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Invigilation Style and Coping Style as Factors in Test Anxiety among Undergraduates of Imo State University, Owerri

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ABSTRACT

Examinations are a routine part of university life, but the conditions under which they are written may add to the anxiety students feel. This study examined whether students' perceptions of invigilation style and their own coping styles were associated with differences in test anxiety among undergraduates of Imo State University, Owerri, Nigeria. A cross-sectional survey was conducted with 260 undergraduates (127 men and 133 women) aged 17 to 44 years (M = 23.55, SD = 4.75), selected by convenience sampling from five faculties. Participants completed the Test Anxiety Inventory, an Invigilation Style Questionnaire and a Coping Style Questionnaire. Data were analysed with a 3 (invigilation style: authoritarian, democratic, permissive) × 3 (coping style: problem-focused, emotion-focused, avoidance) between-subjects analysis of variance. Invigilation style was associated with significant differences in test anxiety, $F(2, 251) = 31.44$, $p < .001$, partial $\eta^2 = .20$. Students who perceived democratic invigilation reported much lower test anxiety than those who perceived authoritarian or permissive invigilation, while the authoritarian and permissive groups did not differ. Coping style was also associated with significant differences, $F(2, 251) = 13.97$, $p < .001$, partial $\eta^2 = .10$, with lower anxiety among students who used problem-focused coping than among those who used emotion-focused or avoidance coping. The interaction between invigilation style and coping style was significant, $F(4, 251) = 5.36$, $p < .001$, partial $\eta^2 = .08$, and suggested that coping style made a larger difference when invigilation was not democratic. The findings suggest that the examination hall is a psychological setting as well as an administrative one. Training invigilators in calm, respectful supervision and teaching students problem-focused coping skills may help to reduce test anxiety.

Keywords: Coping Style; Invigilation Style; Test Anxiety; Undergraduates; Examination; Nigeria

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Introduction

Examinations remain the main way of judging academic progress in Nigerian universities. Results determine whether students progress to the next level, the class of degree they obtain and, often, their access to employment and further study. Because so much depends on them, examinations are a frequent source of worry for students. When this worry becomes intense enough to interfere with thinking and performance, it is described as test anxiety (Zeidner, 1998).

Test anxiety refers to the set of cognitive, emotional, physiological and behavioural responses that accompany concern about possible failure in an evaluative situation (Zeidner, 1998). It is usually described as having two main parts. The cognitive part, often called worry, involves negative thoughts about performance, comparison with others and the consequences of failure. The emotional part, often called emotionality, involves bodily reactions such as a racing heart, sweating and tension (Spielberger, 1980). Meta-analytic studies show that test anxiety is reliably and negatively related to academic performance across levels of education (Hembree, 1988; von der Embse et al., 2018). Among university students, higher test anxiety has been linked with lower grade point averages (Chapell et al., 2005; Cassady & Johnson,

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2002). Attentional control theory explains part of this link by proposing that anxiety takes up limited attentional resources, leaving less capacity for the task itself (Eysenck et al., 2007).

Studies of Nigerian undergraduates suggest that anxiety is common. Aluh et al. (2020) found that 63.5% of pharmacy students in seven Nigerian universities reported anxiety at a level of concern, and Ayodeji et al. (2026) reported moderate or higher anxiety among about half of undergraduates in two universities in Osun State. Students who had previously failed a course were more likely to report anxiety, which suggests that examination experiences play a part (Ayodeji et al., 2026).

Most research on test anxiety has focused on characteristics of the student, such as personality, study habits, self-efficacy and coping. Less attention has been given to the conditions under which examinations are written. The examination hall is a social setting in which students are supervised by invigilators whose behaviour may be calm and supportive, strict and threatening, or loose and inattentive. Studies of online proctoring show that surveillance can raise anxiety and that students vary in how they experience being watched during an examination (Coghlan et al., 2021; Han et al., 2024). Research on teachers' use of fear appeals also shows that threatening messages about examinations are associated with higher anxiety when students appraise them as a threat (Putwain et al., 2017). It is therefore plausible that the style of invigilation in physical examination halls may also be associated with differences in students' test anxiety.

