

Psychological Influence of Achievement Motivation and Family Environment on Stress Coping Skills of Nursing Students

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Abstract

Coping techniques cover a broad spectrum of responses and adjustments made in the face of stress, and they can play a significant role in shaping a child's or adolescent's future. In the current study, we looked at how nursing students' ability to cope with stress was influenced by their motivation for success and their familial environment. The cross sectional survey approach was used to collect data for the current study, which was descriptive in nature. The participants consisted of 209 first and third-year nursing students from government and private colleges in Kozhikode, Kerala, India. Stratified random sampling technique was used to select participants for this current study. In this present study, three standardized instrument were used to measure coping skills inventory by Shrink and Jerabek (1996), family environment scale by Chadha (2000), and Achievement motivation scale by Beena Shah (1986). Data analysis done by using mean, standard deviation, correlation structural equation modeling, Research findings reveals all the dimensions of coping skills were positively correlated with all the dimensions of achievement motivation. A positive relationship between the family environment and coping skills is reasonable. Students differed significantly in their coping skills based on their year of study, nature of college, area of living, and parents' education. Final-year students had a higher level of coping skills compared to first-year students. This might be because final-year students have attained a certain level of independence and have perfected their coping mechanisms to deal with stressful situations, as opposed to first-year students who are still adjusting to college life and yet to face challenges. All the magnitudes of the family environment had a significant positive influence on coping skills. Students who express their thoughts to their parents and maintain healthy relationships may have better-coping skills. Furthermore, dimensions of achievement motivation such as academic success, vocational achievement, and social achievement had a significant positive influence on coping. The results of the structural equation modelling demonstrate that academic success and achievement motivation play a larger influence in predicting coping abilities than does the cohesiveness of the family environment.

Keywords: *Coping skills, family environment, Achievement motivation, nursing students and correlation.*

Introduction

Coping is a behavioural and psychological response that seeks to mitigate the physical, emotional, and psychological strain associated with stressful life occurrences and daily challenges. According to this definition, coping strategies refer to the responses that are efficacious in mitigating the psychological distress (Snyder, 1999). Coping is the continuing behavioural, psychological, cognitive, and emotional process of stress management. The adverse impacts on people's lives might be biological, psychological, and social. Numerous components both intrinsic (such as personality traits) and extrinsic (such as environmental conditions) are necessary for effective coping (e.g., a supportive social network for the individual). The goal of coping strategies can be to avoid, reduce or eliminate or they can make the person feel better about themselves or the situation in general since stress exposure cannot be prevented effective coping skills are essential for preserving wellbeing (Blum, & silver, 2012). The various subtypes of coping strategies include problem-solving,

information seeking, cognitive restructuring, emotional expression or ventilation, distraction, distancing, avoidance, wishful thinking, acceptance, seeking social support, and denial (Dubow & Rubinlicht, 2011). Shah et al (2020) this investigation analysed the influence of stress and coping mechanisms on the drive for academic success among college-level learners. The findings of the study indicate a noteworthy association between the stress experienced by students and their motivation to achieve. Additionally, the research highlights a positive correlation between coping strategies and achievement motivation.

Achievement motivation

Achievement motivation refers to processes that result in behaviour that tries to meet a specific standard or goal. The criterion can be any formal or informal aim or objectives established by a person or by others in any professional or recreational arena (such as school work, music gardening, social relationships, and moral behaviour). This served as the benchmark for assessing success and failure. Achievement motivation has been a key area of study in psychology since meeting standards is a fundamental human task (Kaplan, 2008). The most influential motivational theories for performance are from the middle of the 20th century. Among these thinkers, David Mc Clelland, John Atkinson, and their associates received the most attention from these researchers; achieving success was motivated by a dispositional drive to do well following predetermined standards of perfection. The researchers identified a motivation known as the "need for achievement," which is believed to originate in early childhood and is influenced by parental child-rearing practises. Specifically, parents who encourage and reward their children's independence, either through tangible means or through emotional support, are thought to foster the development of this motive.

