

## **SCHOOL CONNECTEDNESS AND ACADEMIC BUOYANCY: INSIGHTS INTO FILIPINO COLLEGE STUDENTS' EXPERIENCE OF ACADEMIC STRESS**

Gail Conway

Corresponding author's e-mail: [Gee.dconway@gmail.com](mailto:Gee.dconway@gmail.com)

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**Abstract:** The primary purpose of this research was to look into college students' academic stress as regressed from connectedness and academic buoyancy. Participants involved included 186 (male = 61, female = 125) undergraduates from a Philippine university. Hierarchical regression analysis revealed a significant inverse relationship between connectedness and academic stress in model 1 ( $\beta = -.277, p < .01$ ). This relationship remained significant in model 2 ( $\beta = -.186, p < .01$ ) when academic buoyancy and other demographic variables were added, indicating the value of connectedness in situations that could trigger stress among students. Likewise, academic buoyancy was revealed to be a significant predictor of academic stress ( $\beta = -.294, p < .001$ ). Findings suggest the utilization of an endogenous resource and an exogenous resource to cope with stress. Implications of the findings on school outcomes such as learning and motivation, and counseling psychology are discussed.

**Keywords:** School Connectedness, Academic Buoyancy & Academic Stress

### **INTRODUCTION**

Elemental to education is the completion of academic tasks designed to increase the students' learning. Although this may present a straight line in terms of how learning occurs, the actual journey may be bumpy as there are instances when students become stressed. Academic stress may arise from perceptions of one's curriculum or program (Heath, Macfarlane & Umar, 1999; Humphris et al., 2002; Neveu et al., 2012) grade competition (Bedewy & Gabriel, 2015) and the amount of workload that students are required to do (Alzahem, van der Molen, Alaujan, Schmidt & Zamakhshary, 2011). Likewise, academic stress may be triggered by

individual and personal experiences inside and outside of their school (Robotham & Julian, 2006). Aside from the aforementioned, literatures from different fields have also established that stress can vary depending on demographic characteristics, the most common of which is gender, with women experiencing more stress than men (Alzahem et al., 2011; Gyllensten & Palmer, 2005). In educational institutions, female students face the same scenario and rated themselves higher than men in terms of stress and psychological distress, and experienced more somatic symptoms (Banks & Symth, 2015; Saleh, Camart & Romo, 2017).

Academic stress is normal and to some extent, it can have positive outcomes relevant to learning (Zajacova, Lynch & Espenshade, 2005). On the other hand, academic stress can easily escalate to extreme levels, particularly in today's educational system, where academic competition is intense and schools offer curricula that are intensive and laborious. Extreme increases in academic stress can lead to negative outcomes such as dysfunctional coping (Neveu et al., 2012), low performance (Alzahem et al., 2011; Gustems-Carnicer, Calderón & Calderón-Garrido, 2019), student attrition (Amirkhan & Kofman, 2018) and psychological concerns (Alzahem et al., 2011; Bedewy & Gabriel, 2015).

There are psychological characteristics that can address academic stress. Among these, researchers have turned their attention to academic buoyancy in recent years. Defined as students' capacity to cope with "academic setbacks and challenges that are typical of the ordinary course of school life" (Martin & Marsh, 2008), academic buoyancy has been established as a positive psychology construct that has a positive bearing on various academic outcomes. For example, Martin & Marsh (2008) has established that among 3450 Australian students, academic buoyancy was able to account for positive school behaviors such as lower absenteeism, better literacy and higher rates of completing take-home classwork. Likewise, in a large-scale study on school-age children, academic buoyancy was related to academic achievement (Miller, Connolly & Maguire, 2013). In yet another study, academically buoyant students had better scores in a high-stake examination containing items on mathematics, English and science (Putwain, Daly, Chamberlain & Sadreddini, 2015).

