

RELATIONSHIP BETWEEN SCHOOL CLIMATE AND PSYCHOLOGICAL DISTRESS: THE MEDIATING EFFECT OF PERCEIVED SOCIAL SUPPORT

Chidozie E. Nwafor, Harry Obi-Nwosu and Jude O. Ezeokana

ABSTRACT

The study investigated the mediating role of perceived social support on the relationship between the school climate and psychological distress. The participants were 200 undergraduates with mean age of 20.00, $SD = 1.20$ (males = 100 and females = 100) selected from a private and public university in Anambra State of South Eastern Nigeria. Scales measuring psychological distress, perceived social support, and school climate were used to collect data in a study that utilized a combination of cross-sectional and predictive designs. The results showed that there were significant correlations among the study variables and the independent factors significantly predicted the outcome variable. Also the social support subscales (significant others, friends support and family support) mediated the relationship between the school climate and psychological distress. The findings have implications for government and university proprietors where by social support should be part of the school climate to possibly reduce psychological distress.

Keywords: School climate, Social Support, psychological distress

Correspondence concerning this article should be addressed to Chidozie E. Nwafor, PhD, Department of Psychology, Nnamdi Azikiwe University, Awka, Nigeria. Email: ce.nwafor@unizik.edu.ng

School climate is often conceived as the levels of students' relations, school resources, decision making, collaboration, instructional innovation and work pressure experienced in schools (Burden & Fraser, 1994; Johnson, Stevens & Zvoch, 2007). While some studies measured school climate from teachers' perspective (Brown & Henry, 1992; Burden & Fraser, 1994; Johnson et al. 2007); other studies assessed it from the students' perspective

(Bernstein, 1992; Johnson, Johnson & Zimmerman, 1996). The present study adopts Brookover et al. (1978) view of school climate as the social system of shared norms and expectation of the school from the students' perspective.

Among early adults at the university, perhaps the school climate may be considered as one of the most influential factors that determine their general wellbeing (Baker, Dilly, Aupperlee & Patil, 2003). This is because undergraduates spend most of their time in the school environment and each school environment has different levels of school climate (Burden & Fraser, 1994; Johnson et al. 2007) which may directly or indirectly influence the student's wellbeing (Masten & Coatsworth, 1998)

The educational sector in Nigeria has witnessed some evolutions in the past 15 years following the commissioning of Universal Basic Education (UBE) program launched in May; 2000. The UBE Program increased the number of students with primary and secondary education who want to further their studies in tertiary institutions. Therefore, to meet with this demand, the National University Commission (NUC) licensed over fifty private universities which added to the existing licensed state and federal Universities. However, some of these universities in Nigeria tend to make and enforce policies which appear contrary to the requirements for the proper administration of higher institutions compared with the NUC standard guideline for administering higher institutions. For instance, some private universities create school climates which are

socially and psychologically parallel to the developmental requirement of their students (Nwafor, in press). The school climate may include other specifications such as physical structures, the quality of teaching facilities and teachers which undeniably contribute to the welfare of the students (Mazzucchelli & Purcell, 2015). There are many other factors that may determine how well an individual can navigate and graduate successfully from the university. For instance, if an individual adapt effectively to the social and academic environment, the individual is expected to persist stress and graduate successfully (Tinto, 1993). By implication, the individual's level wellbeing is crucial for successfully engaging in meaningful relationships, navigating one's environment, and realizing one's fullest potential throughout the lifespan (Ryff, 1989).

Phenomenological and ecological theorists postulated that the degree of fit between students' developmental needs and capacities (structures, goals, practices) and interactions afforded by the school affects students' outcomes (Baker, Dilly, Aupperlee & Patil, 2003; Bronfenbrenner, 1999; Deci & Ryan, 1985; Lazarus, 1991). Similarly, Masten and Coatsworth (1998) noted that the contexts in which individuals develop play influential roles in promoting their adoption and adjustments. The number of years students spend in higher institutions make school gain the ability to influence experiences, self-perception and life courses (Baker, Derrer, Davis, Dinklage-Travis, Linder &

Nicholson 2001). In their self-determination model Connell and Wellborn (1991) stated that individuals have three fundamental needs from any environment:

- a. To be meaningful, connected to others.
- b. To have developmentally appropriate choice and self-direction.
- c. Perceive themselves as competent in their endeavors.

