

Relationship between Academic Burnout and Family Functioning Among University Students in Langata Constituency, Nairobi County, Kenya

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ABSTRACT

Academic burnout has emerged as a significant concern among university students due to its adverse effects on academic performance and psychological well-being. Although family functioning plays a critical role in shaping students' emotional regulation and coping capacities, limited empirical research has examined its association with academic burnout among university populations. Therefore, the aim of this study was to examine the relationship between academic burnout and family functioning among university students. The study was grounded on Maslach's burnout theory and Murray Bowen's family systems theory. The study adopted a correlational research design to examine the relationship between the two variables. The Yamane formula (1967) was applied to determine the sample size of 244 participants from the study target population of 1007. Data was collected using the Oldenburg Burnout Inventory – Student Version (OLBI-S) and a combined questionnaire incorporating the Family APGAR Scale and the Family Assessment Device (FAD). Data was analyzed using descriptive statistics (frequencies, percentages) and Pearson correlation analysis with SPSS version 25. Results from Pearson correlation analysis showed there was a relationship between academic burnout and family functioning among university students in Langata Constituency, Nairobi County, Kenya ($r=.229$). The study recommends to the institutions of higher learning to strengthen counseling and peer support programs in order to help the university students.

Key Words: Academic burnout, Family functioning, University students, Langata Constituency, Nairobi, Kenya

INTRODUCTION

Academic burnout has become a significant psychological concern among university students due to increasing academic demands, emotional exhaustion, and reduced academic motivation Schaufeli et al. (2017). The Christina Maslach Burnout Theory provided basic framework for understanding the concept of burnout, which was crucial to this current study. Maslach and Jackson (1981) defined burnout as a psychological reaction to ongoing interpersonal and emotional stressors. The theory of academic burnout was derived from Christina Maslach's broader burnout model, which was originally developed to understand emotional exhaustion in occupational settings. In the academic setting, these dimensions are applicable to students who experience overwhelming academic pressures, leading to emotional fatigue, detachment from academic work, and a decline in perceived academic competence (Schaufeli et al., 2002). Moreover, Maslach's theory recognizes the role of external environmental factors, including social and interpersonal relationships, in influencing one's experience of burnout (Leiter & Maslach 2004).

On the other hand, dysfunctional family dynamics may contribute to higher stress levels, increasing the risk of academic burnout (Wang et al., 2019). Thus, understanding the influence of family functioning aligns with Maslach's focus on the relationship between social support and personal coping. Murray Bowen was a pioneering psychiatrist who developed Family Systems Theory in the late 1950s and early 1960s. Bowen developed Family Systems Theory to move away from individual-focused psychology and instead understand

the family as an interconnected emotional unit. He believed that individual behavior cannot be fully understood without considering the family system in which the individual operates (Goldenberg, 2013).

Bowen saw the family as a network of interdependent relationships, where changes or stress in one part of the system affect the entire family. Rather than blaming one person for family problems, Bowen emphasized how patterns of communication, roles, and emotional responses across generations contribute to family challenges. His theory highlighted how family members influence each other's behavior and mental health. Murray Bowen's Family Systems Theory, asserts that people cannot be comprehended in an isolated setting; rather, the family functions as an emotional unit (Bowen, 1978). According to this theory, behaviors, emotions, and functioning patterns of individuals are deeply rooted in and influenced by family relationships and interactions. Bowen argued that families develop emotional interdependence through connectedness and reactivity, and this interconnectedness means that stress or dysfunction in one member can affect the entire system.

According to Callatrava et al. (2022), differentiation of self (DoS), the main concept of Bowen Family Systems Theory, is one of the most well-known concepts among systemic researchers and psychologists. The theory's central idea is differentiation of self, which describes a person's capacity to retain their individuality while feeling an emotional bond with their family. Individuals with low differentiation often struggle with emotional regulation and are more vulnerable to stress and burnout, particularly in demanding environments like universities (Kerr & Bowen, 1988).

This theory is relevant to the present study as it provides a theoretical lens through which family functioning can be understood in relation to academic burnout. According to Bowen, families that exhibit healthy functioning marked by open communication, emotional support, problem-solving, and appropriate boundaries help members develop resilience and better stress management skills. On the other hand, dysfunctional family systems with poor communication, emotional cutoff, or enmeshment may contribute to higher levels of stress and emotional exhaustion among students (Titelman, 2014). Therefore, students from families with low levels of differentiation or unresolved familial tensions may be more liable to academic burnout, as their coping capacity is weakened by chronic emotional strain from the family system.

