

Relationship between Resilience, Social Interaction Anxiety and Health Anxiety among Resident and Non-Resident female College Students

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ABSTRACT

The present study investigated the differences and the relationship between resilience, health anxiety, and social interaction anxiety among 330 resident and non-resident female college students. Convenient sampling was used. The participants completed the survey, which included the Connor-Davidson Resilience Scale, Health Anxiety Inventory, and Social Interaction Anxiety Scale. The statistical tools used were Independent sample t-tests and Pearson's Product Moment Correlation. The results of the study indicated that there was no significant difference in resilience, social interaction anxiety, and health anxiety between resident and non-resident female college students and a significant positive relationship between health anxiety and social interaction anxiety among non-residents and residents. Furthermore, there was a significant negative correlation between resilience and health anxiety among resident students.

Introduction

Emerging adulthood is an important developmental stage of human life. Emerging adulthood is the period between the ages of 18 and 25; the transition to adulthood occurs in this period of time (Arnett, 2000). During emerging adulthood, childhood and adolescent traumatic events and stress result in mental dysfunctional and developmental deficits (Vugt et al., 2014). According to Masten et al. (2004), there is a chance for a positive transition to adulthood for at-risk adolescents by monopolising developmental tasks during the stage of emerging adulthood, where social and cognitive abilities are some of the supportive factors that might advance and determine resilience. In the presence of risk, the individual capacity for maintaining positive development is called resilience (Ahern et al., 2006; Connor and Davidson, 2003)

Most of the emerging adults are college students who can be categorized into two groups: residents and non-residents. Residents are the students who stay away from home in hostels with other students from different backgrounds (Khozaei et al., 2010). Non-residents are the students who stay at home with their families during their course of education. Non-resident students are more likely to receive support, love, and understanding from parents and siblings in their immediate surroundings.

Resident students, on the other hand, undergo many challenges staying away from their families. Some of them are isolation, interaction anxiety, coping with separation from family, financial constraints, peer comparison, social pressure (from other residents), and lack of social support. However, social support, resilience, and self-efficacy help the students to cope with the exposed situations. (Farzier et al., 2019).

Definition

Resilience: "It is defined as the personal quality that enables one to thrive in the face of adversity" (Connor and Davidson, 2003).

Health Anxiety: According to Salkovskis and Warwick (1986), "health anxiety involves an ongoing tendency to interpret physical symptoms, physical variations ("noise"), and health-related information in a catastrophic way."

Social Interaction Anxiety: Social interaction anxiety can be defined as "marked fear or anxiety about one or more social situations during which the individual is exposed to possible scrutiny by others" (Nayan and Sreekumar, 2021).

Theoretical background

RESILIENCE

Multi-System Model of Resilience (MSMR):

The Multi-System Model of Resilience intended the conception of resilience as a growing capacity that can be sourced from multiple dimensions (Liu et al., 2017). MSMR consists of three systems which act as a source of resilience. Core resilience is the innermost system which is composed of health and health related sources which are traits like in nature and it is sturdy throughout life. The outermost system is called the external resilience, which comprises socio-ecological sources of resilience. In between both the systems there is a system which is termed as "Coping and pursuit". This system indicates the individual's orientation and response towards life and external environment and circumstances.

HEALTH ANXIETY

In the interpersonal model of Health Anxiety (IMHA), the anxiety towards health is aggravated among anxious individuals through a maladaptive interpersonal cycle of health-related reassurance-seeking, alienation, and worry (MacSwain et al., 2009). The IMHA puts forward that attachment styles are triggered in situations of threat, initiating the need to seek support from others to maintain interpersonal closeness and manage responses to stress (Sadava et al., 2009). Health-anxious individuals communicate their preoccupation with attachment needs and health fears to others through reassurance-seeking about somatic complaints, increasing the chances that the insecurities in their attachment insecurities and worry about their health are managed interpersonally (Stuart & Noyes, 2005). which results in interpersonal reassurance often leads others to perceive them as fragile, needy, and difficult to reassure. In turn, perceptions of rejection by anxiously attached individuals may exacerbate health-related worry by triggering distress and unpleasantness associated with somatic sensations (Macdonald & Kingsbury, 2006).