At Imo State University, Owerri, as in many Nigerian universities, invigilation practice is guided by general examination regulations, but the behaviour of individual invigilators varies widely. In some halls, invigilators walk about constantly, issue repeated warnings and treat students with suspicion. In others, they explain instructions clearly and respond politely to questions. In still others, they pay little attention to what happens in the hall. Students writing on the same day may therefore experience very different emotional climates.

The way students respond to examination stress also differs. Coping refers to the cognitive and behavioural efforts people make to manage demands they see as taxing or exceeding their resources (Lazarus & Folkman, 1984). Problem-focused coping involves acting on the source of stress, such as planning and studying early. Emotion-focused coping involves managing the feelings that stress produces, for example by venting or seeking comfort. Avoidance coping involves turning away from the stressor through distraction, denial or delay (Carver et al., 1989; Endler & Parker, 1990). Research suggests that these styles are not equally useful in examination settings (Stöber, 2004; Zeidner, 1995). The present study examined whether perceived invigilation style and coping style, separately and together, were associated with differences in test anxiety among undergraduates.

Statement of the Problem

Test anxiety remains a common problem among Nigerian undergraduates and is associated with poor performance, distress and, in some cases, examination malpractice. Counselling services in many universities focus on helping individual students to manage anxiety, but less attention is paid to the examination environment itself. Invigilators are trained mainly to prevent malpractice, and little is known about how their manner of supervision affects students' emotional state.

Existing studies of invigilation have largely been concerned with academic integrity and, more recently, with online proctoring technologies (Coghlan et al., 2021; Han et al., 2024). There is little empirical evidence from Nigerian universities on whether the style of face-to-face invigilation is associated with differences in test anxiety. It is also not clear whether students' coping styles change the link between invigilation and anxiety, so that some students may be more affected by a given style of supervision than others. This study sought to address these gaps among undergraduates of Imo State University, Owerri.

Purpose of the Study

The general purpose of the study was to examine the roles of invigilation style and coping style in test anxiety among undergraduates of Imo State University, Owerri. The specific objectives were to:

1. examine whether undergraduates who perceive authoritarian, democratic and permissive invigilation styles differ in test anxiety;

2. examine whether undergraduates who use problem-focused, emotion-focused and avoidance coping styles differ in test anxiety; and
3. examine whether invigilation style and coping style interact in their association with test anxiety.

Hypotheses

The following hypotheses were tested at the .05 level of significance:

1. Undergraduates who perceive authoritarian, democratic and permissive invigilation styles will differ significantly in test anxiety.
2. Undergraduates who use problem-focused, emotion-focused and avoidance coping styles will differ significantly in test anxiety.
3. There will be a significant interaction between invigilation style and coping style on test anxiety.

Literature Review

Theoretical Framework

Transactional Model of Stress and Coping

The transactional model of stress and coping (Lazarus & Folkman, 1984, 1987) provides the main framework for this study. The model proposes that stress is not a property of the situation or the person alone, but of the relationship between them. In primary appraisal, a person judges whether a situation is relevant to their well-being and whether it is a threat, a challenge or harmless. In secondary appraisal, the person judges what can be done about it and whether their resources are sufficient. Anxiety is likely when a situation is appraised as threatening and resources are judged to be inadequate.

Applied to examinations, the model suggests that the examination hall provides cues that students appraise. A hostile or intimidating invigilator may increase the sense of threat, while a calm and respectful one may reduce it. A permissive invigilator may create uncertainty about fairness, as students may fear that others are cheating or that the hall may be disrupted. The model also predicts that coping style will shape the outcome. Students who respond with problem-focused coping are more likely to feel in control, whereas those who rely on emotion-focused or avoidance coping may remain absorbed by worry (Zeidner, 1995).

Self-Determination Theory

Self-determination theory (Deci & Ryan, 2000) adds an explanation of why the style of supervision may matter. The theory holds that people have basic needs for autonomy, competence and relatedness, and that social settings which support these needs promote well-being, while controlling settings undermine it. Reeve (2009) showed that a controlling teaching style, marked by pressure, commands and threats, tends to increase students' negative emotions. An authoritarian invigilator may be experienced as controlling in this sense, while a democratic invigilator who explains rules and treats students with respect may support their sense of competence and relatedness.

