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Examining Work Group Functioning and Occupational Stress on Turnover Intention among Academic and Non-Academic Staff in Nigeria

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Abstract

Turnover intention has remained an emerging issue in university system every year in Nigeria. As the university system continue to experience increasing number of staff turnover, investigating some of the predictors of turnover intention become imperative. Therefore, this study examines the predictive ability of work group functioning and occupational stress on turnover among academic and non-academic staff in a Nigerian university. Cross-sectional design was utilized while purposive sampling technique was used to select the study population. Social Exchange Theory anchored the study. Data were collected from 250 academic and non-academic staff of the Alex Ekwueme Federal University, Ndufu-Alike Ikwo using validated scales. Data collected were analysed using hierarchical multiple regression to test hypothesis that was accepted at p < .001 level of significance. The result indicated that work group functioning and occupational stress were statistically significant predictors of turnover intention among study participants. In addition, work group functioning and occupational stress were statistically significant independently predictors of turnover intention among study participants. The study concludes that work group functioning and occupational stress are marginally contributed to turnover intention among study participants. The study recommends that the Nigerian university HR strategies should include putting in place an enabling work environment that reduces stress and turnover intention.

Keywords: Occupational Stress; Turnover Intention; University Staff; Work Group

Functioning.

Abstrak

Niat untuk berpindah kerja (turnover intention) tetap menjadi isu yang terus mengemuka setiap tahun dalam sistem universitas di Nigeria. Seiring dengan meningkatnya jumlah pegawai yang keluar dari sistem universitas, penyelidikan terhadap beberapa faktor prediktor dari niat berpindah kerja menjadi semakin penting. Oleh karena itu, penelitian ini mengkaji kemampuan prediktif dari work group functioning (fungsi kelompok kerja) dan stres kerja terhadap niat berpindah kerja di kalangan staf akademik maupun non-akademik pada sebuah universitas di Nigeria. Penelitian ini menggunakan desain potong lintang (cross-sectional design) dengan teknik purposive sampling dalam pemilihan populasi penelitian. Studi ini berlandaskan pada Social Exchange Theory (Teori Pertukaran Sosial). Data dikumpulkan dari 250 staf akademik dan non-akademik di Alex Ekwueme Federal University, Ndufu-Alike Ikwo dengan menggunakan instrumen skala yang telah divalidasi. Data yang terkumpul dianalisis menggunakan regresi berganda hierarkis untuk menguji hipotesis, dengan tingkat signifikansi p < .001. Hasil penelitian menunjukkan bahwa fungsi kelompok kerja dan stres kerja merupakan prediktor yang signifikan secara statistik terhadap niat berpindah kerja pada para partisipan penelitian. Selain itu, fungsi kelompok kerja dan stres kerja juga terbukti secara independen berpengaruh signifikan terhadap niat berpindah kerja. Penelitian ini menyimpulkan bahwa fungsi kelompok kerja dan stres kerja memberikan kontribusi yang relatif kecil (marginal) terhadap niat berpindah kerja para partisipan. Berdasarkan temuan tersebut, penelitian merekomendasikan agar strategi manajemen sumber daya manusia (HR) di universitas-universitas Nigeria mencakup penyediaan lingkungan kerja yang kondusif guna mengurangi tingkat stres sekaligus menekan niat berpindah kerja.

Katakunci: Fungsi Kelompok Kerja; Niat Pindah Kerja; Staf Universitas; Stres Kerja.

1 Introduction

Employee turnover intention is the conscious and deliberate attempts of an employee to leave their current position or organization. It represents the employee's moves to seek alternative employment in the near future (Brause, 2021). Turnover intention is a precursor to actual leaving their current employment. Some factors have been implicated as predictors of turnover intention such as job dissatisfaction, organizational culture, leadership styles and work-life balance (Cilicaran et al., 2025; Maertz & Campion, 2021; Nkwatsibwe et al., 2025). However, in this study two factors: Work group and occupation functioning stress were investigated.