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Aside from school outcomes, academic buoyancy is also a correlate of wellbeing indicators. For instance, it is a negative predictor of emotional instability and neuroticism (Martin, Ginns, Brackett, Malmberg & Hall, 2013). Similarly, it is inversely related to academic stress when the latter is measured in the form of test anxiety (Putwain, Connors, Symes & Douglas-Osborn, 2012; Putwain et al., 2015), pressure from demanding schoolwork (Hirvonen, Yli-Kivisto, Putwain, Ahonen & Kiuru, 2019) and threats of failure (Symes, Putwain & Remedios, 2015).

While the role of buoyancy in alleviating academic stress is underscored in several studies, positive psychology also posits that connectedness can help students in their school-related adjustments. A multifaceted construct, connectedness can be elicited by school climate, and teacher and department support (Winkle-Wagner & McCoy, 2016). Similarly, it can come from students' relationships in schools, extracurricular activities and school opportunities, as well as feelings of safety in school (Libbey, 2004). It is considered a protective factor that can reduce negative effects of stressful experiences even among students with non-normative experiences (Sharp, Penner, Marais & Skinner, 2018). In the form of support from students' proximal social environment in school (Wilks, 2008; Lohmeier and Lee, 2011), connectedness helps in regulating emotions (Winter, Moriarty, and Short, 2018), which in turn serves as a buffer when students experience stress-related emotions such as anxiety and sadness (Saklofske, Austi, Mastoras, Beaton, and Osborne, 2012; Tandon, Dariotis, Tucker, and Sonenstein, 2013).

Empirical reports have shown the positive bearing of connectedness on various school and personal outcomes. For instance, students who reported positive school climate perceptions because of school relationships and opportunities for autonomy were not only academically adjusted but were also more psychologically adjusted (Jia et al, 2009). In their longitudinal study on students transitioning to middle school, Niehaus, Rudasil & Rakes (2012) also demonstrated that connectedness weakens negative experiences during the transition. Likewise, connected students engaged in better self-regulatory behaviors at school (Jdaitawi, 2015). Connectedness also mediated the relationship between extraversion and the three dimensions of subjective wellbeing i.e. life satisfaction, positive and negative effects (Lee, Dean & Jung, 2008). Students, who were extraverted, interacted more with others, felt more connected to the world

and were less distant from people. Furthermore, when effects of self-esteem and mattering were controlled, connectedness emerged as a predictor of indicators of wellness (Watson, 2017). These aforementioned scenarios are echoed in a meta-analysis on school belonging stating that higher belongingness lead to more motivation for school, better academic performance, less misbehavior, more feelings of happiness and more positive psychological functioning (Allen, Kern, Vella-Brodrick, Hattie & Waters, 2016).

All of the preceding literatures on connectedness suggested two things: first, students can find themselves in situations that can induce academic stress and second, connectedness can help address said stress. In other studies, the relationship of connectedness to psychological distress (e.g. Jia et al, 2009; Macrynika, Miranda & Soffer, 2017) was also tested although these studies have a more clinical theme rather than a day-to-day take of stress in the context of school. Though the researchers recognize how essential these studies are, they also acknowledge that it is important to look into stress relevant to academic situations because this a common experience of the general student population particularly because students have numerous roles and would most likely juggle countless of responsibilities (Christiansen et al., 2019).

Despite extant work showing the impact of connectedness on school situations wherein academic stress is embedded, the researchers have not found any literature that juxtaposed it with academic buoyancy and tested by the decrease in stress it can be account for. Since these two have been presented to play key roles in lowering academic stress, a study on how they could have additive effects is imperative. Thus, in light of the preceding contentions, the current research hypothesizes that connectedness can predict lower academic stress among students. Furthermore, it will remain a significant predictor even in the presence of academic buoyancy, which, as previously mentioned, also plays a central role in reducing academic stress. Studying their combined effect on lowering stress among college students is crucial because these individuals are transitioning from basic education to university life and may find adjusting to this new phase challenging (Robotham & Julian, 2006).

## **METHOD**

### **Participants**

A total of 186 Filipino students between ages 17 and 20 ( $M = 18.70$ ) participated in the survey. From the entire sample, 61 were male and 125 were female. At the time of data collection, the participants were enrolled in programs that were in line with the medical field, education, and business and management.