School climates that do not afford opportunities for students to satisfy these needs are likely to be perceived as negative (socially and psychologically) and may create psychological distress (Baker et al., 2003; Masten & Coatsworth, 1998). Psychological distress among students has many undesirable outcomes which psychologists try to discourage (Saïas et al., 2014). It is also a risk factor that exposes students to other major negative outcomes and psychopathologies (Mirowsky & Ross, 2002; Saïas et al., 2014).

The present study firstly proposed that school climate (social and psychological) has a great influence on the level of psychological distress. Psychological distress is construed as a non-specific mental health problem which includes combinations of symptoms ranging from depression and general anxiety symptoms to personality traits, functional disabilities and behavioural problem (Dohrenwend & Dohrewend, 1982; Saïas, et al., 2014). Studies have shown that there is a significant prevalence of psychological distress among students (Ani, Kinanee, Ola, 2011; Ezeilo, 1982; Abiola, Lawal

& Habib, 2015; Field & Kift, 2010). Psychological distress has been shown to have positive relationships with some undesirable outcomes such as dropout from schools, drug dependence, anxiety, depression and poor academic performance (Abiola et al., 2015; Cardozo et al., 2012; Mundia, 2011; Papazisis, Tsiga, Papanikolaou, Vlasiadis & Sapountzi-Krepia, 2008; Saïas, et al., 2014;).

Contrary to these negative consequences of psychological distress, students who are less distressed have been found to have several desirable variables in common, including sufficient personal assets and competencies; effective nurturance and support of the social and psychological environment, which contribute to positive development and protect them from stress and dysfunction (Baker, Derrer, Davis, Dinklage-Travis, Linder, & Nicholson, 2001; Baker et al., 2003).

The second objective of the present study is to reaffirm that social support has a buffering effect on psychological distress (Baker et al., 2001; Bøen, Dalgard & Bjertness, 2012; MdYasin & Dzulkifli, 2010; Pearlin, 1989). Social support is described as 'verbal and nonverbal communication and action between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship and functions to enhance a perception of personal control in one's life experience (Albrecht & Adelman, 1987). It has three main dimensions: family social support, friends' social support and significant others social support. The importance of social support in

understanding distress was highlighted in the sociological theory of stress (Pearlin, 1989). The salient feature of sociological perspectives on distress research is its concern with the socially patterned distribution of the components of the distress process into: stressors, mediators and outcomes (Pearlin, 1989). According to the sociological paradigm, an outcome (e.g. psychological distress) may depend on some stressors (e.g. school climate). However, the stressor may have a mediator (e.g. social support) which may reduce or reverse the ability of the stressor to activate the outcome. Following this rationale, the study also proposed that social support will mediate the impact of school climate on psychological distress.

The following questions will be answered:

- a. To what extent will school climate predict psychological distress?
- b. To what extent will social support predict psychological distress?
- c. To what extent will social support mediate the impact of school climate on psychological distress?

Methods

Participants

Participants comprised of two hundred (males = 100 and females =100) third year undergraduates randomly chosen from two universities (one private = 100 and one public =100) in Anambra State South-East Nigeria. One hundred participants were chosen from each university. The first private University licensed to operate in Nigeria was in Anambra State. The Participants ages ranged from 19 to 23 years, their mean age was 20.00 years, and standard deviation was 1.20.

Instruments

The participants completed the instruments described below:

School climate Scale.

This is a 15-item questionnaire developed by Nwafor (2015) measures students' perception of their school climate. Each item was anchored on a likert-type response format of 1 = *Not at all True*, 2 = *Hardly True*, 3 = *Moderately True*, and 4 = *Exactly True*. Some of the items (8, 10, 12, and 13) were reversed during scoring. Samples of the items include: students can easily interact with their lecturers; students can organize social activities in the school; relations can visit any time they want. The Cronbach's alpha for the scale was .82.

Multidimensional Perceived Social Support Scale.