Control-Value Theory of Achievement Emotions

Pekrun's (2006) control-value theory proposes that achievement emotions such as anxiety arise when students attach high value to an outcome but feel little control over it. Examinations are high in value for most students. Features of the examination setting that reduce students' sense of control, such as an unpredictable or threatening invigilator, or a disorderly hall, may therefore raise anxiety. Coping styles that increase perceived control, such as early preparation and planning, may reduce it.

Together, these theories suggest that test anxiety will be higher when invigilation is experienced as threatening or uncertain, that it will be lower among students who use problem-focused coping, and that the two may interact, so that coping matters more in less supportive examination settings.

Empirical Review

Invigilation, Supervision and Test Anxiety

Direct studies of face-to-face invigilation style and test anxiety are few, but related research offers useful evidence. Studies of online examinations conducted during and after the COVID-19 pandemic found that surveillance by proctoring software was associated with heightened stress and anxiety for many students (Coghlan et al., 2021). A systematic review by Han et al. (2024) identified students' anxiety and performance under different proctoring conditions as one of the main themes in this literature. These findings suggest that the intensity and manner of supervision may affect students' emotional state during examinations.

Research on teachers' messages about examinations also bears on this question. Putwain et al. (2017) found that when secondary school students appraised teachers' fear appeals as threatening, they reported lower engagement and performed less well in examinations. Although invigilators do not teach, their warnings and manner in the hall may function in a similar way. Research on controlling and autonomy-supportive styles of teaching shows that pressure and threats are linked with more negative emotions, while explanation and respect are linked with more positive ones (Reeve, 2009).

Coping Styles and Test Anxiety

The link between coping and test anxiety has received more attention. Zeidner (1995) reviewed studies of coping with examinations and concluded that problem-focused strategies, such as preparation and planning, were generally adaptive, whereas avoidance was generally associated with poorer outcomes. Stöber (2004) found that the worry and emotionality components of test anxiety were related to different ways of coping with pre-examination stress, with higher worry linked to more emotion-focused and avoidance coping.

Genc (2017) studied 263 university students in Serbia and found that emotion-focused coping mediated the relationship between test anxiety and test performance, such that highly anxious students who relied on emotion-focused coping performed less well. In a later study with the same type of sample, Genc (2022) found that the effects of coping depended on students' level of maladaptive perfectionism. Galvin et al. (2022) reported that avoidance coping carried part of the effect of stress on anxiety among university students in three European countries, while problem-focused coping was associated with fewer symptoms.

Nigerian findings are broadly consistent with this pattern. Ayodeji et al. (2026) reported that denial and self-critical disengagement were associated with higher anxiety among undergraduates in Osun State. Agubosi et al. (2022) found that students in Kwara State saw strategies such as early revision, adequate study time and self-testing as ways of overcoming examination anxiety, which reflect problem-focused coping.

Test Anxiety and Academic Outcomes

Although test anxiety is generally related to lower performance (von der Embse et al., 2018), the strength of this link varies. Jerrim (2023) found little evidence that test anxiety was associated with grades in high-stakes examinations in England once other factors were taken into account, while Robson et al. (2023) reported consistent negative associations among primary school children. Putwain et al. (2023) argued that academic buoyancy, the capacity to deal with everyday academic setbacks, may protect students from the harmful effects of test anxiety. These findings suggest that test anxiety is shaped both by features of the person and by features of the setting, which supports the joint study of invigilation and coping.

Summary of the Literature

The literature shows that test anxiety is common among university students and is linked with poorer outcomes. Coping styles are consistently related to test anxiety, with problem-focused coping generally associated with lower anxiety and avoidance with higher anxiety. Evidence on supervision during examinations comes mainly from online proctoring and teacher behaviour, and suggests that threatening

or controlling supervision may raise anxiety. There is a lack of Nigerian studies on face-to-face invigilation style and its joint relationship with coping, which the present study sought to address.