### **Measures**

#### ***Demographic characteristics***

The genders were dummy coded; males were coded as 1 ( $n = 61, 32\%$ ) and females were coded as 2 ( $n = 125, 67.2\%$ ). Likewise, the courses were also dummy coded and the five courses were split into two program categories; quota programs, which referred to courses that required higher cumulative grades and retained students according to their ranking, were coded as 1 ( $n = 75, 40.3\%$ ) while non-quota programs were coded as 0 ( $n = 111, 59.7\%$ ).

#### ***Academic buoyancy***

Participants' buoyancy was measured using a 4-item Likert scale on the construct (Martin & Marsh, 2008). The items questioned about the students' capacity to deal with school related obstacles such as failing grades and pressure from schoolwork. Participants rated the extent of their agreement or disagreement with the items using a 7-point rating scale (1 = strongly disagree, 2 = disagree, 3 = disagree somewhat, 4 = neither agree nor disagree, 5 = agree somewhat, 6 = agree and 7 = agree strongly). The scale had an acceptable computed reliability of  $\alpha = .789$ .

#### ***School connectedness***

Participants responded to a 15-item scale measuring social connectedness in a school setting. The items, which were adapted from the original work of Summers, Beretvas, Svinicki & Gorin (2005) were answered using a 6-point Likert scale (1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = slightly agree, 5 = moderately agree and 6 = strongly agree). The scale had a good computed Cronbach's  $\alpha$  of .861.

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***Academic stress***

To measure school stress, participants were asked to respond to a 6-item scale that was originally developed by Cohen, Kamarck & Mermelstein as cited in Taylor (1999). Participants were primed to think of their classes while responding to the items which were answered using a 5-point scale (0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often and 4 = very often). The scale had an acceptable computed Cronbach's  $\alpha$  of .767.

**Procedure**

Data was collected from the participants in the form of survey. Prior to data collection, consent of the participants was obtained. Afterwards, they underwent research debriefing and were allowed to ask questions regarding the information that they shared. In addition, participants were informed about data confidentiality twice, prior to the survey and post survey. Once data collection was completed, each datum was encoded and screened for missing responses. When these were done, they were statistically processed.

**Data Analysis**

To prepare the data for the main analysis, descriptive statistics and variable correlations were obtained. Thereafter, hierarchical regression was utilized to regress academic stress from the predictors. School connectedness was entered first because of the assumption that it would explain lower academic stress. Demographic characteristics, i.e. gender and program, and academic buoyancy were entered next in the process because of extant literature establishing their connection to student stress. The three aforementioned variables were entered last because of the assumption that school connectedness would remain significant even with the addition of the other variables, especially with the addition of academic buoyancy, which has been empirically reported as having a substantial role in lowering academic stress.

**RESULT**

As previously mentioned, two psychological assets of students, i.e. school connectedness and academic buoyancy, and their relationship to academic stress were explored in the current study. The descriptive results indicate that more than half of the time, participants experienced being stressed by their academic work ( $M = 2.90$ ,  $SD = 0.63$ ). This stress was manifested through feelings of less control over academic situations as well as feelings

of being unable to cope and accomplish academic demands that were piling up.

With regards to the predictor variables, participants reported academic buoyancy that was slightly above the midpoint of the scale ( $M = 4.41$ ,  $SD = 1.36$ ). This score implies that the participants are academically buoyant and are thus capable of dealing with their academic setbacks and pressures effectively. Parallel to buoyancy, the participants' sense of school connectedness is also above the midpoint ( $M = 4.49$ ,  $SD = .080$ ), which means that they are able to “participate with anyone or any group in school, closely bond with people in the campus, and have a sense of connection and belongingness with peers and significant people in their campus life” (Summers et al., 2005). The associations among the variables range from weak to moderate ( $r = .16$  to  $-.37$ ), with both predictor variables negatively correlating with academic stress.