This 12-item questionnaire was developed by Zimet, Dahlem, Zimet & Farly (1988) to assess individuals' outcome from different social contexts namely, family, friends and significant others. Each subscale has four items and the response pattern is ranked strongly disagree = 1 to very strongly agree = 7. Dahlem, Zimet, & Walker (1991) found total Cronbach's alpha (α) of .91 and alphas of .90, .94 & .95 for significant others, family and friends supports respectively. The Cronbach's alpha for the present study were .75 for significant others, .76 family, .77 friends and .81 for all items in the scale.

Psychological Distress Scale.

This was developed by Kessler et al. (2003) for screening, mental disorder and psychological distress. It contained 10 questions of non-specific psychological state of different levels of anxiety and depressive symptoms a person experienced within the past four weeks. The response ranged from *none of the time* = 1 to *all of the times* = 5. Fassaert, et al. (2009) recorded a Cronbach alpha of .93. However, the alpha for the present study was .80.

Procedure

Two universities that participated in the study were randomly selected from five Universities in Anambra State. Balancing technique was applied to

ensure that one private and one public university was selected. This was achieved by random sampling private and public universities, separately and selecting one university from each. The heads of the two Departments involved in the study gave their consents. Thereafter, science students who consented to participate were given the questionnaires to complete. The participants completed and returned the questionnaires before commencement of their first morning lectures. All the two hundred questionnaires administered were collected, scored and used for the analysis.

Design/Statistics

A combination of cross-sectional and predictive design was adopted for the study. Pearson r correlation and conditional process analysis (Hayes, 2013) were used to access the direct and indirect regression effects of the independent factor (school climate) and mediators (social support) on the outcome (psychological distress). Conditional process analysis is a statistical program that calculate mediation coefficient in a regression model.

Results

Table 1

Means, Standard Deviations and Correlation Coefficients

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Psychological Distress	29.78	6.21	1				
2. Significant others	15.91	6.20	-.42**	1			
3. Family	16.04	6.33	-.41**	.82**	1		
4. Friends	14.70	4.70	-.18**	.60**	.62**	1	
5. School Climate	16.74	7.79	-.36**	.25**	.23**	.14	1

** $p < .01$, * $p < .05$

Table 2

Effect of perceived Social Support on Relationship between School Climate and Psychological Distress.

	<i>R²</i>	<i>Df</i>	<i>F</i>	<i>B</i>	<i>Se</i>	<i>LLCI</i>	<i>ULCI</i>
Model 1	.27	4(195)	18.10**				
Others				-.25**	.10	-.05	-.04
Family				-.21**	.11	.48	.07
Friends				-.26**	.10	-.05	-.47
School climate				-.22**	.05	.31	.12
Model 2 indirect effect				Effect	Se	LLCI	ULCI
Total model				-.07	.03	-.14	-.03
Others				-.05	.03	-.12	-.01
Family				-.05	.02	-.11	-.01
Friends				-.02	.02	-.10	-.07

** $p < .01$

Result showed that school climate correlated significantly with psychological distress, significant others, family and friend support at $r(1, 194) = -.36, p < .01; .25, p < .01, .23, p < .01$ & $.14, p < .05$ respectively (see Table 1). Multiple regression and mediation analysis showed that the independent predictor and the mediators predicted the outcome (psychological distress) significantly the $R^2 = .27, F(1, 195) = 18.10, p < .01$. The beta coefficients were $-.25; -.21; -.26; \& \ -.22; p < .01$ for other, family, friends and school climate respectively (see, Table 2).

The result of indirect effects of school climate on psychological distress showed that the three dimensions of social support have both total indirect effect and independent indirect effect on the level of psychological distress (see Table 2). By implication, there was a significant decrease of psychological distress when support was not controlled.

Discussion

The primary objective of this study is to investigate whether different dimensions of social support (significant others, family and friends) mediate significantly the relationship between school climate and psychological distress. The results revealed firstly that a significant negative relationship exists between school climate and psychological distress. This affirms the theories and empirical studies that showed that environment can be a potent stressor that predicts psychological distress (see Baker, et al., 2003, Deci & Ryan,

1985, Connell & Wellborn, 1997, Masten & Coatsworth, 1998). Similarly, social support significantly predicted psychological distress. This is also in concordance with the previous research which found that social support is a buffer to psychological distress (see Baker et al., 2001, MdYasin & Dzulkifli, 2010; Pearlin, 1989). The result further showed that social support significantly mediated the effect of school climate on psychological distress.