According to waithaka et al. (2019) for students, a supportive family environment characterized by strong cohesion and shared responsibilities can act as a deterrent against burnout, offering practical and emotional support. Conversely, families with high levels of conflict or limited adaptability may add to the stress of balancing work and study, increasing the risk of burnout. Bowen's framework underscores the reciprocal nature of this relationship, as burnout in one member, such as a student, can strain the emotional stability of the entire family system.

Andrade et al. (2023) conducted a correctional study on the relationship between academic burnout and family functioning among 519 students from universities in Hungary and other European countries during the COVID-19 pandemic. Academic burnout was assessed using the Copenhagen Burnout Inventory – Student version, while family functionality was evaluated through the Family APGAR Index scales. Correlation analysis revealed significant negative relationships between academic burnout and family functionality ($r = -0.42$, $p < 0.001$), social support ($r = -0.48$, $p < 0.001$), and coping ($r = -0.45$, $p < 0.001$). Structural equation modeling indicated that higher family functioning, stronger social support, and more effective coping strategies were associated with reduced levels of academic burnout. Moreover, the link between social support and burnout was partially mediated by coping and family functioning. These results highlight the protective influence of supportive family and social environments in alleviating academic burnout.

Yu et al. (2021) investigated how family cohesion and adaptability influence academic burnout among 1971 Chinese undergraduate students. The study found a significant negative relationship between family cohesion and adaptability and academic burnout ($r = -0.24$, $p < 0.01$), indicating that students from more cohesive and adaptable families experienced lower levels of burnout. The study also revealed positive correlations between family cohesion and adaptability with positive psychological capital ($r = 0.41$, $p < 0.01$) and peer support ($r = 0.31$, $p < 0.01$). Furthermore, the relationship between family cohesion and adaptability and academic burnout was indirect, mediated through positive psychological capital alone, as well as through a serial mediation

pathway involving both peer support and positive psychological capital. These findings emphasize the critical role of positive family environments in promoting psychological resources that protect students from academic burnout.

Yang et al. (2025) conducted a study in China to examine the relationship between family functioning, academic self-efficacy, and academic burnout among nursing students enrolled in a three-year vocational training program in Henan Province, Eastern China. A sample of 2,847 students was recruited using convenience sampling, and data were collected via an online questionnaire. The instruments used included the Family APGAR Index for family functioning, a scale for academic self-efficacy, and the Copenhagen Burnout Inventory – Student Version (CBI-SS) to measure academic burnout. The findings showed that nursing students had a mean academic burnout score of 53.98 (SD = 10.87). Family functioning was negatively correlated with academic burnout ($r = -0.39$, $p < 0.001$) and positively correlated with academic self-efficacy ($r = 0.46$, $p < 0.001$). Similarly, academic self-efficacy was strongly and negatively related to academic burnout ($r = -0.64$, $p < 0.001$). Further analysis revealed that academic self-efficacy partially mediated the relationship between family functioning and burnout (indirect effect = -1.009 ; 95% CI: -1.114 to -0.910), confirming that higher family support contributed to reduced burnout through enhanced self-efficacy ($\beta = -0.21$, $p < 0.001$). The gap in that study was its focus on nursing students only, limiting generalizability; the current study addressed this by examining the relationship between family functioning and academic burnout among a broader population of university students in Kenya.

Kaggwa et al. (2021) carried out a cross-sectional study to ascertain the prevalence of burnout and the factors that are linked to it among medical students pursuing Bachelor of Medicine and Bachelor of Surgery (MBChB) degrees in Mbarara University of Science and Technology (MUST) in Uganda. The study targeted all MBChB students at MUST, with a sample size of 145 participants (70.3% male), recruited through consecutive sampling via official class WhatsApp groups. Data was collected using an online survey that incorporated the Maslach Burnout Inventory, Student Survey (MBI-SS) tool. The results showed that the total incidence of burnout was 54.5%, with 93.1% of students reporting high levels of emotional weariness, 97.2% reporting high levels of cynicism, and 62.1% reporting low professional effectiveness. Interestingly, burnout was more common among students who voluntarily enrolled in the MBChB program (Adjusted Odds Ratio: 7.2; 95% CI: 1.4–36.9; $p=0.018$). There was a knowledge gap on the part that family functioning plays in academic burnout, indicating that more study is necessary.