Table 1. Descriptive Statistics and Correlations among the Study Variables

Study Variables	M	SD	AS	SC
Academic stress (AS)	2.90	0.63		
School connectedness (SC)	4.49	0.80	-.23**	
Academic buoyancy (AB)	4.41	1.36	-.37***	.16*

Note: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The study primarily hypothesized that school connectedness, relates to academic stress inversely. Hierarchical regression analysis confirmed this hypothesis by yielding results illustrating connectedness' significant contribution to the lowering of academic stress among the participants (See Table 2, Model 1). In the second model, participants' academic buoyancy, due to empirical evidences showing it as a salient predictor of stress, was entered together with the participants' demographic characteristics. Model 2 shows that gender and program category have no bearing on participants' academic stress as denoted by their non-significant p-values. However, like school connectedness in Model 1, academic buoyancy has a significant inverse relationship with the said criterion variable. Thus, the more academically buoyant the participants are, the lower their scores in academic stress.

Model 2 also illustrates how school connectedness remains a salient negative predictor, even when academic buoyancy and demographic

variables were entered in the model, demonstrating predictors-criterion relationships that have not been well explored in previous literatures. Overall, participants' sense of connectedness in school and their academic buoyancy are both salient psychological assets in decreasing their experience of stress. Combined, these predictors explain 16.3% of the variance of academic stress.

Table 2. Hierarchical Regression Results for Academic Buoyancy and School Connectedness as Predictors of Academic Stress

Model/Predictor Variable	B	SE B	$\beta$	T	p	Semi partial r
1 <sup>a</sup> School Connectedness	-.180	.057	-.227	-3.166	.002	-.227
2 <sup>b</sup> School Connectedness	-.147	.054	-.186	-2.701	.008	-.182
Program Category	.090	.090	.070	1.003	.317	.067
Gender	.147	.095	.109	1.543	.125	.104
Academic Buoyancy	-.137	.034	-.294	-4.058	.000	-.273

Note. <sup>a</sup>  $F(1,184)= 10.024$ , adjusted  $R^2=.047$ ,  $p<.01$ ; <sup>b</sup>  $F(4,181)= 10.005$ , adjusted  $R^2= .163$ ,  $p<.001$

## DISCUSSION

The current findings indicate that gender and program do not have bearing on academic stress among the participants. The result of gender is contrary to empirical evidence and other literature depicting females as generally experiencing more stress than males (e.g. Saleh et al., 2017). Although this is unexpected, the researchers contend two possible reasons for this: First, since the original correlation between gender and academic stress is significant, there is likelihood that other variables in the study, i.e. connectedness and academic buoyancy, might have exerted more influence on academic stress, thereby negating the influence of gender and rendering it an insignificant predictor. Secondly, gender variation in stress exists depending on the nature of stressors. Literature indicating how both men and women find fast and time-pressured work stressful but only women are stressed by more emotionally and intellectually demanding jobs corroborates said argument (Rivera-Torres, Araque-Padilla & Montero-Simó, 2013). Perhaps for the participants of the study, perceptions of how demanding academic work is were the same across gender, thus their stress experiences approximated one another's.



Similarly, the result on the program category is opposite to what has been more commonly shown in the empirical literature (e.g. Heath, Macfarlane & Umar, 1999; Bedewy & Gabriel, 2015). While contradicting literature, this result is anticipated given its close to zero explained variance on academic stress. Even if there were participants who were enrolled in programs that differed from the others in terms of grading and grade competition, there is a chance that these individuals had adapted to said standards and were able to manage them. Participants' high scores on academic buoyancy hinted at this possibility. Thus, all participants' stress levels, at the time of data collection, were parallel. Furthermore, it is possible that for all students, perceptions of grade competition were the same regardless of the programs they were enrolled in, thus bearing no influence on their experience of stress. Evidence of this likelihood is suggested in recent literature on stress perceptions of students in a competitive vs. non-competitive programs in Saudi Arabia (Alsulami et al., 2018).