Work group functioning has to do how individuals collaborates, communicates, interacts to achieve common goals within an organizational setting. When a work group operates smoothly, it enhances productivity, creativity, and job satisfaction among its members. On the other hand, a dysfunctional work group would lead to conflicts, communication breakdowns and negative effects individual's employee and collective performance (Gunasekra et al., 2023). When

work groups foster positive interpersonal relationships, employees feel a sense of support and camaraderie. This support contributes to job satisfaction, as individuals appreciate collaborative and positive atmosphere. A work group that values and recognizes individuals' contributions enhances iob satisfaction. Employees who feel acknowledged for their efforts are more likely to find their work meaningful and satisfying (Jeon et al., 2022). On the other hand, dysfunctional work groups marked by conflict and stress contribute to job dissatisfaction. Constant disagreements, unresolved issues, and high stress levels would lead to employees seeking alternatives where they perceive a healthier work environment. In a negative work group, individuals may feel isolated or marginalized, leading to feelings of dissatisfaction. The lack of a supportive network can significantly affect the overall job satisfaction employees stirring turnover (Maertz et al., 2023).

Studies have consistently demonstrated a strong relationship between poor work group functioning and higher turnover intention. For example, Chen et al. (2019) found that positive work group functioning characterized by strong cohesion and effective communication, enhances

job satisfaction among employees. This increases job satisfaction which in turn reduces their intention to leave the organization. This suggests that when employees experience a sense of belonging and cooperation within their work groups, it positively affects their overall job satisfaction and subsequently reduces their seek alternative desire to employment opportunities. In addition, Thaiba and Survab (2019) found that employees with high job involvement are less affected by poor work group functioning in terms of turnover intention.

Furthermore, Li et al. (2015) found that poor work group dynamics marked by low cohesion, ineffective communication, and conflicts, tend to increase the likelihood of employees considering leaving their organizations. An extant study revealed that employees who perceived lower levels of group cohesion and social support were more inclined to express turnover intentions (Chen & Aryee, 2007). This implies that lack of support and positive interactions within the work group would erode an employee's commitment to the organization and then turnover intention. This suggests that when employees perceive their work groups as dysfunctional, with low levels of communication, collaboration, and social support, they are more likely to express their intention to leave the organization.

The second factor considered in this study as a predictor of turnover intention is occupational stress which refers to the physical, emotional, psychological strain that emplovees experience as a result of their job and work environment (Maertz et al., 2023). It arises when there is a perceived imbalance between job demands and the employee's ability to cope with or control those demands (Jeon et al., 2022). Occupational stressor contributes dissatisfaction through various mechanisms and then turnover intention. These stressors include excessive workloads, unrealistic expectations, lack of control over employee's tasks, and insufficient support from supervisors colleagues during challenging times (Gunasekra & Perera, 2023).

Some studies have investigated occupational stress as a predictor of turnover intention. For instance, Chen et al. (2022) found occupational stress as a predictor of turnover intention. In another study, Chen and Aryee (2020) found specific occupational stressors such as role ambiguity and interpersonal conflict as strong predictors of employees' intentions to leave their current jobs. Similarly, Gautam and Gautam (2022) in a study that examined the relationship

between occupational stress and employees' turnover intention found occupational stress to predict turnover intention in a banking industry. Furthermore, Salama et al. (2022) in a study within the hospitality industry that focused on workload and emotional demands as stressors that contribute to employees' intentions to leave their jobs found higher levels of workload and emotional demands to be strong predictors of turnover intention. Finally, Jiang and Lavaysse who conducted a study in the (2018)manufacturing industry found high levels of job demands such as workloads and time pressure, and job resources such as supervisor support and task autonomy as strong predictors of turnover intention.

Turnover intention is a critical concern for organizations as it leads to increased costs, decreased productivity, and loss of valuable human capital. While turnover intention has been extensively studied among different populations and samples, the roles of work group functioning occupational stress as predictors of employees' turnover intention remain underinvestigated especially among university staff in Nigeria leaving gap in knowledge to fill. Therefore, the purpose of this study was to investigate work group functioning occupational stress as predictors of turnover intention among academic and non-academic staff of AE-FUNAI. The study sought to answer the question: Would work group functioning and occupational stress jointly and independently predict turnover intention among university staff? The findings of this study would guide the system to develop and implement university strategies that would enhance work group functioning, reduce occupational stress and turnover intention among university staff.