Family Environment

The family is a significant social entity that requires individuals who share close and frequent interpersonal interactions, along with shared expectations regarding group member behaviour, to have enduring and extensive influence on one another. These family members of a primary group have a tremendous amount of power over that group and one another. The second component of the family definition pertains to the notion of obligation, which encompasses shared commitment and responsibility towards other members within the family system. The 3rd aspect of the definition encompasses the notion of shared dwellings where individuals who are related to each other reside together to a certain degree (astrow & Ashman, 2020). Studies suggest that poor home environments, such as those marked by high levels of conflict or low levels of emotional support are linked to stress reactions that are out of control in children and adolescents. In contrast, children and teenagers in homes with increased levels of emotional support or low levels of conflict seem to be protected from developing stress regulatory problems (Rachel, Thompson, Goldberg, 2011). There are hardly any studies exploring achievement motivation and family environment and stress coping skills among nursing students. Given these findings, the present study explores the correlation between achievement motivation and family environment on stress coping skills among nursing students. Studies in nursing students have found that coping skills and achievement motivation are the best predictors of overall coping skills.

Methods

Sample

This research used a quantitative method, correlation study. Participants were selected from nursing colleges in the government and private sectors in Kozhikode, Kerala state, India. Sample from the population was selected by using stratified random sampling technique. The total sample included 209 nursing students who participated in the survey; all first-year and third-year students are invited to participate in the survey. The needs of the study were fully introduced and consent was obtained before data collection.

TOOLS

Sociodemographic data sheet

A sociodemographic data sheet was developed for the research to collect numerous sociodemographic information such as year of passing, nature of college, area of living, community, parent's education, and family income.

Coping skills inventory

The coping skills inventory by Shrink and Jerabel (1996) was used in the present study. The inventory comprises a total of 45 statements that are categorised into 5 response options, namely almost, rarely, sometimes, quite often, and most of the time. The inventory comprises 45 distinct items that are categorised into seven distinct dimensions, namely responsiveness to stress, resourcefulness, ability to relax, self-reliance, proactive attitude, adaptability, flexibility, and ability to assess the situation. The inventory in question exhibited a split-half reliability coefficient of 0.82 and a test-retest reliability coefficient of 0.74. These values reveal that this inventory was highly reliable.

Family Environment

The study utilised Chadha's (2001) family environment scale. The inventory comprises of 69 statements that are categorised into three subscales, namely connection dimension, growing personally dimension, and system maintenance dimension. The dimension of relationship encompasses four distinct subscales, namely cohesion, expressiveness, conflict, acceptance, and caring. The personal growth measurement comprises two subscales, namely independence and active-recreational orientation. The dimension of system maintenance encompasses the aspects of organisation and control. The Family Environment Scale exhibits a split-half reliability coefficient of 0.873 and a test-retest reliability coefficient of 0.819. The tool's validity coefficient is 0.826. The obtained values indicate that Chadha's family environment scale exhibits a high degree of reliability and validity.

Achievement Motivation

The achievement motivation scale Beena Shah (1986) was used in this study. This test was a self-report questionnaire consisting of 40 items that were split to measure four achievement dimensions viz, academic success, vocational achievement, social achievement, and skill achievement. This tool possesses both split-half and test-retest reliability. The split-half reliability of this was 0.796 and the test-retest coefficient is 0.714. These values suggest that the test was highly reliable.