Substantiating existing literature on psychological consequences of school connectedness (e.g. Allen et al., 2016; Jia et al., 2009; Lee et al., 2008; Macrynika et al., 2017; Sharp et al., 2018), this protective factor significantly lowered experiences of academic stress among the participants. Thus, participants who feel that they are connected rather than distant from others in the campus experienced lower stress. Likewise, those who believe that their school reinforces feelings of fitting in and belongingness and are able to interact with others at school have lower academic stress. One explanation of this brings to fore connectedness' role in regulating negative emotions, decreasing their impact on students (Saklofske et al., 2012). Another possible explanation is relevant to the role of school connectedness in help-seeking behavior. Research has demonstrated that students who feel connected to their schools engage in instrumental help-seeking from peers instead of avoiding them (Conway, Jugarap, Marquez, Crisostomo & Ouano, 2018). Similarly, students who perceive receiving emotional support from their teachers are more likely to approach the latter for help inside the classroom (Parker et al., 2019).

Subsequently, academic help-seeking lowers stress since students have an avenue to cope with their academic tasks.

The decrease in stress brought about by academic buoyancy ( $\beta = -.294, p < .001$ ) is larger than the decrease brought about by connectedness ( $\beta = -.186, p < .01$ ) when these two variables were put together in the statistical process. However, the fact that it remained a significant predictor even in the presence of academic buoyancy implies its additive effect to buoyancy. Thus, even if students are already academically buoyant, if they also feel more connected to others in school, they probably have less academic stress compared to those who are buoyant but not as connected to others.

The current findings highlight the idea that since students respond to high stress in various cognitive, physical and psychological ways, many of which might be classified as unhealthy reactions (Robotham & Julian, 2006), it is only practical to address them using protective factors such as academic buoyancy and school connectedness. Furthermore, it underscores school connectedness as playing a key role in lowering academic stress. Although the 4.7% of variance it can explain in the criterion variable appears inconsequential at first, once considered in the context of Filipino schools, it weighs conspicuously. Being interdependent individuals, Filipino students are socially-oriented and are happier when they have a sense of connection to other people in their community (Datu, King, & Valdez, 2016). Likewise, much of their day-to-day functioning emphasizes interactions with others, and how they can influence those surrounding them and vice versa, which can culminate in a positive development. Since schools are microcosms of communities where interactions occur, connectedness can be instilled and improved in them. Thus, the more promotive schools are of connectedness, the higher the likelihood that students might experience less academic stress and might also be more psychologically adjusted.

Readers are cautioned that the study is not without its limitations. First, the cross-sectional nature of the study offers limited insight into the association of the variables. Factors affecting both predictors and outcomes and changes in students' scores on these can occur at different

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time points. Thus, a longitudinal study can provide more clarity in terms of the interplay of the predictors about academic stress. Secondly, data was collected at the end of the school term, after many of the students have completed their academic tasks, likely explaining the lower experiences of stress among the participants. Thirdly, the researchers only tested additive influences of school connectedness and academic buoyancy to low student stress. Future studies might want to test the interactions of these two variables to determine if one moderates the other. Notwithstanding its limitations, the findings of this research emphasized the function of school connectedness in decreasing academic stress.

Educational institutions already have initiatives to help students manage academic stress through the use of personal coping resources that can improve daily resilience and the researchers do not discount the fact that in their study, academic buoyancy plays a critical role in stress management. However, since findings also show how important connectedness is, paying attention to this externally motivated psychological asset may also prove to be helpful. This implies the need for school connectedness to be considered not only in curriculum design and classroom instruction but also in attempts to improve the entire campus climate. When school connectedness is incorporated in these school matters, academic behaviors and learning outcomes will also benefit. Whereas academic buoyancy facilitates a more cognitive and problem-focused approach in dealing with stress (Martin and Marsh, 2009; Parker and Martin, 2009), connectedness opens one's opportunities for good coping strategies relevant not only to help-seeking but also to emotion regulation.