Muasya (2015) explored burnout and work-family conflict among female teachers in Kenyan elementary and secondary schools. It specifically aimed to determine the general pressures related to work and family as well as the stressors particular to the profession and the ways in which these stressors affected instructors. 375 female teachers from urban Kenyan schools made up the sample size. The approach of stratified random sampling was employed. The study identified that 81% of participants reported emotional exhaustion, while 76% experienced reduced professional efficacy due to high workloads and inflexible schedules. Stressors such as lack of reliable domestic support were highlighted as key contributors to burnout. While this research provided insights into burnout among educators, it did not quantify on the relationship between academic burnout and family functioning among university students.

METHODOLOGY

This study adopted a correlational research design to examine the relationship between academic burnout and family functioning among University students in Lang'ata Constituency, Nairobi County. The design was suitable for the study because it aimed at establishing relationship between variables. The study was conducted with one of the public Universities within Langata Constituency. The target population of the study was made up of 1007 fourth-year undergraduate students who were nearing the completion of their degree programs. These students were selected because they have had prolonged exposure to family interactions throughout their university life, allowing family functioning patterns to be clearly established. At this stage, students experience increased family expectations related to graduation and career decisions, while also possessing greater maturity and reflective ability to accurately evaluate family communication, support, and problem-solving dynamics.

The Yamane formula (1967) was applied to determine the sample size of 244 participants. A stratified random sampling technique, a probability sampling method, was applied by dividing the student population into distinct strata based on characteristics such as year of study or faculty. From each stratum, participants were then randomly selected to ensure fair representation across all academic disciplines. The researcher identified and listed all undergraduate students at the Co-operative University. Selection was made from official class lists of fourth-year students from each program, which served as the sampling frame for each stratum. The sample size from each program was determined proportionally based on the number of students in that undergraduate program relative to the total fourth-year student population. To ensure fair representation, proportionate sampling was applied, with 41% of participants selected from the School of Business and Economics, 30% from the School of Computing and Mathematics, and 29% from the Bachelor of Co-operatives program. Within each undergraduate program, students were selected using simple random sampling, such as a random number generator or lottery method. This approach ensured that every undergraduate program was adequately represented, enhancing the accuracy and comparability of the study findings. Those who consented were selected using probability sampling to ensure each eligible student had an equal chance of participation.

Academic burnout was measured using the Oldenburg Burnout Inventory – Student Version (OLBI-S). This instrument was adapted from the original Oldenburg Burnout Inventory developed by Demerouti et al. (2003) to assess burnout in occupational settings. It was later modified for use in academic contexts by Reis, Xanthopoulou, and Tsaousis (2015). The OLBI-S measured two key dimensions of academic burnout: exhaustion, which referred to feeling drained by academic demands, and disengagement, which involved detachment from studies and reduced interest in learning. Academic efficacy was also considered within the context of disengagement. Unlike some other tools, the OLBI-S used both positively and negatively worded items, reducing response bias and improving measurement accuracy (Halbesleben & Demerouti, 2005). It was particularly well suited for student academic burnout studies because it captured burnout as a multidimensional, process-oriented phenomenon rather than a single symptom, was validated across different cultural and educational contexts, and was concise enough for use in large surveys without causing respondent fatigue.

Scoring of the Oldenburg Burnout Inventory–Student Version (OLBI-S) was done using a 4-point Likert scale, where responses typically ranged from 1 = strongly agree to 4 = strongly disagree for negatively worded items, and were reverse-scored for positively worded items (Demerouti et al., 2001; Reis et al., 2015). The tool had two subscales: Exhaustion and Disengagement. After adjusting scores for reverse-coded items, responses for each subscale were summed separately to obtain total scores, which were then averaged by the number of items in the subscale. Higher mean scores indicated greater exhaustion or disengagement. Interpretation was based on these mean values—students with higher scores on both dimensions were considered to have higher levels of academic burnout, while lower scores suggested better engagement and energy in academic work (Campos et al., 2012). Previous studies using the OLBI-S often classified burnout levels based on the sample's mean or percentile distribution rather than fixed universal thresholds; however, some used mean scores above 2.25–2.50 on a 4-point scale to indicate high burnout (Reis et al., 2015; Campos et al., 2022). These cutoffs were context-specific and were interpreted relative to the population under study. This study adapted the cutoffs from previous studies.