MODEL OF SOCIAL ANXIETY

The appraisal and the coping system work as a part of the overall self-regulation system (Carver, 1979). They form a discrepancy-reducing loop at a general level. The main function of this is to minimize any sensed difference between two given values. A given state of affairs is thought of and compared with a standard to get to know whether there is any discrepancy between them. This is the function of the appraisal system. When there is no discrepancy, no action is taken. When there is a discrepancy, action is taken to reduce it; this is the function of the coping system. This process can be interrupted by various conditions. When it is interrupted, an assessment is made to check out how likely discrepancy reduction can be brought about, based on the person's resources and the present situation. When the outcome is favorable, discrepancy

reduction continues, but when it is unfavorable, the person won't take any future steps to reduce the discrepancy. In this theory, they argue that social anxiety focuses on the discrepancy between self-identity, standards, and low expectations that the desired self-identity will be constructed. The greater the discrepancy, the greater the social anxiety level.

Review of Literature

Gloria et al., (2014) conducted a study on "Relationships among positive emotions, coping, resilience and mental health" on 200 post-doctoral scholars. The statistics used are correlation, regression and mediation analysis. The result was that there was a relationship between positive emotion and resilience. Positive emotion indirectly promotes adaptive coping strategy. stress was associated with depressive symptoms.

Kashiwazaki et al., (2020) conducted a study on "Relationships between radiation risk perception and health anxiety, and the contribution of mindfulness to alleviating psychological distress after the Fukushima accident." Ton 832 participants. The statistical tools that were used were structural equation model and correlation. The result found that mindfulness can reduce health anxiety and psychological distress.

Stuart et al., (2021) conducted a study on "Online social connection as a buffer of health anxiety and isolation during COVID-19." The study had a sample population of 473 Australian citizens. The statistics used to analyze the aim were correlation and regression. The result indicates that there is a significant positive relationship between isolation, health anxiety, and social interaction anxiety. The participants who have health anxiety tend to isolate themselves because of the fear that others might not take their health-related issues as a real concern.

Need for the study:

There are only limited studies when it comes to identifying the relationship between resilience, health anxiety, and social interaction anxiety among resident students in India, and the existing studies focused on medical and nursing students as their sample. Hence, this study aims to identify the difference and the relationship between resilience, health anxiety, and social anxiety among female resident college students.

Research problem:

This study aims to explore the differences and the correlation between resilience, health anxiety and social interaction anxiety among female college students.

Objectives of the study:

The study seeks to establish the differences and association between resilience, health anxiety and social interaction anxiety among female college students.

Research methodology:

College students are referred to as individuals belonging to the emerging adulthood stage, where there is a transition from adolescence to adulthood. Participants completed the Connor Davidson resilience scale 25, Health Anxiety Inventory 18 and Social Interaction Anxiety Scale 6. Convenience sampling was utilized to select the sample.

Research Design:

A survey methodology was employed to ascertain the presence of a difference and correlation between resilience, health anxiety, and social interaction anxiety among female college students.

Sample Selection:

The study involved data collection from Women's Christian College. The researcher had obtained permission to collect data from the principal of the institution. The college was selected based on the availability of resources and the convenience of the researcher.

Data Collection:

Questionnaires: The study utilized established tools, including the Connor Davidson resilience scale 25, Health Anxiety Inventory 18, and Social Interaction Anxiety Scale 6. These instruments obtained the extent of resilience, health anxiety, and social interaction anxiety and the relationship between them.

Data Analysis:

Quantitative data: Statistical correlation, that is, t-tests and correlational analysis, has been used to analyze the quantitative data obtained from the questionnaires. This analysis has provided numerical data on the association of two specified variables. Microsoft Excel and Statistical Package for Social Sciences (version 24.0) were used to calculate the data.

Research hypothesis:

H1: There is no significant difference in resilience among resident students and non-resident college students.

H2: There is no significant difference in interaction anxiety among resident students and non-resident college students.

H3: There is no significant difference in health anxiety among resident students and non-resident college students.

H4: There is no relationship between resilience, health anxiety, and interaction anxiety among resident college students.

H5: There is no relationship between resilience, health anxiety, and interaction anxiety among non-resident college students.

Research gap:

There is a dearth of studies focused among residents in the Indian context of resilience, health anxiety, and social interaction anxiety. Through this research the researcher aims to fill the knowledge gap.

