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EMOTIONAL EXHAUSTION AND TIME MANAGEMENT AS PREDICTORS OF GLOSSOPHOBIA AMONG MUSLIM UNIVERSITY STUDENTS IN THE GAMBIA

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Abstract
This study examined whether emotional exhaustion and time management, each treated as an independent variable, are related to glossophobia, the dependent variable, among Muslim university students in The Gambia. A quantitative, cross-sectional correlational design was used. The four institutions were purposively selected: the University of The Gambia (UTG), the International Open University (IOU), the American International University West Africa (AIUWA), and the Management Development Institute (MDI). Their estimated student population was 8,000 to 10,000, and a sample of 200 students (50 per institution, equally divided by gender) was drawn through multi-stage stratified sampling. Three fifteen-item scales adapted from established instruments were used: the Emotional Exhaustion Scale (α = .84), the Time Management Scale (α = .81), and the Glossophobia Scale (α = .86). Validity was ensured through adaptation from established instruments, expert review, and pilot testing. Data were analysed with Pearson Product-Moment Correlation at the .05 level of significance. Emotional exhaustion was strongly and positively correlated with glossophobia ($r = .63$, $p < .001$), and time management was strongly and negatively correlated with glossophobia ($r = -.55$, $p < .001$). Because the design is cross-sectional and correlational, the results show association rather than cause or prediction. The findings are interpreted through the Job Demands-Resources Model, Stress and Coping Theory, and Cognitive Load Theory. It is recommended that lecturers provide supportive speaking opportunities, that universities strengthen counselling services and time-management training, and that education policymakers and the Government integrate communication and stress-management skills into the higher education curriculum and fund further research.

Keywords: Glossophobia, Public speaking anxiety, Emotional exhaustion, Time management and Muslim university students

Introduction
Glossophobia, often described as public speaking anxiety, is one of the most commonly reported fears among university students (Dwyer & Davidson, 2012). Public speaking anxiety involves physiological, cognitive, and behavioural reactions to a real or imagined presentation (Bodie, 2010). This study treats emotional exhaustion and time management as two separate independent variables and glossophobia as the dependent variable among Muslim university students in The Gambia. Each independent variable is introduced below, and was later analysed, on its own. Emotional exhaustion is one of the three dimensions of burnout (Maslach & Jackson, 1981) and has been linked to stress and academic outcomes among students (Schaufeli et al., 2002). According to the Job Demands-Resources model (Demerouti et al., 2001) and Stress and Coping Theory (Lazarus & Folkman, 1984), emotional exhaustion is expected to be positively associated with glossophobia, because depleted psychological reserves make it harder for students to appraise a speaking task as manageable rather than threatening. Its relationship with glossophobia was examined on its own, separately from time management.

Time management is a self-regulatory skill that has been linked to academic success and lower stress (Britton & Tesser, 1991; Macan et al., 1990). According to Cognitive Load Theory (Sweller, 1988), distributed, well-organised preparation lessens the working-memory burden of a speaking task and frees cognitive capacity for delivery, so time management is expected to be negatively associated with glossophobia. Its relationship with glossophobia was examined on its own, separately from emotional exhaustion. This study therefore asks whether, and how strongly, each of the two independent variables, emotional exhaustion and time management, is related to glossophobia among Muslim university students in The Gambia. The theoretical accounts above are offered as interpretive lenses rather than tested models. The conceptual model therefore has two independent variables, emotional exhaustion and time management, and one dependent variable, glossophobia. Two research questions follow directly from it, one for each independent variable, and the results, discussion, and recommendations are organised around them. The findings are intended to inform student-support services, orientation programmes, and communication-skills training. The word "predictors" in the title refers to the two independent variables; the analysis is correlational, and no causal or regression-based predictive claims are made.

Purpose of the Study

The primary purpose of this study was to examine how emotional exhaustion and time management are related to glossophobia among Muslim university students in The Gambia. In line with this purpose, the study set out to:

1. determine the relationship between emotional exhaustion and glossophobia among Muslim university students in The Gambia; and
2. determine the relationship between time management and glossophobia among Muslim university students in The Gambia.

Research Questions

Based on the purpose of the study, the research questions were raised as follows:

1. What is the relationship between emotional exhaustion and glossophobia among Muslim university students in The Gambia?
2. What is the relationship between time management and glossophobia among Muslim university students in The Gambia?