In other words, high social stable school climate reduces the rate of psychological distress while socially unstable school climate increases the level of psychological distress. This result is supported by Pearlin (1989) postulation in a sociological model of distress. The model stated that the stressors ability to effectively determine an outcome may depend on some mediators. In this instance, even though school climate (stressor) significantly predicted psychological distress, the strength of this prediction becomes even better when social support was added to the model. This is possible because social support fill in the needed gap, proposed in self-determination model (Connell & Welborn, 1991) that ensuring individuals are meaningfully connected to others; ensuring developmentally appropriate choice and self-direction and ensuring that individuals perceived themselves as competent in their endeavor are criteria for psychological balance.

Limitations

The main limitation of the present study is the choice of survey design, which the researchers believe may increase the chances of extraneous variables and limits the power of inference and causality. However, certain research may not be easily subjected to experimental design. Because of this caution was applied on how the present finding was generalized.

Implications

The study has implication for policy makers and individuals that are in charge of administering private and public universities. As a matter of fact, the National University Commission may emphasize not only the academic and physical environments but also the psychological and social environments. Forums that encourage significant others mentoring can be encouraged; also programs that encourage intimacy as postulated by psychosocial theory can be designed and students should to be part of the decision that affects them.

Conclusion

School climate and social support are important factors in understanding psychological distress among undergraduates. The structure, goals, and policies are all part of school climate and are vital in determining the psychological balance of its occupant. Therefore, to avert the secondary consequences of psychological distress experienced in its exhaustion stage

(e.g., anxiety and depression) preventive measures that include adequate social support should be designed and inculcated into the university scheme.

References

- Abiola, T., Lawal, I., & Habib, Z.G.(2015). Psychological distress due to academic stress among clinical students in a Nigerian tertiary institution: comparison between medical and physiotherapy students. *Nigerian Journal of Basic and Clinical Sciences*, 1, 1 - 7.
- Ani, C., Kinanee, J.& Ola, B. (2011). Psychological distress among trainee teachers in Nigeria Association with religion practice. *European Journal of Educational Studies*,3 (1) 163 – 172.
- Albrecht, T. L., &Adelman, M. B. (1987). Communicating social support: A theoretical Perspective. In T. L. Albrecht & M. B. Adelman (Eds.), *Communicating social support* (pp. 18 – 39). Newbury Part, CA: Sage.
- Baker, J. A., Derrer, R., Davis, S., Dinklage-Travis, H., Linder, D., & Nicholson, M. (2001). The flip side of the coin: Understanding the school's contribution to drop-out. *School Psychology Quarterly*, 16, 406–427.
- Baker, J.A., Dilly, L.J., Aupperlee, J.L. &Patil, S. A. (2003). The developmental context of school satisfaction: Schools as psychologically healthy environments. *School Psychology Quarterly*, 18 (2) 206 – 221.
- Bernstein, L. (1992). Where is reform taking place? An analysis of policy changes and school climate. *Educational Evaluation and Policy Analysis*, 14, 297-302.
- Bøen, H., Dalgard, O. S. & Bjertness, E. (2012).The importance of social support in the associations between psychological distress and somatic health problems and socio-economic factors among older adults living at home: a cross sectional study. *BioMedicine Central Geriatric*, 12 (27) 1-12.
- Bronfenbrenner, U. (1999). Environment in developmental perspective: Theoretical and operational models. In S. L. Friedman & T. D. Wachs (Eds.), *Measuring environments across the lifespan: Emerging methods and concepts* (pp. 3–31). Washington, DC: American Psychological Association.
- Brown, G. J., & Henry, D. (1992). Using the climate survey to drive school reform. *Contemporary Education*, 63, 277-280.
- Burden, R., & Fraser, B. (1994). Examining teachers' perceptions of their working environments: Introducing the School Level Environment Questionnaire. *Educational Psychology in Practice*, 10, 67-71.