RESULTS AND DISCUSSION

From table 1, The research observed a positive correlation between various coping skill dimensions, including reactivity to stress, resourcefulness, proactive attitude, and ability to assess situations, and all dimensions of "achievement motivation", namely academic success, vocational achievement, social achievement, and skill achievement. The quality of resourcefulness is beneficial in optimising the utilisation of environmental resources (Ahmad, 2013). A proactive stance is characterised by a forward-looking approach that enables an individual to cultivate an enhanced outlook regarding the unpredictability of forthcoming events(Ahmad, 2013). A proactive stance is characterised by a forward-looking approach that enables an individual to cultivate an enhanced outlook regarding the unpredictability of forthcoming events(Goff, 2011) which would lead to academic success, and vocational, social, and skill achievements. A relevant study was done by Huang and Guo (2009) who reported that students with higher resourcefulness and proactive attitude were more likely to develop planning and problem-solving skills to achieve in their academics. It was also noticed from table 1 that ability to relax dimension of coping skills was positively correlated with social achievement of achievement motivation. Self-reliance was positively correlated with academic success and social achievement. Adaptability & and flexibility of coping skills had a significant positive correlation with academic success, vocational success, and social achievement.

Table 1: Correlation between achievement motivation and coping skills

Dimensions of coping skills/ Dimensions of achievement motivation	Reactivity to stress	Resourcefulness	Ability to relax	Self-reliance	Proactive attitude	Adaptability and flexibility	Ability to assess the situation
Academic Success	0.371**	0.344**	0.133	0.155*	0.387**	0.401**	0.326**
Vocational Achievement	0.215**	0.189**	0.102	-0.090	0.204**	0.236**	0.185**
Social Achievement	0.320**	0.325**	0.223**	0.179**	0.320**	0.331**	0.252**
Skill Achievement	0.163*	0.237**	0.007	0.044	0.174*	0.098	0.167*
Total	0.144*	0.143*	-0.084	-0.122	0.143*	0.136*	0.136*

Note: *p < 0.05; **p < 0.01.

From table 2, it is noted that reactivity to the stress of coping skills had a significant positive relationship with various dimensions of the family atmosphere such as cohesion, expressiveness, conflict, acceptance & caring, independence, active recreational orientation, organization, and control. The resourcefulness of coping skills had a significant positive relationship with cohesion, expressiveness, conflict, and acceptance & caring. Self-reliance was positively correlated with cohesion, expressiveness, active recreational orientation, and organization. Adaptability & flexibility was positively correlated with expressiveness and conflict. A relatively high degree of cohesion, expressiveness, and organization in the family may be associated with a variety of practices in the home that directly enhance the coping skills of the individuals, such as having a proactive attitude towards the future and the ability to assess the situation in a good manner (DuBois, 1994). Organization in the family also may help students to be self-reliant. Hence, the positive relationship between family environment and coping skills is reasonable.

Table 2: Correlation between family environment and coping skills

Dimensions of coping skills/ Dimensions of family environment	Reactivity to stress	Resourcefulness	Ability to relax	Self-reliance	Proactive attitude	Adaptability and flexibility	Ability to assess the situation
Cohesion	0.270**	0.198**	0.023	0.171*	0.163*	-0.015	-0.032
Expressiveness	0.304**	0.211**	0.108	0.165*	0.207**	0.148*	0.058
Conflict	0.269**	0.193**	0.149*	0.083	0.129	0.141*	0.076
Acceptance and Caring	0.271**	0.211**	0.081	0.071	0.200**	0.074	0.065
Independence	0.241**	0.088	-0.002	0.064	0.046	0.015	0.039
Active Recreational Orientation	0.189**	0.117	0.008	0.155*	0.092	0.047	-0.012
Organization	0.310**	0.136	0.119	0.162*	0.143*	0.092	0.030
Control	0.214**	0.077	0.069	0.056	0.176*	0.036	0.053

Note: *p < 0.05; **p < 0.01.