Results

TABLE 1

Comparison of Means in the Levels of Resilience between Residents and Non-Residents female college students

	Resident		Non-resident		t	p	Cohen's d
	Mean	SD	Mean	SD			
RESILIENCE	67.02	14.49	66.02	14.75	.533	0.05	0.06

N= 330

Table 1 shows the results of the independent sample t-test. It was done to assess the difference between resident and nonresident college students, i.e., undergraduate students). The sample size of the study was 330 resident and non-resident college students. It was found that there was no significant difference

between the levels of Resilience among residents and non-resident college students (t = .533, p<0.05). Therefore the null hypothesis **H1**, “**There is no significant difference in Resilience between residents and non-resident college students**” failed to be rejected.

TABLE 2

Comparison of Means in the Levels of social interaction anxiety between Residents and Non-Residents female college students

	Resident		Non-resident		t	p	Cohen's d
	Mean	SD	Mean	SD			
SOCIAL INTERACTION ANXIETY	9.85	5.52	10.49	5.49	.295	0.05	0.115

N=330

Table 2 shows the results of the Independent sample t-test. It was done to assess the difference between Residents and Non- Resident college students i.e (undergraduate students). The sample size of the study was 330 resident and non-resident college students. It was found that there was no significant difference

between the levels of Social interaction anxiety among residents and non-resident college students ($t = .295, p < 0.05$). Therefore, the null hypothesis H2, **“There is no significant difference between Social interaction anxiety between residents and non-resident college students”** has failed to be rejected.

TABLE 3

Comparison of Means in the Levels of Health anxiety between Residents and Non-Residents female college students

	Resident		Non-resident		t	p	Cohen's d
	Mean	SD	Mean	SD			
HEALTH ANXIETY	22.17	5.55	22.85	6.00	.288	0.05	0.117

N= 330

Table 3 shows the results of the Independent sample t-test. It was done to assess the difference between Residents and Non- Resident college students i.e (undergraduate students). The sample size of the study was 330 resident and non-resident college students. It was found that there was no significant difference

between the levels of Health anxiety among residents and non-resident college students ($t = .288, p < 0.05$). Therefore the null hypothesis H3, **“There is no significant difference between Health interaction anxiety between residents and non-resident college students”** has failed to be rejected.

TABLE 4

Pearson product moment correlation analysis for Resilience, Social interaction anxiety and Health anxiety among Non-residents.

Variables (N=330)	Resilience	Social interaction anxiety	Health anxiety
Resilience	1	-.028	.004
Social interaction anxiety	-.028	1	.231**
Health anxiety	.004	.231**	1

**Correlation is significant at the 0.01 level (2-tailed)

Table 4 shows the results of Pearson's Product Moment Correlation analysis between Resilience, Social interaction anxiety, and health anxiety among Non-resident college students. The sample size of the study was 330 college students of whom 163 are Non-resident college students. Table 4 shows there is no significant relationship between resilience and social interaction anxiety ($r = -.028, p < 0.01$). There is no significant relationship between resilience and health

anxiety ($r = 0.04, p < 0.01$). However there is a significant positive relationship between Social interaction anxiety and health anxiety ($r = 0.231, p < 0.01$).

Therefore, the null hypothesis H4, **“There is no relationship between resilience, health anxiety and interaction anxiety among resident college students”** is partially rejected.

TABLE 5

Pearson product moment correlation analysis for Resilience, Social interaction anxiety and Health anxiety among Residents.

Variables (N=330)	Resilience	Social interaction anxiety	Health anxiety
Resilience	1	-.025	-.180*
Social interaction anxiety	-.025	1	.304**
Health anxiety	-.180*	.304**	1

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

Table 5 shows the results of Pearson's Product Moment Correlation analysis between Resilience, Social interaction anxiety, and health anxiety among Residents college students. The sample size of the study was 330 college students in which Residents are 167. Table 5 shows that there is no significant relationship between resilience and social interaction anxiety ($r = -.025$, $p < 0.01$). However, there is a Negative significant relationship between Resilience and health anxiety ($r = -.180$, $p < 0.01$). This table also clearly shows that there is a significant positive relationship between social interaction anxiety and health anxiety ($r = .304$, $p < 0.01$).

Therefore, the null hypothesis **H5**, “**There is no relationship between resilience, health anxiety, and interaction anxiety among non-resident college students**” is partially rejected.