- Cardozo, B. L., Crawford, C. G., Eriksson C., Zhu J., Sabin M., Ager, A,... Simon, W. (2012). Psychological distress, depression, anxiety, and burnout among international humanitarian aid workers: A longitudinal study. *PLoS ONE*, 7(9): e44948. doi:10.1371/journal.pone.0044948
- Connell, J. P., & Wellborn, J. G. (1991). Competence, autonomy and relatedness: A motivational analysis of self-system processes. In M. Gunnar & L. A. Sroufe (Eds.), *Minnesota Symposium of Child Psychology* (Vol. 22, pp. 43–77). Minneapolis: University of Minnesota Press.
- Dahlem, N. W., Zimet, G. D., & Walker, R. R. (1991). The Multidimensional Scale of Perceived Social Support: a confirmation study. *Journal of clinical psychology*, 47, 756-61.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dohrenwend, B. P., & Dohrenwend, B. S. (1982). Perspectives on the past and future of psychiatric epidemiology. *American Journal of Public Health*, 72, 1271-1279.
- Ezeilo, B. N. (1982). Somatization of psychological distress among Nigerian undergraduate medical out-patients. *Psychopathologie Africaine*, 18 (3) 363 -372.
- Fassaert, T., De Wit, M. A. S., Tuinebreijer, W.C., Wouters, H., Verhoeff, A. P., Beekman, A.T.F. & Dekker, J. (2009). Psychometric properties of an interviewer administered version of the Kessler Psychological Distress scale (K10) among Dutch, Moroccan and Turkish respondents. *International Journal of Methods in Psychiatric Research*, 18 (3) 159–168
- Field, R., & Kift, S. (2010). Addressing the high levels of psychological distress in law students through intentional assessment and feedback design in the first year law curriculum. *The International Journal of the First Year in Higher Education*, 1(1) 65-76.
- Johnson, W. L., Johnson, A. M., & Zimmerman, K. (1996). Assessing school climate priorities: A Texas study. *Clearing House*, 70, 64-66.

- Johnson, B., Stevens, J.J. & Zvoch, K. (2007). Teachers' Perceptions of School Climate: A Validity Study of Scores From the Revised School Level Environment Questionnaire. *Educational and Psychological Measurement*, 67 (5) 833-844.
- Kessler, R. C., Barker, P. R., Colpe, L.J., Epstein, J .F., Gfroerer, J. C., Hiripi, E., et al.(2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60 (2)184 -189.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46, 819–834.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*,53, 205–220.
- Mazzucchelli T. G., & Purcell, E. (2015). Psychological and Environmental Correlates of Well-being Among Undergraduate University Student. *Psychology of Well-Being*, 5 (6)1-18
- MdYasin, A. S., & Dzulkifli, M. A.(2010). The Relationship between Social Support and Psychological Problems among Students. *International Journal of Business and Social Science*,1 (3) 110 -116.
- Mirowsky, J., and Ross, C. E. (2002). Measurement for a human science. *Journal of Health and Social Behavior*, 43,152 – 170.
- Mundia, L. (2011). Effects of psychological distress on academic achievement in Brunei student teachers: identification challenges and counseling implications. *Higher Education Studies*, 1(1) 51-63
- Nwafor ,C. E. (2015). Validation of school climate scale among Nigerian undergraduates. Paper presented in 2015 *Nigeria Psychological Association annual conference Benin Edo State*..
- Papazisis, G., Tsiga, E., Papanikolaou, N., Vlasiadis , I., & Sapountzi-Krepia, D. (2008). Psychological distress, anxiety and depression among nursing students in Greece. *International Journal of Caring Sciences*, 1(1)42–46
- Pearlin, L. (1989). The sociological study of stress. *Journal of health and social Behavior*.30 (3) 241 -256.
- Saias, T., Roscoät, E. Véron, L., Guignard, R., Richard, J.B., Legleye, S.,... Beck F. (2014).Psychological distress in French college students: demographic, economic and social stressors. Results from the 2010

- National Health Barometer. *BioMedicine Central Public Health*, 14 (256) 1 - 8
- Salami, S.O. (2011). Psychosocial Predictors of Adjustment Among First Year College of Education Students. *US-China Education Review*, 8 (2) 239-248.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being, *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Tinto, V. (1993). *Leaving college* (2nd ed). Chicago: University of Chicago Press.
- Zimet, G. D., Dahlem, N.W., Zimet, S. G. & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support, *Journal Assessment*, 52, 30-41.