Method

Participants

Participants were 260 undergraduates of Imo State University, Owerri, drawn from the Faculties of Physical Sciences, Arts, Management Sciences and Social Sciences and the Department of Mass Communication. There were 127 men (48.8%) and 133 women (51.2%). Their ages ranged from 17 to 44 years (M = 23.55, SD = 4.75). All were full-time students who had recently written or were preparing to write invigilated examinations. Participants were selected by convenience sampling. A total of 280 questionnaires were distributed, and 260 were returned complete, giving a usable response rate of 92.9%. The remaining 20 questionnaires were excluded because of missing pages or incomplete responses.

Instruments

Three instruments were used, together with a short demographic section that recorded age, gender and faculty.

Test Anxiety Inventory

The Test Anxiety Inventory (TAI; Spielberger, 1980) is a 20-item self-report measure of test anxiety with worry and emotionality subscales. Items are rated on a four-point scale from 1 (*almost never*) to 4 (*almost always*), giving total scores from 20 to 80, with higher scores indicating greater test anxiety. Sample items include "I feel very jittery when taking an important test" and "Thinking about my grade in a course interferes with my concentration on tests." Omoluabi (1993) validated the TAI for Nigerian samples and reported Cronbach's alpha coefficients of .73 for the worry subscale and .79 for the emotionality subscale.

Invigilation Style Questionnaire

The Invigilation Style Questionnaire (ISQ) was assembled by the researchers to measure students' perceptions of the invigilation they experienced. It contains 30 items in three subscales of 10 items each. The authoritarian subscale describes high control, constant movement, strict monitoring and harsh language (for example, "The invigilator continuously walked around the hall and issued frequent warnings"). The democratic subscale describes respectful, calm supervision that maintains order without intimidation (for example, "The invigilator was respectful and explained instructions clearly and politely"). The permissive subscale describes minimal supervision and relaxed enforcement of rules (for example, "The invigilator appeared unconcerned and did not observe students closely"). Items are rated on a five-point scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In a pilot study with 30 undergraduates who did not take part in the main study, Cronbach's alpha was .98 for the authoritarian subscale, .99 for the democratic subscale and .98 for the permissive subscale.

Coping Style Questionnaire

The Coping Style Questionnaire (CSQ) was adapted by the researchers from items in the Ways of Coping framework (Lazarus & Folkman, 1984), the COPE Inventory (Carver et al., 1989) and the Coping Inventory for Stressful Situations (Endler & Parker, 1990). It contains 24 items in three subscales of eight items each, measuring problem-focused coping (for example, "I plan and study ahead of time"), emotion-focused coping (for example, "I talk to someone about how I feel before an examination") and avoidance coping (for example, "I avoid thinking about examinations until the last minute"). Items are rated on a five-point scale from 1 (*I do not do this at all*) to 5 (*I do this very much*).

For the analysis, each participant was assigned to the invigilation style on which they obtained the highest ISQ subscale score and to the coping style on which they obtained the highest CSQ subscale score.

Procedure

Approval to conduct the study was obtained from the Department of Psychology, Imo State University. The researchers and trained assistants approached students in lecture halls and departmental areas after

lectures. The purpose of the study was explained, and students were told that participation was voluntary, that they could withdraw at any time without penalty and that their responses would be anonymous and confidential. Students who agreed signed a consent form and completed the questionnaire on their own, in about 20 to 25 minutes. The researchers remained nearby to clarify instructions without guiding responses. No incentives were offered.

Design and Statistical Analysis

The study used a cross-sectional survey design. Data were analysed with a 3 (invigilation style: authoritarian, democratic, permissive) × 3 (coping style: problem-focused, emotion-focused, avoidance) between-subjects analysis of variance (ANOVA), with test anxiety as the dependent variable. Levene's test was used to check the equality of error variances. Partial eta squared (η^2) was reported as the measure of effect size, with values of .01, .06 and .14 taken as small, medium and large, respectively (Cohen, 1988). Significant main effects were followed by pairwise comparisons of estimated marginal means using the least significant difference (LSD) procedure. Analyses were conducted with the Statistical Package for the Social Sciences.

Results

Table 1 presents the means and standard deviations of test anxiety for each invigilation style and coping style.