From table 3, it is clear that students differed significantly in their coping skills based on their year of study, nature of college, area of living, and parents' education. Final-year students had a higher level of coping skills equated to first-year students. This might be because final-year students have attained a certain level of independence and have honed their coping mechanisms to deal with stressful situations, as opposed to first-year students who are still adjusting to college life and yet to face challenges. Students from private colleges had shown a higher ability to cope with stress compared to students from government colleges. Because private colleges prepare their students for professional admission exams in an extremely competitive environment, it was anticipated that these students would have better stress coping mechanisms than those from government colleges (Augustine et al., 2011). Students differed meaningfully in their coping skills based on their area of living whereas students from urban had advanced level of coping skills. Students who reside in urban may have better infrastructure and enhanced lab facilities in their colleges. They may also have greater exposure to the real world which would develop their coping skills compared to students in rural areas. The educational backgrounds of the student's parents also made a significant difference. When compared to students whose parents had only completed high school education, those whose parents had graduated showed better coping skills. According to (Mohamed Firose, 2020), parents who have received a formal education tend to exhibit a heightened level of interest in their children's academic, career-oriented, and leisure pursuits. Parents assist their offspring by offering appropriate prospects, exposure, and prompt evaluation. According to (Mohamed Firose, 2020), parents who exhibit greater interest and positive attitudes towards their children's development may facilitate the enhancement of their children's coping abilities.

Table 3: Difference in coping skills based on demographic categories

Variables	Category	N=209	M	SD	t-value
Year of Study	First-year	74	111.88	17.39	3.15*
	Final year	134	120.36	19.27	
Nature of College	Private	103	126.65	14.40	7.99*
	Government	103	108.25	18.62	
Area of living	Rural	89	107.19	14.52	7.16*
	Urban	120	124.83	18.51	
Community	OC/BC/MBC	167	117.91	18.92	0.88 ^{NS}
	SC/ST	42	114.95	19.48	
Parents education	Upto 12 th	115	107.06	12.45	10.78*
	Graduated	93	130.04	18.18	
Family income	Below 25000	92	117.10	18.96	0.19 ^{NS}
	Above 25000	116	117.62	19.18	

Note: * $p < 0.05$; NS=Non-Significant N=Number of participants; M=Mean; SD=Standard Deviation

Table 4 presents the influence of family environment and achievement motivation on coping skills. Expressiveness and organization dimensions of the family environment had a significant positive influence on coping skills. Students who express their thoughts to their parents and maintain healthy relationships may have better-coping skills. In addition, the various dimensions of achievement motivation, namely “academic success”, “vocational achievement”, and “social achievement”, were found to have a noteworthy positive impact on an individual's coping skills. Students who equip better with their academics tend to have better-coping skills. Moreover, students' coping skills were significantly predicted by their vocational, social, and skill achievements. Students who find success in their careers in the areas of occupation and social life will have better-coping skills. Therefore, it makes sense that academic success, vocational achievement, social achievement, and skill achievement have a favorable impact on coping skills. It is also noticed from the table that 54% of coping skills were predicted by expressiveness, organization, academic success, vocational achievement, and social achievement.

Table 4: Influence of family environment and achievement motivation on coping skills

Independent Variables	Un-standardized coefficient		Beta	't' value (Sig. at 0.05 level)	Model Summary
	B	Std. Error			
Expressiveness	0.599	0.235	0.180	2.544	F=18.176 R=0.740 R ² =0.548
Organization	1.204	0.573	0.128	2.101	
Academic Success	1.515	0.288	0.320	5.263	
Vocational Success	2.494	0.438	0.391	5.692	
Social Achievement	1.858	0.313	0.362	5.931	
Skill Achievement	2.277	0.396	0.377	5.756	

Table 5: Model fit summary and structural models comparison (N=209)

The study employed Structural Equation Modelling (SEM) to assess the adequacy of the model fit for coping skills as the dependent variable, while integrating the chosen predictor variables. The model incorporated family environment and achievement motivation as exogenous variables. To make the model more expressive and to improve the overall fit of the model, we trimmed the model by removing factors with non-significant and feeble coefficients from the model (Hooper et al., 2008). As such, we removed one factor from the family environment (conflict) and one from achievement motivation (skill achievement).