Social exchange theory (SET, Blau, 1964, Eisenberger et al., 2001) provided the theoretical explanation for this study. The theory that individuals engage in interactions within organizations based on the expectation of reciprocal benefits. interactions involve the exchange of resources, both tangible (e.g., rewards, recognition) and (e.g., emotional intangible support, satisfaction). In the context of work group functioning, the quality of interactions within a group becomes crucial in shaping employees' perceptions of their work environment and their subsequent intentions to stay or leave.

Within the context of work group functioning, the SET suggests that cohesive, supportive, and positive work group environments foster a sense of belonging, mutual respect, and camaraderie among group members. When employees experience positive interactions such as effective communication, collaboration, and shared goals, they would develop a sense of psychological attachment to their work group (Eisenberger et al., 2001). This attachment translates into the perception that the benefits gained from the group, including emotional support and a positive work atmosphere, outweigh the costs.

The Social Exchange Theory also posits that employees who perceive their work group as supportive and cohesive are more likely to experience job satisfaction and a sense of fulfilment. This positive exchange of resources enhances their commitment to the organization as they recognize the value of the social and emotional rewards received from their work group (Eisenberger et al., 2001). Consequently, employees in well-functioning groups are more inclined to remain in their positions and resist the intention to leave. On the other hand, employees experience dysfunctional work group dynamics, characterized by conflicts, lack of communication, and unsupportive interactions, would feel that the costs of remaining in their current job outweigh their benefits. These employees may perceive a lack of reciprocity in the social exchange, leading to reduced job satisfaction and an increased propensity to consider alternative employment options. The hypothesis tested was in this study was: Work group functioning and occupational stress would jointly and independently predict turnover intention among staff of AE-FUNAI

2 Method

Cross-sectional survey design was used for the study. Work group functioning and occupational stress were independent variables, while turnover intention was the dependent variable. The Alex Ekwueme Federal University, Ndufu-Alike Ikwo (AE-FUNAI) was purposive selected while participants were conveniently selected for data collection.

The study used three validated questionnaires for data collection. Team Effectiveness Scale Questionnaire (TEQ, Dhar & Dhar, 2011) which has 20-item rated on a 5-point Likert's format Higher scores indicate better work group functioning. TEQ has Cronbach's alpha of 0.81, and in this study, Cronbach's alpha of 0.83 was obtained.

Occupational Stress Inventory(OSI, Srivastava & Singh, 2004) has 20-item rated on a 5-point

Likert's format. The authors' Cronbach's alpha was 0.81 and in the current study, Cronbach's alpha of 0.78 was obtained Turnover Intention Scale (TIS, Bothma & Roodt, 2013) has 6-item and is rated on a 5-point Likert's format. The authors' Cronbach's alpha was 0.80 and in the current study, Cronbach's alpha of 0.82 was obtained.

Procedurally, the researchers were identified with a letter of introduction obtained from the Department of Psychology, AE-FUNAI. These potential participants were approached one-onone and invited to participate in the study. They were duly informed of the voluntary nature of the study and assured of the confidentiality of their responses. Only those that agreed to participate were given the questionnaires to fill which took less than 10 minutes to complete. The questionnaires were collected on the spot. A total of 256 questionnaires were distributed, however, during screening and coding, six questionnaires had inconsistent responses and were removed leaving 250 used for the analysis.

Ethical clearance was duly followed as it affects research using human participants. The concept of voluntariness, confidentiality and no harm to the participants were strictly adhered to in the course of data collection.

Finally, data collected were analysed using IBM^R SPSS version 25. Descriptive and inferential statistics were computed while the hypothesis was tested using hierarchical multiple regression and accepted at p <.001 level of significance.

3 Result and Discussion

The participants in this study were drawn from the academic and non-academic staff of the Alex Ekwueme Federal University Ndufu Alike Ikwo (AE-FUNAI), Ebonyi State, Nigeria. A total of 250 staff of AE-FUNAI participated in the study. Descriptive statistics revealed that 165(62%) of the participants were males while 95(38%) were females. Also, the age ranges from 25 to 60 years ($M_{age}=36.20$, SD = 11.12).