Table 1. Means and Standard Deviations of Test Anxiety by Invigilation Style and Coping Style

Variable	Group	*n*	*M*	*SD*
Invigilation style	Authoritarian	78	56.73	11.66
	Democratic	100	33.23	8.48
	Permissive	82	57.99	11.03
Coping style	Problem-focused	99	33.72	8.66
	Emotion-focused	69	56.78	11.60
	Avoidance	92	57.03	12.34
Total		260	48.09	15.64

Note. Possible scores range from 20 to 80. Higher scores indicate greater test anxiety.

Students who perceived democratic invigilation reported much lower test anxiety (M = 33.23, SD = 8.48) than those who perceived authoritarian (M = 56.73, SD = 11.66) or permissive invigilation (M = 57.99, SD = 11.03). Students who used problem-focused coping reported lower test anxiety (M = 33.72, SD = 8.66) than those who used emotion-focused (M = 56.78, SD = 11.60) or avoidance coping (M = 57.03, SD = 12.34).

Levene's test showed that the assumption of equal error variances was met, $F(8, 251) = 1.44$, $p = .179$. The results of the ANOVA are presented in Table 2.

Table 2. Summary of the 3 × 3 Analysis of Variance on Test Anxiety

Source	*SS*	*df*	*MS*	*F*	*p*	Partial η^2
Invigilation style (A)	5,893.48	2	2,946.74	31.44	< .001	.200
Coping style (B)	2,618.65	2	1,309.32	13.97	< .001	.100
A × B	2,010.80	4	502.70	5.36	< .001	.079
Error	23,527.29	251	93.73			
Corrected total	63,374.97	259				

Note. R^2 = .629, adjusted R^2 = .617.

The first hypothesis, which stated that undergraduates who perceive authoritarian, democratic and permissive invigilation styles will differ significantly in test anxiety, was supported, $F(2, 251) = 31.44$, $p <$

.001, partial η^2 = .20. This was a large effect. Pairwise comparisons of estimated marginal means (Table 3) showed that students who perceived democratic invigilation reported significantly lower test anxiety than those who perceived authoritarian invigilation (mean difference = 18.76, p < .001) or permissive invigilation (mean difference = 16.89, p < .001). Students who perceived authoritarian and permissive invigilation did not differ significantly (mean difference = 1.87, p = .501).

The second hypothesis, which stated that undergraduates who use problem-focused, emotion-focused and avoidance coping styles will differ significantly in test anxiety, was also supported, $F(2, 251) = 13.97$, p < .001, partial η^2 = .10, a medium effect. Students who used problem-focused coping reported significantly lower test anxiety than those who used emotion-focused coping (mean difference = 14.43, p < .001) or avoidance coping (mean difference = 15.19, p < .001). Students who used emotion-focused and avoidance coping did not differ significantly (mean difference = 0.76, p = .735).

Table 3. Estimated Marginal Means and Pairwise Comparisons of Test Anxiety

Factor and comparison	Mean difference	*SE*	*p*	95% CI
Invigilation style				
Authoritarian vs democratic	18.76	2.42	< .001	[14.00, 23.52]
Authoritarian vs permissive	1.87	2.77	.501	[−3.59, 7.32]
Democratic vs permissive	−16.89	3.12	< .001	[−23.03, −10.76]
Coping style				
Problem-focused vs emotion-focused	−14.43	3.01	< .001	[−20.35, −8.51]
Problem-focused vs avoidance	−15.19	3.03	< .001	[−21.16, −9.21]
Emotion-focused vs avoidance	−0.76	2.23	.735	[−5.15, 3.64]

Note. Estimated marginal means were 52.31 (SE = 1.38) for authoritarian, 33.55 (SE = 1.98) for democratic and 50.45 (SE = 2.40) for permissive invigilation, and 35.56 (SE = 2.57) for problem-focused, 50.00 (SE = 1.55) for emotion-focused and 50.75 (SE = 1.61) for avoidance coping. Comparisons used the least significant difference procedure.

The third hypothesis, which stated that there will be a significant interaction between invigilation style and coping style on test anxiety, was supported, $F(4, 251) = 5.36$, p < .001, partial η^2 = .08. Table 4 presents the cell means. Under democratic invigilation, test anxiety was low whatever the coping style used (means between 31.67 and 35.80). Under authoritarian and permissive invigilation, students who used problem-focused coping reported much lower test anxiety (39.54 and 34.00, respectively) than those who used emotion-focused or avoidance coping, whose means ranged from 58.08 to 59.34. In other words, coping style made a larger difference when invigilation was not democratic.