Methodology

A quantitative, cross-sectional correlational design was used in order to investigate naturally occurring relationships across psychological dimensions that cannot ethically be manipulated through experimentation (Creswell & Creswell, 2018). This approach allowed glossophobia, time management, and emotional exhaustion to be assessed simultaneously at a single point in time, and allowed the direction and strength of the associations between them to be examined. The target population was Muslim students attending higher education institutions in The Gambia. The estimated number of students in the four institutions was 8,000 to 10,000, as estimated by the MoBSE, and the sample taken was 200 students. Four institutions were purposively selected to cover public and private provision, secular and faith-based orientation, and on-campus and distance learning: the University of The Gambia (UTG), the International Open University (IOU), the American International University West Africa (AIUWA), and the Management Development Institute (MDI). A multi-stage stratified sampling procedure was then used, in the following stages: Stage 1 (selection of institutions): the four institutions were purposively selected as described above. Stage 2 (stratification by institution): each institution was treated as a stratum, and an equal number of 50 students was allocated to each, giving 200 students in total. Stage 3 (stratification by gender): within each institution, students were divided into male and female strata, and 25 male and 25 female students were allocated to each, giving 100 male and 100 female students overall. Stage 4 (selection of respondents): the required number of respondents (25 per gender stratum in each institution) was selected from each stratum. The sample size was determined with Yamane's (1967) formula, $n = N / (1 + N(e)^2)$. With an estimated population of N = 8,000 to 10,000 and a 7% margin of error (e = .07), the formula gives $n = 8{,}000 / 40.2 \approx 199$ for N = 8,000 and $n = 10{,}000 / 50 = 200$ for N = 10,000. A sample of 200 was therefore taken, which is about 2% to 2.5% of the

estimated population. A 7% margin of error was adopted because of logistical constraints in accessing the four institutions. Because the institutions were purposively selected and each contributed an equal number of participants, the findings was generalized with caution.

Data were collected with a structured questionnaire, three scales of which are analysed in this article. Each scale has fifteen items rated on a five-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The Emotional Exhaustion Scale (EES) was adapted from the emotional exhaustion dimension of the Maslach Burnout Inventory (Maslach & Jackson, 1981); an example item is "I often feel emotionally exhausted because of my university workload." The Time Management Scale (TMS) was adapted from the Time Management Questionnaire (Britton & Tesser, 1991); an example item is "I set clear goals for my academic tasks." The Glossophobia Scale (GS) was adapted from the Personal Report of Public Speaking Anxiety (McCroskey, 1970); an example item is "Speaking in front of others makes me nervous." All items are listed in Appendix B of the dissertation from which this article is drawn. Cronbach's alpha was computed on the responses of the 200 respondents and was .84 for the Emotional Exhaustion Scale, .81 for the Time Management Scale, and .86 for the Glossophobia Scale. All three scales exceeded the conventional reliability threshold of .70 (Nunnally & Bernstein, 1994). Only internal consistency was assessed; test–retest reliability was not. The validity of the instrument was ensured in three ways. First, each scale was adapted from an established and widely used instrument (the Maslach Burnout Inventory, the Time Management Questionnaire, and the Personal Report of Public Speaking Anxiety) rather than constructed from scratch, so that the items rest on constructs already defined in the literature. Second, content and cultural-relevance validity were established through review by a panel of three experts in educational psychology, research methodology, and Islamic education, who examined whether the items covered the intended constructs and suited Muslim university students in The Gambia. Third, the instrument was pilot-tested with 15 participants, more than 90% of whom confirmed that the items were clear and relevant before full administration.

Permission was obtained from the four participating institutions, and formal ethical approval was secured from a research ethics committee before data collection. Participation was voluntary, and informed consent was obtained from all respondents using a form that stated the purpose and procedures of the study and the right to withdraw at any time without penalty. Respondents were assured of anonymity and confidentiality; no names or other identifying information were collected, responses were coded numerically, digital data were stored on password-protected, encrypted devices, and results are reported only in aggregate form. The questionnaire was administered in printed form and through a Google Forms version. All 200 questionnaires were returned fully completed (a 100% response rate), and none was excluded for missing or invalid data. Responses were coded and analysed with SPSS version 26. Pearson Product-Moment Correlation was used to answer RQ1 and RQ2, with statistical significance set at $p < .05$ (two-tailed). The strength of a correlation was described following Cohen (1988), with values of about .10, .30, and .50 or above regarded as small, medium, and large (here called "strong"), and the coefficient of determination (r^2) is reported as the proportion of variance shared by the two variables.

Results

Research Question 1: What is the relationship between emotional exhaustion and glossophobia among Muslim university students in The Gambia?

Table 1: Relationship between emotional exhaustion and glossophobia among Muslim university students in The Gambia

Variable		Emotional Exhaustion	Glossophobia
Emotional Exhaustion	Pearson Correlation	1	.63**
	Sig. (2-tailed)		< .001
	N	200	200
Glossophobia	Pearson Correlation	.63**	1

Variable		Emotional Exhaustion	Glossophobia
	Sig. (2-tailed)	< .001	
	N	200	200

Note. **Correlation is significant at the .01 level (two-tailed); df = 198; r^2 = .40.

Research Question 1 asked about the relationship between emotional exhaustion and glossophobia. Table 1 demonstrates a strong positive correlation between the two variables, r(198) = .63, p < .001. About 40% of the variance in the two variables is shared (r^2 = .40), leaving about 60% unexplained by this association. Students who reported greater emotional exhaustion also reported greater fear of public speaking. This is an association only; the cross-sectional design does not show that emotional exhaustion causes glossophobia.

Research Question 2: What is the relationship between time management and glossophobia among Muslim university students in The Gambia?