Table 1. Means, Standard Deviation and Zero Correlations of Work Group Functioning, Occupational Stress and Turnover Intention.

Variable	М	SD	1	2	3
1. TI	.75	.59	-		
2.WGF	3.29	.55	.151*	-	
3. OC	.81	.69	.129*	203*	-

NB: TI= Turnover Intention, WGF = Work Group Functioning, OC= Occupational Stress, N = 250, * p significance at <.001

According to Table 1 which presents the zero-order correlation of the study variables, both work group functioning (r = -.151, p <.001) and occupational stress (r = .129, p <.001) correlated with turnover intention. This means that as work group decreases, the intention to leave the organization increase. Furthermore, as occupation stress increases, turnover intention increases.

Table 1 provides the descriptive statistics and correlations among zero-order the variables, namely turnover intention, work group functioning, and occupational stress. The findings indicate that work group functioning was negatively and significantly correlated with turnover intention (r = -.151, p < .001). This suggests that when staff members perceive their work group as less effective in terms of collaboration, support, and task performance, their intention to leave the organization tends to rise. In contrast, occupational stress showed a positive and significant relationship with turnover intention (r = .129, p < .001). This implies that as employees experience higher levels of workrelated stress, their likelihood of considering resignation or job change also increases. Taken together, these results highlight the dual influence of social and psychological factors on staff retention. Enhancing effective work group dynamics and reducing occupational stress may therefore serve as important strategies for mitigating turnover intention.

Table 2. Hierarchical Multiple Regression Predicting Turnover Intention by Work Group Functioning and Occupational Stress.

Model	В	SE	β	t	р
Const.	3.007	.251		11.99	.00
WGF	202	.069	-185	2.913	.00
os	.146	.055	.167	2.634	.00

NB: TI= Turnover Intention, WGF = Work Group Functioning, OC= Occupational Stress, * p significance at <.001, N= 250, R² = .049, F = 6.421, df = 2, 247

Table 2 presents the hierarchical multiple regression of work group functioning and occupational stress on turnover intention. As revealed in Table 2, work group functioning and occupational stress jointly predicted turnover

intention among study participants [R² = .049, F(2,247) = 6.421, p < .001] which explained about 4.9% variance in turnover intention. Furthermore, both work group functioning (β = .185, p < .001) and occupational stress (β = .167, p < .001) independently predicted turnover intention among study participants.

Table 2 presents the results of the hierarchical multiple regression analysis conducted examine the predictive roles of work group functioning and occupational stress on turnover intention among staff participants. The findings demonstrate that the overall model was statistically significant, F(2,247) = 6.421, p < .001, with an R² value of .049. This indicates that approximately 4.9% of the variance in turnover intention can be explained by the combined work functioning effects of group occupational stress. Although the explained variance is relatively modest, the statistical significance of the model highlights that these two variables play a meaningful role in shaping employees' decision-making processes about leaving the organization.

Specifically, the standardized beta coefficients reveal differential effects. Work group functioning was found to negatively predict turnover intention ($\beta=-.185,\,p<.001$), suggesting that employees who perceive their work groups as more effective in terms of communication, collaboration, and role clarity are less likely to consider leaving their positions. Conversely, occupational stress positively predicted turnover intention ($\beta=.167,\,p<.001$). This suggests that higher levels of stress—such as work overload, role conflict, or emotional exhaustion—are associated with greater intentions to resign.

Taken together, these findings underscore the importance of workplace social dynamics and psychological well-being in influencing turnover behavior. While the explained variance is small, it should not be underestimated, as even marginal increases in turnover intention can translate into higher turnover rates over time. Organizational interventions aimed at fostering effective teamwork and reducing occupational stressors may therefore serve as viable strategies to improve retention in the university system.

The hypothesis that work group functioning and occupational stress would jointly predict turnover intention was supported. When work groups foster positive interpersonal relationships, employees feel a sense of support and camaraderie. This support contributes to job satisfaction, as employees appreciate the collaborative and positive atmosphere. This

supports Social Exchange Theory that meaningful interaction with work-group and positive exchange of resources would make individuals to remain in their positions and resist the intention to leave the organization (Eisenberger et al., 2001).

