scale and phobia scale: Reliability, validity and clinical utility. *Psychiatry Journal*, Article ID 360193, 9 pages. Retrieved from <http://dx.doi.org/10.1155/2014/360193>.
- Enochs, W. K. Austin, S. F. & Roland C. B. (2006). Social adjustment of college freshmen: the importance of gender and living environment. *College Student Journal*, 40(1), 63-73.
- Ferrari, M. (1986). Fears and phobias in childhood: some clinical and developmental considerations. *Child Psychiatry & Human Development*, 17(2), 75-87.
- Geangu, E., & Reid, V. M. (2006). What can early social cognition teach us about the development of social anxieties? *Cognition, Brain, Behaviour*, 10(4), 543-557.
- Gougreau, J. (2011). Do you suffer from workplace anxiety? Retrieved on April 14, 2014 from <http://www.forbes.com/sites/jennagoudreau/2011/02/08/do-you-suffer-workplace-anxiety-worry-stress-fear-office-most-common/#7245545846a4>
- Heimberg, R. G., Juster, H. R., Hope, D. A., & Mattia, J. I. (1995). Cognitive-behavioral group treatment: description, case presentation, and empirical support. In M. B. Stein (Ed.), *Social phobia: Clinical and research perspectives* (pp. 293-321). Arlington, VA, US: American Psychiatric Association.
- Herrington, R. J., Birn, R. M., Ruttle, P. L., Burghy, C. A., Stodola, E., Davidson, R. J. & Essex, M. J. (2013). *Proceedings of the National Academy of Sciences*, 110(47), 19119-19124.
- Ho, M. K. (1987). *Family therapy with minorities*. Newbury Park, CA: Sage.
- Hudson, J. L., & Rapee, R. M. (2000). The origins of social phobia. *Behavior Modification*, 24, 102-129.
- Kashdan, T. B. (2004). The neglected relationship between social interaction anxiety and hedonic deficits: differentiation from depressive symptoms. *Journal of Anxiety Disorders*, 18, 719-730.
- Kashdan, T. B. (2007). Social anxiety spectrum and diminished positive experiences: Theoretical synthesis and meta-analysis. *Clinical Psychology Review*, 27, 348-365.
- Kessler, R. C., Berglund, P. Demler, O., Jin, R., Merikangas, K. R., Walters, E. E. (2005). Lifetime prevalence and age of onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication.

- Archives of General Psychiatry*, 62, 593-602.
- Kift, L. B. (2010). Childhood experience and adult anxiety. Retrieved on April 13, 2018 from <http://loveandlifetoolbox.com/childhood-experience-and-adult-anxiety/>.
- Loudin, J., Loukas, A., & Robinson, S. (2003). Relational aggression in college students: Examining the roles of social anxiety and empathy. *Aggressive Behaviour*, 29(5), 430-439.
- Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy*, 36(4), 455-470.
- Mohammed, I. (2013). Many roads to social satisfaction? Social anxiety, social interaction format and social belonging. A thesis submitted to the honors college of the University of Southern Mississippi in partial fulfillment of the requirements for the degree of bachelor of science in the department of psychology.
- Ngwenya, M. D. (2004). The imaging techniques as learning support for educationally disadvantaged learners in the secondary school to improve comprehension. Pretoria, University of Pretoria.
- Okpilike, M E. (2012). The place of social interaction in the Nigerian school system: implications for group life. *Developing Countries Journal*, 2(10), 37.
- Peng, Z. W., Lam, L. T., & Jin, J. (2011). Factors associated with social interaction anxiety among Chinese adolescent. *East Asian Arch Psychiatry*, 21(4), 135-141.
- Villiers, D. (2009). Perfectionism and social anxiety among college students. A Dissertation Submitted to the Department of Counseling and Applied Educational Psychology in Partial Fulfillment for the Degree of Doctor of Philosophy, North-eastern University, Boston.
- Pillay, A. L. & Ngcobo, H. S. B. (2010). Sources of stress and support among rural-based first year university students: an exploratory study. *South African Journal of Psychology*, 40(3), 234-240.
- Russel, G., & Shaw, S. (2006). What is the impact of social anxiety on student well-being and learning? *Social Anxiety Teaching Fellowship, University of Plymouth Teaching Fellowship Report*.
- Rosenthal, J., Jacobs, L., Marcus, M., & Katzman, M. (2007). Beyond shy: When to suspect social anxiety disorder. *Journal of Family Practice*, 56(5), 369-374.
- Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologists*, 55, 68-78.
- Storch, E., Bagner, D., Geffken, G., & Baumeister, A. (2004). Association between overt and relational aggression and psychosocial adjustment in undergraduate college students. *Violence and Victims*, 19, 689-700.

Tassin, C., Reynaert, C., Jacques, D., & Zdanowicz, N. (2014). Anxiety disorders in adolescence, *Psychiatria Danubina*, 26(1), 27.

Yousaf, S. (2015). The relation between self-esteem, parenting style and social anxiety in girls. *Journal of Education and Practice*, 6(1), 140.