Family functioning in this study was assessed using two standardized tools: the Family APGAR Scale and the Family Assessment Device (FAD). The Family APGAR provided a quick evaluation of perceived family support through five core items, including adaptability, partnership, growth, affection, and resolve. The FAD offered a more comprehensive assessment of seven dimensions, namely problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, and general functioning. The Family APGAR Scale, developed by Gabriel Smilkstein (1978), was a brief 5-item tool assessing satisfaction with family functioning. Higher scores indicated better perceived family support, making it valuable in both clinical and research settings (Smilkstein, 1978; Smilkstein, Ashworth, & Montano, 1982).

The Family APGAR Scale consisted of five items rated on a 3-point Likert scale to assess satisfaction with family functioning with a total score ranging from 0 to 10. A score of 7 to 10 indicates high family functioning,

4 to 6 suggests moderate dysfunction, and 0 to 3 reflects severe dysfunction. This simple scoring method allows for quick assessment of perceived family support and cohesion. (Smilkstein, 1978). The Family APGAR is valued for its brevity and applicability across diverse cultural settings, making it ideal for university student populations. While the Family APGAR Scale provided a quick screening of family functioning through five core dimensions, it did not capture the full complexity of family interactions. The Family Assessment Device (FAD) complemented it by offering a more comprehensive evaluation across multiple domains such as communication, roles, and problem-solving.

The Family Assessment Device (FAD), developed by Epstein, Baldwin, and Bishop (1983), was a widely used tool for assessing family functioning based on the McMaster Model of Family Functioning. It consisted of multiple subscales that evaluated domains such as problem-solving, communication, roles, affective responsiveness, affective involvement, and behavior control. Responses were rated on a 4-point Likert scale, with higher scores indicating poorer family functioning. Scores were averaged for each subscale, and a mean score above the established cut-off suggested dysfunction in that domain. The FAD demonstrated good reliability and validity, making it suitable for both clinical and research settings (Epstein et al., 1983). The items for FAD were reverse-coded and the scores were combined together with scores of APGAR for final analysis. After combination of the scores for APGAR and FAD, the family functioning was categorized into three levels namely low (15-29), moderate (30-44) and high (45-60). Data was analyzed using descriptive statistics and Pearson correlation analysis with SPSS version 25 to examine the relationship between academic burnout and family functioning among university students.

RESULTS AND DISCUSSION

The study aimed to determine the relationship between academic burnout and family functioning among university students in Langata Constituency, Nairobi County, Kenya. The study began by presenting the demographic of the participants followed by findings of the objective of the study.

Demographic Details of the Participants

The study utilized descriptive statistics to analyze the demographic variables generated from the demographic profiles of the participants. The analysis was carried out on the four variables: age, gender, academic program and marital status. The demographic characteristics were summarized and presented accordingly in Table 1

Table 1: Demographic Details of the Participants

Demographic Variable	Categories	Frequency	Percentage
Age	18-21	196	80.3
	22-25	48	19.7
Gender	Male	148	60.7
	female	96	39.3
Academic Program	SBE	73	29.9
	SCM	161	66.0
	BCS	10	4.1
Marital status	Single	236	96.7
	Married	5	2.0
	Separated	1	.4
	others	2	.8
Totals		244	100%

Results in table 1 shows that a larger proportion of participants were between 18 and 21 years, representing 80% (n = 196.) This shows that most of the participants were in the late stages of adolescence. A larger proportion of the participants were male, 148 (60.7%), compared to their female counterparts, 96 (39.3%). This shows that courses that are related to business, economics, computer and mathematics are pursued by male students compared to female students. The results showed that the higher proportion of participants were in academic program under the school of computing and mathematics 161 (66%) followed by participants who were in academic program under the school of business and economy 73 (29.9%). This shows that courses that are related to pure sciences are dominated by males in relation to gender. In terms of marital status, majority of participants were single 236 (96%). The results on marital status are consistent with the participants' age distribution. The fact that most participants were in the late adolescent stage explains why the majority of them were single.