A work group that values and recognizes individual contributions enhances job satisfaction. Employees who feel acknowledged for their efforts are more likely to find their work meaningful and satisfying. This finding resonated with the findings of Putrin and Renwarin (2023) and Kachi et al. (2020) who found work group functioning and occupational stress interacting to predict turnover intention among their study participants. In addition, the finding in this study lent credence to Cilicaran et al. (2025 who reported that work group functioning and occupational stress jointly predicted turnover intention.

Furthermore, work group functioning and occupational stress independently predicted turnover intention among study participants. Employees who experience positive working relationships with their colleagues are more likely to exhibit increased job satisfaction and reduced turnover intentions, ultimately leading enhanced organizational stability and retention. Moreover, organizations where there are high job stressors such as psychological/physical stress response, lack of workplace social support, and job strain (the combination of high job demands and low job control) serve as enabling environments to generate turnover intention. These findings have been supported by previous results that work group functioning(Jeon et al., 2022; Maertz et al., 2023) and occupational stress (Chen et al., 2022; Gautam & Gautam, 2022) predicted turnover intention among different populations and samples. Besides cultural factor, one important difference in turnover intention compared to what this result shows is that of "brain drain" in Nigeria and Africa compared to the Asian countries which is characterized by "the Great Resignation" (Chen et al., 2023; Hadi-Cahyadi et al., 2024; Singh et al., 2025). The results of this study showed that work group functioning and occupational stress independently predicted turnover intention among study participants.

4 Conclusion

The study shows that work group functioning and occupational stress were good contributors to turnover intention among academic and non-

academic staff of AE-FUNAI. The implication of this finding is that university authority who wants to reduce turnover among academic and nonacademic staff should address the issues of poor work group functioning and occupational stress academic. The implication to theory is that it extent social exchange theory by examining what is applicable in a Nigerian university system. One important limitation of this study is the low variance (R2(4.9%) in turnover intention caused by work group functioning and occupational stress. This implies that these two variables explains very little in turnover intention because new employment is very scarce to secure in Nigeria especially in government institution where there is job security. Another limitation of study is the use of self-reported questionnaires which were not free of response bias. This should be addressed in further study by using focus group discussion documentary evidence from the planning unit to triangulate data collected from self-reported questionnaires. Another is the study used of only one higher institution in the state with a sample size of 250 which hindered generalization of study findings. Another limitation is that of cultural bias where job is hold on to even when there is job dissatisfaction. Finally, further research direction should involve conducting multi-site longitudinal studies to validate results obtained using cross-sectional study.

5 References

Bothma, C.F.C., & Roodt, G.(2013). The validation of the turnover intention scale. SA Journal of Human Resource Management/, 11(1), 507, 1-12 https://doi.org/10.4102/sajhrm.v11i1.50

Brause, C.(2021) Team communication. The Designer 's Field Guide to Collaboration, March, 148-179, https://doi.org/10.4324/9781315753458 4-11

Chen B, Wang L, Li B and Liu W (2022). Work stress, mental health, and employee performance. Frontiers I Psychology, 13:1006580 https://doi.org/10.3389/fpsyg.2022.1006580

Chen, X., Ran, L., Zhang, Y., Yang, J., Yao, H., & Zhao, S. (2019). Moderating role of job satisfaction on turnover intention and burnout among workers in primary health care institutions: A cross-sectional study. *BMC Public Health*, 19, 1-10. https://doi.org/10.1186/s12889-019-7894-7

Chen, Z. X. & Aryee, S.(2007). Delegation and employee work outcomes: An

- examination of the cultural context of mediating processes in China. *Academy of Management Journal* ,50(1),226-238 https://doi.org/10.5465/AMJ.2007.24162 389
- Chen, L., & Chen, L. (2023). To Stay or to Leave: The Turnover Intentions of International Academics at Japanese Universities. Journal of Studies in International Education, 28(3), 376–397. https://doi.org/10.1177/102831532 31164842
- Cilicaran, B.S., & San-Joe, D. B.S.(2025). Predictors of turnover intention among non-academic staff personnel in Catholic University in Western Vsayas, International Journal Philippines. Multidisciplinary Research & Growth Evaluation, 6(1),1297-1304 https://doi.org/10.54660/IJMRGE.2024.5 .6.1297-1304
- Dhar, U. & Dhar, S.(2011). *Team effectiveness* scale . Agra: National Psychological Corporation , India.
- Gautam, D.G.D., & Gautam, P. K.(2022).