Indices	Obtained Values	Suggested values	References
Chi-Square	1.32	<5	Kline, 2005
GFI	0.92	>0.90	Hair et al.2006
AGFI	0.90	>0.90	Daire et al.2008
CFI	0.97	>0.90	Hu and Bentler.1999
SRMR	0.06	<0.08	Hu and Bentler.1999
RMSEA	0.03	<0.08	Hair et al.2006

Structural Equation Modeling Diagram

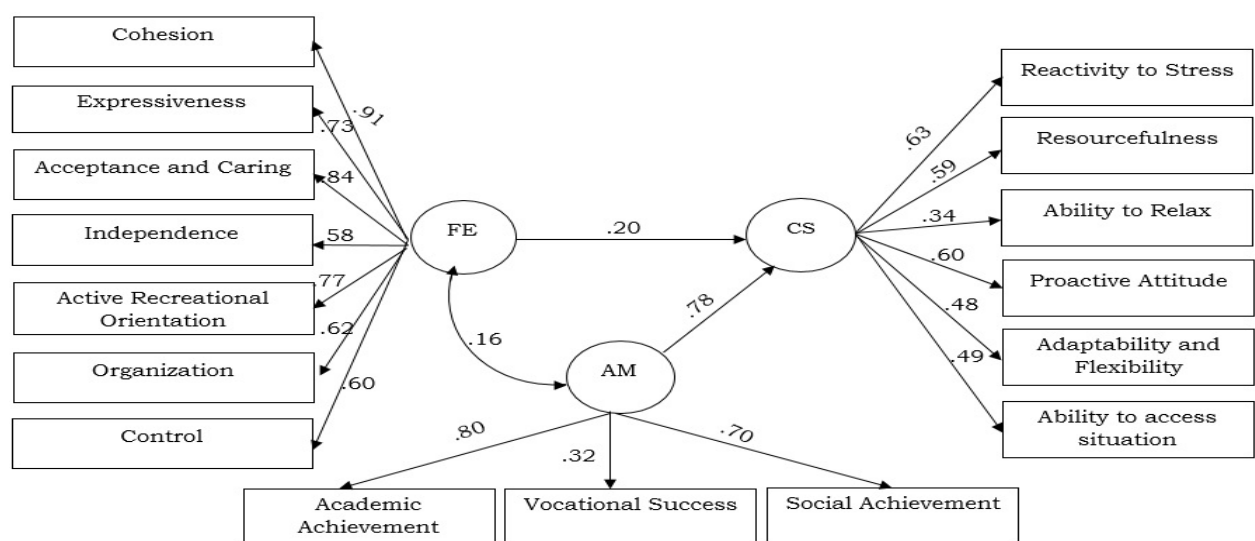


Figure 1: Summary of standardized path coefficient for the hypothesized code with full sample (209).

The path diagram has been utilised to illustrate the conventional solution of the Structural Equation Model (SEM). The competence of the model fit was evaluated based on the analysis of fit indicators. The results indicate that all indicators yielded satisfactory values, with a Comparative Fit Index (CFI) of 0.97, a Goodness of Fit Index (GFI) of 0.92, an “Adjusted Goodness of Fit Index (AGFI)” of 0.90, a “Root Mean Square Error of Approximation (RMSEA)” of 0.03, and a Standardised Root Mean Square Residual (SRMR) of 0.06. The present study presents a model that elucidates the outcomes of correlation and regression analyses, which demonstrate a significant structural and causal association among the variables. The model demonstrates that the relationship between the cohesiveness of the familial environment and academic achievement, as well as achievement motivation, is more influential in the prediction of coping skills.

Conclusion

Finally, a study has shown that family environment and academic achievement motivation play a significant role in determining coping skills among nursing students. Based on the aforementioned results, the researcher has suggested that nursing students who exhibit maladaptive stress coping mechanisms should receive training and encouragement to employ efficacious coping strategies. Academic institutions have the potential to arrange stress management programmes. The provision of guidance and counselling services is essential in addressing the academic needs of students and facilitating their effective attainment of academic goals.

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