Table 4. Mean Test Anxiety by Invigilation Style and Coping Style

Invigilation style	Problem-focused	Emotion-focused	Avoidance	Total
Authoritarian	39.54 (8)	59.34 (34)	58.08 (36)	56.73 (78)
Democratic	33.19 (89)	31.67 (6)	35.80 (5)	33.23 (100)
Permissive	34.00 (2)	58.97 (29)	58.37 (51)	57.99 (82)
Total	33.72 (99)	56.78 (69)	57.03 (92)	48.09 (260)

Note. Cell sizes are shown in parentheses. Several cells contain fewer than 10 participants, and their means should be interpreted with caution.

Discussion

This study examined whether perceived invigilation style and coping style were associated with differences in test anxiety among undergraduates of Imo State University, Owerri. Both factors were associated with significant differences, and they also interacted. Together, invigilation style, coping style and their interaction accounted for about 63% of the variance in test anxiety in this sample, although this figure should be treated with caution for reasons discussed under the limitations.

The first finding was that students who perceived democratic invigilation reported much lower test anxiety than those who perceived authoritarian or permissive invigilation. The size of this effect was large. This finding is consistent with self-determination theory, which holds that supportive settings that respect autonomy and provide clear structure reduce negative emotions, while controlling settings increase them (Deci & Ryan, 2000; Reeve, 2009). A democratic invigilator who explains instructions, responds politely and keeps order without intimidation is likely to be appraised as non-threatening, which, in line with the transactional model, reduces the sense of threat during the examination (Lazarus & Folkman, 1984). The result also agrees with research showing that threatening messages and intrusive surveillance are associated with higher anxiety among students (Coghlan et al., 2021; Putwain et al., 2017).

An interesting feature of the results was that students who perceived permissive invigilation were as anxious as those who perceived authoritarian invigilation. It might be expected that relaxed supervision would reduce anxiety. However, control-value theory suggests that anxiety rises when students feel that outcomes are uncertain or outside their control (Pekrun, 2006). Loose supervision may create such uncertainty. Students may worry that others are cheating and gaining an unfair advantage, that noise and movement will disturb their concentration, or that the examination may be cancelled because of malpractice. In this sense, both too much control and too little structure may be experienced as threatening. The finding suggests that the important quality of good invigilation is not leniency but a combination of order and respect.

The second finding was that students who used problem-focused coping reported lower test anxiety than those who used emotion-focused or avoidance coping, and that the latter two groups did not differ. This result agrees with earlier reviews and studies showing that problem-focused coping is generally adaptive in examination settings and that avoidance is associated with higher anxiety (Stöber, 2004; Zeidner, 1995). It is also consistent with Nigerian findings that disengagement and denial are linked with greater anxiety (Ayodeji et al., 2026) and that students see early preparation as a way of overcoming examination anxiety (Agubosi et al., 2022). The similarity between the emotion-focused and avoidance groups is in line with Genc (2017), who found that emotion-focused coping carried part of the negative effect of test anxiety on performance. Emotion-focused coping can be useful when a stressor cannot be changed, but before an examination there is usually something that can be done, and strategies that focus only on feelings may leave the source of worry untouched.

Because the study was cross-sectional, the direction of the link between coping and anxiety cannot be determined. It is possible that anxious students turn to emotion-focused and avoidance coping because they feel overwhelmed, rather than the coping styles producing the anxiety. Stöber (2004) noted that the components of test anxiety are themselves related to the coping strategies students choose. The relationship is therefore likely to be reciprocal.

The third finding was a significant interaction between invigilation style and coping style. Under democratic invigilation, test anxiety was low across all coping styles. Under authoritarian and permissive invigilation, students who used problem-focused coping remained relatively calm, while those who used emotion-focused or avoidance coping reported high anxiety. This pattern is consistent with the transactional model, which holds that the outcome of a stressful encounter depends on both the demands of the situation and the resources of the person (Lazarus & Folkman, 1984). A supportive examination setting appears to reduce anxiety for most students, while a less supportive setting appears to expose differences in coping. Put differently, problem-focused coping may protect students when the examination climate is difficult, and a supportive climate may protect students whose coping is less effective. The result also fits with Putwain et al.'s (2023) argument that personal resources such as academic buoyancy help students to deal with test anxiety. However, several cells in the interaction contained very few participants, and the pattern needs to be confirmed in a larger and more balanced sample.