Table 2: Relationship between time management and glossophobia among Muslim university students in The Gambia

Variable		Time Management	Glossophobia
Time Management	Pearson Correlation	1	−.55**
	Sig. (2-tailed)		< .001
	N	200	200
Glossophobia	Pearson Correlation	−.55**	1
	Sig. (2-tailed)	< .001	
	N	200	200

Note. **Correlation is significant at the .01 level (two-tailed); df = 198; r^2 = .30.

Research Question 2 asked about the relationship between time management and glossophobia. According to Table 2, there is a strong negative correlation between the two variables, r(198) = −.55, p < .001. About 30% of the variance is shared (r^2 = .30). Students who reported better time management reported less fear of public speaking. The correlation for emotional exhaustion (.63) is numerically larger in size than that for time management (.55), but the difference between the two coefficients was not tested.

Discussion of the Findings

Research Question 1 asked about the relationship between emotional exhaustion and glossophobia. The first research question indicated a significant, strong, positive relationship (r = .63, p < .001), with about 40% of the variance shared. Students who reported greater emotional exhaustion tended to report greater fear of public speaking. This is what the Job Demands-Resources model and Stress and Coping Theory would lead one to expect: when psychological resources are depleted, a speaking task is more likely to be appraised as exceeding one's coping capacity, which produces anticipatory anxiety (Demerouti et al., 2001; Lazarus & Folkman, 1984). A related finding comes from a longitudinal study of Vietnamese management students, which reported a positive relationship between English-language anxiety and learning burnout (Pham Thi & Duong, 2024). That is a different form of anxiety from glossophobia, so it supports the direction of the association only indirectly. Because the data are cross-sectional, the direction of the relationship cannot be established: exhaustion may heighten glossophobia, but repeated anticipatory anxiety and avoidance may equally add to exhaustion, and both may be influenced by a third factor.

Research Question 2 asked about the relationship between time management and glossophobia. The second research question indicated a significant, strong, negative relationship (r = −.55, p < .001), with about 30% of the variance shared. Students with better time management reported less fear of public speaking. Cognitive Load Theory offers a plausible mechanism: distributed preparation lowers the working-memory load that builds up

when preparation is compressed near a deadline, leaving more capacity for delivery (Sweller, 1988). The finding also fits earlier work associating time management with lower stress (Claessens et al., 2007; Macan et al., 1990) and with better academic outcomes (Adams & Blair, 2019; Britton & Tesser, 1991). None of those studies measured public speaking anxiety, so the mechanism for glossophobia is inferred rather than tested, and the direction may again run both ways, since students who are less anxious about speaking may prepare more systematically. Claessens et al. (2007) also found in their review that time management training tends to improve time management skills without automatically improving performance, so whether such training would reduce glossophobia should be evaluated rather than assumed. Taken together, the answers to the two research questions are consistent with the conceptual model. Emotional exhaustion was positively related, and time management negatively related, to glossophobia, so the two independent variables can be read as a risk factor and a protective factor, each with its own association. The association with emotional exhaustion is numerically larger, but the difference between the coefficients was not tested, and the study cannot show that either variable cause glossophobia.

Conclusion

Among the Muslim university students sampled in The Gambia, emotional exhaustion was strongly and positively correlated with glossophobia ($r = .63$, $p < .001$), and time management was strongly and negatively correlated with it ($r = -.55$, $p < .001$). Because the study is cross-sectional and correlational, these findings show that the variables are associated; they do not show that emotional exhaustion or time management cause or forecast glossophobia. They do indicate that students' emotional state and planning habits are worth considering alongside communication-skills training, and that this should be tested in future research. Future research should use longitudinal designs to clarify the direction of the relationships, and mixed-methods designs that add interviews or focus groups to understand the sources of emotional exhaustion and the experience of glossophobia. Multiple regression, mediation, and moderation models could estimate the combined contribution of time management and emotional exhaustion, and item-level, component-level, gender, and institution-level analyses could be added. Comparative studies across other Sub-Saharan African and Muslim-majority countries would show how far the findings generalise beyond The Gambia.

Recommendations

The following recommendations are made from the findings of the study. Each addresses a different issue, and together they are directed to lecturers, universities, education policymakers, and the Government. Their effectiveness was not tested in this study and should be evaluated when they are implemented.

1. Lecturers should provide structured, low-pressure public speaking opportunities in their courses, such as classroom rehearsal sessions, with supportive feedback; in one pre–post study, fear of public speaking was chosen less often as a top fear after a public speaking course (Dwyer & Davidson, 2021).
2. Universities should establish or strengthen counselling and mental-health support services that address academic burnout and emotional exhaustion.
3. Universities should integrate time-management training into orientation programmes for new students, with periodic refresher sessions, and monitor its effect on glossophobia, since training does not automatically improve performance (Claessens et al., 2007).
4. Education policymakers should consider incorporating communication-skills and stress-management components into the national higher education curriculum framework.
5. The Government should support and fund further research on emotional exhaustion, time management, and glossophobia among students in The Gambia.

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