Discussion:

Resilience In Resident and Non-Resident

Table 1 the results indicate that this is no significant difference in resilience between the resident and non-resident because most of the students might exercise regularly, which will activate the physical responses in the body and, in turn, increase the resilience of the person and reduce the negative emotions of the person (Anyan et al., 2016). The results of the present study are contradictory to the existing study by Karmakar et al. Both the resident and non-resident may be having a good family bond (Cardoso et al., 2012). Moreover, the characteristics of the participants in both the groups might have traits such as optimism, perseverance, and motivation which made them resilient.

Social Anxiety In Resident And Non-Resident

Table 2 indicates that there is no significant difference in the levels of social interaction anxiety among resident and non-resident college students. The reason of this result can be explained by the research by Baltaci et al., (2013) reveals lack of social support might be the reason for the residents to have high levels of social interaction anxiety. Analysis of the study by Bano et al., (2021) supports the findings of the present study: there is no difference in the social support between the resident and non-resident students. This result might have been because of the equal amount of social support received by both residents and non-residents.

Health anxiety in resident and non-resident

Table 3, the results indicate that there is no significant difference between the levels of health anxiety among residents and non-resident college students. The result obtained in this study is contradictory to the existing research by Jacob, A. M., & Kaushik, A. (2017) as the researchers concluded that the non-residents have high levels of Health status when compared to the residents. However, college students experience health anxiety because of Health-related information-seeking

behaviour through the Internet, which is one of the signs of having health anxiety (Son et al., 2019). Escoffery et al., (2005) indicates that the majority of college students have the habit of searching for health information online and that some of them are more involved into, which is one of the symptoms of having health anxiety. Research by Aktas and Basat (2022) indicates that Individuals who are physically active had lower anxiety levels and felt healthier.

Resilience, Social Interaction Anxiety, And Health Anxiety Among Non-Resident Students

Table 4, results of Pearson's Product Moment Correlation analysis between Resilience, Social interaction anxiety, and health anxiety among non-resident college students.

The results of the present study might be because of non-resident students might not be having a having an extended family or a good relationship with the families and friends or they might not have a good mental and physical state which could have resulted in non-resilient and in turn they might have a health anxiety. In addition to this research by Wang et al. (2023) indicates that better the psychological resilience among the college students the lesser the social anxiety. So, the non-resident students might lack the psychological resilience which could have resulted in the social interaction anxiety. Moreover, the non-residents might have higher emotional reactivity which could have increased the emotional tolerance which is related to social anxiety. So there might be a significant positive correlation for health anxiety and social interaction anxiety.

The research articles which support the correlation between the social interaction anxiety and health anxiety are Stuart et al., (2021) which indicates that there is a significant positive relationship between isolation, health anxiety and social interaction anxiety. The participants who have health anxiety tend to isolate themselves, due to fear assuming people might not take that as a real concern. This might be because of the negative evaluation, fear of positive evaluation, personality traits, self-efficacy and academic achievement (Jia et al., 2025).

Resilience, Social Interaction Anxiety, And Health Anxiety Among Resident Students

Table 5 represents the results of Pearson's Product Moment Correlation analysis between Resilience, Social interaction anxiety, and health anxiety among Resident college students. A Study by Midilli et al., (2024) found out that students who do not have an extended family, a poor relationship with their families and friends, whose mental and physical health is not in a good state and who are incapable of coping up with the problems in life and the students who live in dormitories are non-resilient, and in turn these factors provoke the students to experience higher levels of health anxiety,

which might be the possible reason for the significant relationship obtained from the results of the data. The result of the relationship between health anxiety and social interaction anxiety is consistent with the research that the participants who have health anxiety tend to isolate themselves because of the fear that others might not take that as a real concern (Stuart et al., 2021).

Conclusion:

The results of this study indicate that there is no difference in the levels of resilience, social interaction anxiety, and health anxiety between resident and non-resident female college students. However, there was a significant positive correlation between health anxiety and social interaction anxiety in non-residents and resident, which indicates that when the levels of health anxiety in both non-residents and residents increase, their level of social interaction anxiety also increases, and when the level of health anxiety decreases, their level of social interaction anxiety also decreases. Additionally, the results also indicated that there was a significant negative correlation between resilience and health anxiety in resident female college students. The results can be interpreted as if the residents are resilient, they have low health anxiety.

To understand this relationship further, qualitative studies can be carried out for an in-depth analysis of the factors that lead to health anxiety and social interaction anxiety. Considering the relationship, intervention studies can be done to decrease social interaction and health anxiety to help resident female college students and improve their overall well-being.

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