Implications of the Findings

The findings have several practical implications. First, they suggest that the examination hall should be treated as a psychological setting as well as an administrative one. Universities may consider including guidance on supervision style in the training of invigilators, with emphasis on clear instructions, polite

communication and firm but calm control. Such training does not require any relaxation of rules against malpractice; the findings suggest that order and respect can go together.

Second, the finding that permissive invigilation was associated with high anxiety suggests that lax supervision is not a solution. Students appear to value an orderly and fair examination setting, and invigilators who fail to maintain order may add to students' worries.

Third, university counselling units may help students to develop problem-focused coping skills, such as planning, time management and early revision, through workshops held before examination periods. Students who rely on avoidance or emotion-focused coping may benefit from targeted support, especially since they appear to be most affected by unfavourable examination conditions.

Fourth, the interaction suggests that efforts to improve invigilation and to strengthen students' coping are likely to work best when they are combined.

Limitations of the Study

Several limitations should be noted. First, participants were drawn by convenience sampling from one university, which limits the extent to which the findings can be generalised to other Nigerian universities. Second, invigilation style was measured through students' perceptions rather than through observation, and highly anxious students may have perceived their invigilators as more threatening. Third, the Invigilation Style Questionnaire and the Coping Style Questionnaire were developed or adapted by the researchers, and their validity has not yet been established in independent samples. The pilot reliability coefficients for the invigilation subscales were extremely high (.98 to .99), which may indicate that items were very similar in wording or that pilot respondents answered in a uniform pattern; further item analysis and validation with larger samples are needed. Fourth, participants were placed in groups according to their highest subscale score, which discards information about students who use more than one coping style and reduces statistical power. Fifth, the cell sizes in the interaction analysis were very unequal, with some cells containing fewer than 10 participants. The very large proportion of variance explained may partly reflect the way the groups were formed and the overlap between perceived invigilation style and anxiety, and the interaction should be confirmed with larger samples. Finally, the cross-sectional design does not allow conclusions about cause and effect.

Suggestions for Further Studies

Future research should test the validity of the invigilation and coping measures with larger samples, using factor analysis and comparisons with established scales. Studies should treat invigilation style and coping style as continuous variables and use regression or moderation analysis. Observational or experimental designs, in which invigilation style is varied under controlled conditions, would allow stronger conclusions about cause and effect. Researchers should also examine whether invigilation style and coping style are related to actual examination performance and to examination malpractice, and should include students from several universities and types of institution.

Recommendations

Based on the findings, the following recommendations are made:

1. University management should include guidance on supportive supervision in the training of invigilators, emphasising clear instructions, respectful communication and calm but firm control of the examination hall.
2. Invigilators should avoid both harsh, intimidating behaviour and lax supervision, since both were associated with higher test anxiety.
3. Counselling units should organise coping-skills and stress-management programmes before examination periods, with emphasis on planning, time management and early preparation.
4. Lecturers and course advisers should help students to identify avoidance and emotion-focused patterns and refer students with high test anxiety to counselling services.
5. Universities should develop a written code of conduct for invigilators that addresses the emotional climate of the examination hall as well as the prevention of malpractice.

Conclusion

This study found that perceived invigilation style and coping style were associated with significant differences in test anxiety among undergraduates of Imo State University, Owerri. Students who perceived democratic invigilation and those who used problem-focused coping reported the lowest levels of test anxiety, while authoritarian and permissive invigilation, and emotion-focused and avoidance coping, were associated with higher anxiety. The two factors also interacted, with coping style making a larger difference when invigilation was not democratic. These findings suggest that reducing test anxiety requires attention to both the examination environment and the coping resources of students. Training invigilators in supportive supervision and teaching students problem-focused coping skills are practical steps that universities can take.

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