Besides, the current study highlights the role of counselors, teachers, and administrators as they work together to address issues on students' school connectedness as well as their experiences of stress. On one hand, counselors can use their knowledge on the influences on school connectedness as they help students gain a better hold of their academic setbacks, thereby facilitating experiences of lower stress. On the other hand, teachers and school administrators can create programs and policies that can enhance a culture of connectedness between and among students,

faculty and other campus figures. Future studies on stress management interventions could also incorporate the two factors and test the extent of their effectiveness. Through all of these, students and other parties can find meaning in using both endogenous resources and exogenous resources, thereby facilitating a more holistic approach to academic stress management. The fact that students spend most of their time in school, and operate and learn within its context, makes such an approach to stress management not only opportune but also indispensable.

## REFERENCE

- Allen, K., Kern, M., Vella-Brodrick, D., Hattie, J., & Waters, L. (2016). What schools need to know about fostering school belonging: a meta-analysis. *Educational Psychology Review*, *30*(1), 1-34. doi: 10.1007/s10648-016-9389-8
- Alsulami, S., Omar, Z. A., Binnwejim, M.S., Alhamdan, F., Aldrees, A., Al-bawardi, A.,... Alhabeeb, M. (2018). Perception of academic stress among health science preparatory program students in two Saudi universities. *Advances in Medical Education and Practice*, *9*, 159-164.
- Alzahem, A.M., van der Molen, H.T., Alaujan, A.H., Schmidt, H.G., & Zamakhshary, M.H. (2011). Stress amongst dental students: a systematic review. *European Journal of Dental Education*, *15*, 8-18.
- Amirkhan, J.H., & Kofman, Y.B. (2018). Stress overload as a red flag for freshman failure and attrition. *Contemporary Educational Psychology*, *54*, 297-308. doi: 10.1016/j.cedpsych.2018.07.004
- Banks, J., & Smyth, E. (2015). ‘Your whole life depends on it’: academic stress and high-stakes testing in Ireland. *Journal of Youth Studies*, *18*(5), 598-616. doi: 10.1080/13676261.2014.992317
- Bedewy, D., & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among university students: The perceptions of academic stress scale. *Health Psychology Open*, 1-9. doi: 10.1177/2055102915596714
- Christiansen, A., Salamonson, Y., Crawford, R., McGrath, B., Roach, D., Wall, P.,... Ramjan, L.M. (2019). “Juggling many balls”: Working and studying among first year nursing students. *Journal of Clinical Counseling*. Advance online publication. doi: 10.1111/jocn.14999

- 
- Conway, G.D., Jugarap, E.J.M., Marquez, V.M., Crisostomo, K.A., & Ouano, J.A. (2018). Examining the salience of school connectedness in college students' academic help-seeking behavior. *Philippine Journal of Counseling Psychology*, 20(1), 61-80. Philippines: Philippine Association for Counselor Education, Research and Supervision (PACERS).
- Datu, J.A.D., King, R.B., & Valdez, J.P.M. (2016). The benefits of socially-oriented happiness: Validation of the interdependent happiness scale in the Philippines. *Child Indicators Research*, 9(3), 631-649. doi: 10.1007/s12187-015-9333-3
- Gustems-Carnicer, J., Calderón, C., & Calderón-Garrido, D. (2019). Stress, coping strategies and academic achievement in teacher education students. *European Journal of Teacher Education*, 42(3), 375-390. doi: 10.1080/02619768.2019.1576629
- Gyllensten, K., & Palmer, S. (2005). The role of gender in workplace stress: A critical literature review. *Health Education Journal*, 64(3), 271-288.
- Heath, J.R., Macfarlane, T.V., & Umar, M.S. (1999). Perceived source of stress in dental students. *Behavioural Science*, 26(3), 94-100. doi: 10.12968/denu.1999.26.3.94
- Hirvonen, R., Yli-Kivistö, L., Putwain, D.W., Ahonen, T., & Kiuru, N. (2019). School-related stress among sixth-grade students: Associations with academic buoyancy and temperament. *Learning and Individual Differences*, 70, 100-108. doi: 10.1016/j.lindif.2019.01.012
- Humphris, G., Blinkhorn, A., Freeman, R., Gorter, R., Hoad-Reddick, Murtomaa, H, Splieth, C. (2002). Psychological stress in undergraduate dental students: Baseline results from seven European dental schools. *European Journal of Dental Education*, 6(1), 22-29. doi: 10.1034/j.1600-0579.2002.060105.x
- Jdaitawi, M. (2015). Social connectedness, academic, non-academic behaviors related to self-regulation among university students in Saudi Arabia. *International Education Studies*, 8(2), 84-100. doi: 10.5539/ies.v8n2p84
- Jia, Y., Niobe, W., Ling, G., Yoshikawa, H., Chen, X., Hughes, D, Lu, Z. (2009). The influence of student perceptions of school climate on socio-emotional and academic adjustment: A comparison of Chinese and American adolescents. *Child Development*, 80(5), 1514-1530. doi: 10.1111/j.1467-8624.2009.01348.x