 Occupational stress for employee turnover intention: Mediation effect of service climate and emotion regulation.

 Asian-Pacific Journal of Business Administration, 1-24

 https://doi.org/10.1108/APJBA-02-2021-0056
- Gunasekra, K. A.& Perera, B. A. K. S.(2023).

 Defining occupational stress: A
 systematic literature review. FARU
 Journal, 10(1), 104-111
 https://doi.org/10.4038/faruj.V10i1.194
- Hadi-Cahyadi, Andrias, D., Masman, R. R., Estralita Trisnawati, & Wijaya, H. (2024). Investigating the determinants turnover intention among the big 4 public Indonesia. accounting firms in International Journal of Innovative Research and Scientific Studies, 7(4), 1423-
 - 1434. https://doi.org/10.53894/ijirss.v7i
 4.3441
- Jeon, M. K., Yoon, H., & Yang, Y. (2022). Emotional dissonance, job stress, and intrinsic motivation of married women working in call centres: The Roles of work overload and work-family conflict. Administrative Sciences, 12(1) https://doi.org/10.3390/admsci12010027
- Jiang, L. and Lavaysse, L.M. (2018) Cognitive and affective job insecurity: A meta-analysis and a primary study. *Journal of Management*, 44, 2307-2342. https://doi.org/10.1177/0149206318773853
- Kachi, Y., Inoue, A., Eguchi, H., Kawakami, N., Shimazu, A., Tsutsumi, A. (2020). Occupational stress and the risk of

- turnover: A large prospective cohort study of employees in Japan BMC public health 2020; 20(1):e174 https://doi.org/10.1186/s12889-020-8289-5
- Maertz, C.P., & Campion, M. A. (2004). Profiles in quitting: Integrating process and content turnover theory. *Academy of Management Journal*, 47(4),566-582. https://doi.org/10.2307/20159602
- Maertz, C.P., Keith, M.G., Raghuram, S., Porter, C.M., & Dalton, G. L.(2023). Advancing practice ` theory and on managing dvsfunctional turnover: Developing an improved measure of turnover reasons. & Organization Management, 48(5), 1387-1429 https://doi.org/10.1177/1059601121106 <u>58</u>80
- Nkwatsibwe, I., Rukundo, A., & Balimuttajjo, S. (2025). Job stress, job satisfaction, self-efficacy and turnover intentions across socio-demographic characteristics of government secondary school teachers in Greater Mbarara. *American Journal of Education & Practice*, 9(1), 32-66 https://doi.org/10.47672/ajep.2630
- Putri, A. R., Renwari, J. M. J., (2023). The effect of leadership and teamwork on employee turnover and team performance. *Human Capital & Organizations*, 1(1), 46-55 https://doi.org/ 10.58777/hco.v1i1.121
- Salama, W., Abdou, A.H., Mohamed, S.A., & Shehata, H. S.(2022). Impact of work stress and job burnout on turnover intentions among hotel employees. International Journal of Environmental Research & Public Health, 19(9724).https://doi.org/10.3390/ijerph19159724
- Singh, D. ., Tanwar, R. ., Gupta, D., Verma, R. ., & Chaudhary, D. . (2025). Decoding Employee Exit: A Systematic Review of Turnover Intention and Its Determinants. *Journal of Neonatal Surgery*, 14(26S), 736–750. Retrieved from
 - https://www.jneonatalsurg.com/index.php/jns/article/view/6351
- Srivastava, A.K. & Singh, A.P.(2004). Manual of the occupational stress index. Varanasi: Department of Psychology, Banaras University.
- Thaiba, D. & Suryab, R. L.(2019). Influence of job involvement on turnover: Organizational commitment as mediator. International Journal of Innovation, Creativity & Change, 6(8). 315-333 www.ijicc.net