Relationship between Academic Burnout and Family Functioning among University Students in Langata Constituency, Nairobi County, Kenya

The objective was to establish the relationship between academic burnout and family functioning among university students. A Pearson correlational analysis was run to establish the relationship between the academic burnout and family functioning and results are presented in table 2.

Table 2: Relationship between academic burnout and family functioning

Variables		Academic Burnout	Family Functioning
Academic Burnout	Pearson Correlation	1	.299**
	Sig.		.001
	N	244	244
Family Functioning	Pearson Correlation	.299**	1
	Sig.	.001	
	N	244	244

** Correlation is a significant at the 0.001 level (2 tailed)

Results from table 2 showed there was a positive relationship between academic burnout and family functioning university students in Langata Constituency, Nairobi County, Kenya ($r=.229$). This indicates there is a correlation between academic burnout and family functioning which may mean as academic burnout increases also family functioning increases. This means there is a possibility when an individual is coming from a functional family can as well experience academic burnout. The positive association may suggest that students who perceive strong family functioning may also experience increased academic expectations or internal pressure to perform; however, this interpretation requires further investigation through qualitative or longitudinal research.

The students who are coming from functioning families are may be focused and hardworking in their studies which in turn may lead to academic burnout. On the other hand, students who are coming from dysfunctional families are likely not to give much effort to their academic studies and therefore, end up experiences less academic burnout.

Pearson correlation findings showed there was a relationship between academic burnout and family functioning among university students in Langata Constituency, Nairobi County, Kenya ($r=.229$). This indicates there is a correlation between academic burnout and family functioning which mean as academic burnout increases also family functioning increases. This means there could be a possibility when an individual is coming from a functional family can as well experience academic burnout. On the other hand, students who are coming from dysfunctional families are likely not to give much effort to their academic studies and therefore, end up experiences less academic burnout.

The current findings are in disagreement with findings of Amani et al. (2018) who conducted a study in Iran, to examine the relationship between family cohesion and academic burnout among 386 university students. The findings revealed a significant negative correlation between family cohesion and academic burnout, with a correlation coefficient of $r = -0.27$ and $p < 0.001$, indicating that higher levels of family cohesion were associated with lower levels of academic burnout among the participants. Furthermore, the findings was contradicted by the findings of Yang et al. (2025) who conducted a study in China to examine the relationship between family functioning, academic self-efficacy, and academic burnout among 2, 847 nursing students enrolled in a three-year vocational training program in Henan Province, Eastern China. The findings revealed that mean (SD) score of academic burnout among nursing students was 53.98 (10.87). Family functioning ($r = -0.39$, $p < 0.001$) and academic self-efficacy ($r = -0.64$, $p < 0.001$) were negatively correlated with academic burnout.

Family functioning ($r = 0.46$, $p < 0.001$) was positively correlated with academic self-efficacy. At the same time, academic self-efficacy plays a partial mediating role (indirect effect = -1.009 ; 95% CI, -1.114 to -0.910) in the influence of family functioning on academic burnout. family functioning was significantly and negatively correlated with academic burnout ($\beta = -0.21$, $p < 0.001$), and academic self-efficacy partially mediated this relationship, indicating that better family support was associated with lower levels of burnout through increased self-efficacy.

In addition, the findings of the current study were not supported by findings of Khoza et al. (2022) who conducted a study in South Africa and found students from families with low functioning were 35% more likely to suffer from burnout than students from homes with excellent family cohesiveness. This dynamic is also influenced by cultural and economic considerations, as students in environments with little resources can feel more pressure from their families to make financial contributions, which would exacerbate stress and burnout (Moussa et al. 2021). The unexpected positive correlation may be as a result of scoring direction, cultural expectations, pressure from the supportive families, programme-related workload, gender composition of the sample or the use of combined family functioning tools.

CONCLUSION

The study found a statistically significant association between academic burnout and family functioning among fourth-year university students, but that the direction and meaning of the association require careful interpretation because of the scoring structure of the instruments and the correlational design. The study recommends that university counselling departments assess both academic stress and family-related pressures during student counselling. Universities could introduce family sensitive counselling approaches, stress management workshops, peer support groups, mentorship systems and referral pathways for students experiencing serious emotional distress. Parents and guardians should also be encouraged to provide support without creating excessive academic pressure.

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