- Lee, R.M, Dean, B.L., & Jung, K-R. (2008). Social connectedness, extraversion, and subjective wellbeing: Testing a mediation model. *Personality and Individual Differences, 45*(5), 414-419. doi: 10.1016/j.paid.2008.05.017
- Libbey, H. P. (2004). Measuring student relationships to school: Attainment, bonding, connectedness, and engagement. *The Journal of School Health, 74*(7), 274-283. doi: 10.1111/j.1746-1561.2004.tb08284.x
- Lohmeier, J.H., & Lee, S.W. (2011). A school connectedness scale for use with adolescents. *Educational Research and Evaluation, 17*(2), 85-95. doi: 10.1080/13803611.2011.597108
- Macrynikola, N., Miranda, R., & Soffer, A. (2017). Social connectedness, negative life events, and self-injurious thoughts and behavior among young adults. *Comprehensive Psychiatry, 80*, 140-149. doi:10.1016/j.comppsy.2017.09.008
- Martin, A.J., & Ginns, P., Brackett, M.A., Malmber, L-E., & Hall, James (2013). Academic buoyancy, and psychological risk: Exploring reciprocal relationships. *Learning and Individual Differences, 27*, 128-133. doi: 10.1016/j.lindif.2013.06.006
- Martin, A.J., & Marsh, H.W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology, 46*, 53-83. doi: 10.1016/j.jsp.2007.01.002
- Martin, A., & Marsh, H. (2009). Academic resilience and academic buoyancy: multidimensional and hierarchical conceptual framing of causes correlates and cognate constructs. *Oxford Review of Education, 35*(3), 353-370.
- Miller, S., Connolly, P., & Maguire, L. (2013). Wellbeing, academic buoyancy and educational achievement in primary school students. *International Journal of Educational Research, 62*, 239-248. doi: 10.1016/j.ijer.2013.05.004
- Neveu, D., Doron, J., Visier, L., Boiche, J., Trouillet, R., Dujols, P., & Ninot, G. (2012). Students perceived stress in academic programs: Consequences for its management. *Revue d'Épidémiologie et de Santé Publique, 60*(4), 255-264. doi: 10.1016/j.respe.2012.01.008
- Niehaus, K., Rudasill, K.M., & Rakes, C. (2012). A longitudinal study of school connectedness and academic outcomes across sixth grade. *Journal of School Psychology, 50*(4), 443-460. doi: 10.1016/j.jsp.2012.03.002

- Parker, P., & Martin, A. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related wellbeing and engagement. *Teacher and Teacher Education*, 25(1), 68-75. doi: 10.1016/j.tate.2008.06.009
- Parker, J.S., Shum, K.Z., Suldo, S.M., Shaunessy-Dedrick, E., Ferron, J.M., & Dedrick, R.F. (2019). Predictors of adaptive help seeking across ninth-grade students enrolled in advanced placement and international baccalaureate courses. *Psychology in the Schools*, 56(5). doi: 10.1002/pits.22223
- Putwain, D.W., Connors, L., Symes, W., & Douglas-Osborn, E. (2012). Is academic buoyancy anything more than adaptive coping?. *Anxiety, Stress, & Coping: An International Journal*, 25(3), 349-358. doi: 10.1080/10615806.2011.582459
- Putwain, D.W., Daly, A.L., Chamberlain, S., & Sadreddini, S. (2015). Academically buoyant students are less anxious and perform better in high-stakes examinations. *British Journal of Educational Psychology*, 85(3), 247-263. doi: 10.1111/bjep.12068
- Rivera-Torres, P., Araque-Padilla, R.A., & Montero-Simó, M.J. (2013). Job stress across gender: The importance of emotional and intellectual demands and social support in women. *International Journal of Environmental Research & Public Health*, 10(1), 375-389. doi: 10.3390/ijerph10010375
- Robotham, D. & Julian, C. (2006). Stress and the higher education student: A critical review of the literature. *Journal of Further and Higher Education*, 30(2), 107-117. doi: 10.1080/03098770600617513
- Saleh, D., & Camart, N., & Romo, L. (2017). Predictors of stress in college students. *Frontiers in Psychology*, 8(19). doi: 10.3389/fpsyg.2017.00019
- Saklofske, D.H., Austin, E.J., Mastoras, S.M., Beaton, L., & Osborne, S.E. (2012). Relationships of personality, affect, emotional intelligence and coping with student stress and academic success: Different patterns of association for stress and success. *Learning and Individual Differences*, 22(2), 251-257. doi: 10.1016/j.lindif.2011.02.010
- Sharp, C., Penner, F., Marais, L., & Skinner, D. (2018). School connectedness as psychological resilience factor in children affected by HIV/AIDS. *AIDS Care*, 30(54), 34-41. doi: 10.1080/09540121.2018.1511045
- Summers, J.J., Beretvas, S.N., Svinicki, M., & Gorin, J. (2005). Evaluating

- 
- collaborative learning and community. *The Journal of Experimental Education*, 73(3), 165-188. doi: 10.3200/JEXE.73.3.165-188
- Symes, W., Putwain, D.W., & Remedios, R. (2015). The enabling and protective role of academic buoyancy in the appraisal of fear appeals used prior to high-stakes examinations. *School Psychology International*, 36(6), 605-619. doi: 10.1177/0143034315610622
- Tandon, S.D., Dariotis, J.K., Tucker, M.G., & Sonenstein, F.L. (2013). Coping, stress, and social support associations with internalizing and externalizing behavior among urban adolescents and young adults: Revelations from a cluster analysis. *Journal of Adolescent Health*, 52(5), 627-633. doi: 10.1016/j.jadohealth.2012.10.001
- Taylor, S. (1999). *Health psychology* (4<sup>th</sup> ed.). Boston, MA: McGraw-Hill.
- Watson, J. (2017). Examining the relationship between self-esteem, mattering, school connectedness, and wellness among middle school students. *Professional School Counseling*, 21(1), 108-118. doi: 10.5330/1096-2409-21.1.108
- Wilks, S.E. (2008). Resilience amid academic stress: The moderating impact of social support among social work students. *Advances in Social Work*, 9(2), 106-125.
- Winkle-Wagner, R., & McCoy, D.L. (2016). Feeling like an “alien” or “family”? Comparing students and faculty experiences of diversity in STEM disciplines at a PWI and an HBCU. *Race, Ethnicity and Education*, 21(5), 593-606. doi: 10.1080/13613324.2016.1248835
- Winter, L., Moriarty, H.J., & Short, T.H. (2018). Beyond anger: emotion regulation and social connectedness in veterans with traumatic brain injury. *Brain Injury*, 32(5), 593-599. doi: 10.1080/02699052.2018.1432895
- Zajacova, A., Lynch, S.M., & Esphensade, T.J. (2005). Self-efficacy, stress and academic success in college. *Research in Higher Education*, 46(6), 677-706. doi: 10.1007/s11162-004-4139-z