



Psychological Correlates of Well-Being among Medical Students: Learned Helplessness as a Mediator

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ARTICLE INFO

Article history:

Submitted 19.03.2026

Accepted 10.06.2026

Published 30.06.2026

Volume No. 13

Issue No. I

ISSN (Online) 2414-8512

ISSN (Print) 2311-293X

DOI:

Keywords: Attribution to Success and Failure, Learning Self-efficacy, Academic Motivation, Learned Helplessness, Well-being, Medical Students

ABSTRACT

Mental health of medical students is an area of major concern, because they have to safeguard the health of public after the completion of their medical studies. The aim of the current study was to examine predictive relationships of attribution to success and failure, learning self-efficacy, and academic motivation with learned helplessness and well-being among medical students. The sample comprised 300 medical students (Male students= 171, Female students= 129), within age range of 18 to 25 years ($M = 21.94$, $SD = 1.68$). Demographic sheet, Attribution to Success and Failure Questionnaire, General Self-Efficacy Scale, Learned Helplessness Scale, Academic Motivation Scale, and Warwick Edinburgh Mental Well-being Scale were used to collect data. SPSS version 23.00 was used to analyze the data. The results indicated significant correlations among study variables. Results of hierarchical regression analyses indicated that learning self-efficacy, internal attribution to failure, internal academic motivation and amotivation significantly predicted learned helplessness ($R^2 = .42$), and learning self-efficacy, external attribution to success, learned helplessness appeared as significant predictors of well-being of medical students ($R^2 = .41$). Learned helplessness partially mediated in the relationship of attribution to success, academic motivation, and learning self-efficacy with the well-being of medical students. Implications of the study have been discussed.



Introduction

Mental health of students, especially of medical students is of vital importance, because have to play a significant role in the healthcare system after the completion of their medical studies. However, stressors like anxiety, academic stress, mental pressure, and competition adversely impacts their well-being in their quest to excel their academics. Being an emotionally draining and psychologically challenging field, the study of medicine interferes with the functioning and ultimately the well-being of the medical students.

According to statistics, one out of 10 medical students receive a diagnosis of a mental illness while they are in medical school (Masri et al., 2019). Research has shown that the stressful environment of the medical universities contribute to the well-being of the medical students and these students score higher on depression and stress in comparison to other students (Srivastava et al., 2007) that further impacts their academic performance (Park et al., 2012). Medical students are exposed to academic pressure at every stage throughout their years of medical study, whether it is pre-clinical stage, para-clinical or during the clinical years (Al-Dubai et al., 2011). This can have an adverse impact on the mental health of the medical students, if ignored, can further effect the students at an individual level by contributing to deterioration of their relationships, substance abuse, suicide, and attrition of their profession. It can also affect them at a

community level by contributing to stress that may impair the relationships of the medical students with their patients, faculty and the culture of medical profession (Dyrbye et al., 2005).

This signals the need to empirically study the protective and risk factors of the well-being of medical students, so that intervention plans can be designed and implemented to reduce the stress levels among medical students and enhance their well-being (Tran, 2015).

Some of the most common protective factors of well-being include personality, religiosity, social support (Saleem & Saleem, 2017), resilience (Bonanno, 2004), spirituality, racial identity, and self-esteem (Mushonga & Henneberger, 2020). Other factors that play a significant role in predicting well-being of medical students include learning self-efficacy (Siddiqui, 2015), attribution to success and failure (Shaukat et al., 2010) and academic motivation (Ahn et al., 2007).

Students who possess higher learning self-efficacy, ascribe their failures to lesser effort rather than their poor abilities, while those to possess lower learning self-efficacy, ascribe their failures to their lower abilities (Hayat et al., 2020). It is also found to foster academic performance (Alyami et al., 2017), learning, and motivation of students (Hayat et al., 2020). Higher learning self-efficacy also positively impacts the mental well-being, life satisfaction and engagement with life among undergraduate students (Siddiqui, 2015).

Academic motivation is another significant determinant of well-being among medical students. It is referred to as a motive expresses the person's expectations and depicts the ideas and actions, and motivate, shape, and sustain particular behaviors in them (Atalay et al., 2016). Academic motivation is classified into three types on the basis of how an individual's personal needs and motivations affect interactions with external influences: intrinsic motivation, extrinsic motivation and amotivation (Park et al., 2012). Students possessing higher intrinsic motivation follow in-depth study methods, spend more time on studying and attain higher GPAs (Kusurkar et al., 2013, as cited in Lyndon et al., 2016). Students' evaluations of their academic performance correlate with their academic motivation, cumulative academic stress, and medical stress. Moreover, premedical students perform better on perceptions of academic performance and extrinsic academic motivation than do medical students, although they score low on general academic stress and medical stress (Ahn et al., 2007).

Attribution to success and failure also significantly impacts well-being of the medical students. According to a study, attributional patterns and self-esteem have a significant impact on the mental health of undergraduate students (Okadigbo & Unachukwu, 2022). It has been found that high achievers attribute their success to parental and familial support, effective communication skills, hard work, effective learning strategies, and self-efficacy, while low achievers ascribe their failures to adjustment challenges, poor learning tactics, biased role of instructors, irregular class attendance, and irregularity in revisions (Mirza & Usmani, 2017).

The impact of demographics on well-being have also been found to be significant. Married medical students and interns experience less stress as compared to those who are unmarried and in their clinical years (Aboalshamat et al., 2017). A significant association have been found among poor grades, poor sleep quality, training type, financial status, and marital status of medical students (Ghoreishi & Aghajani, 2008 as cited in Azad et al., 2015). There is also evidence for positive mental well-being and less career issues among medical students who have educated parents as they understand career decisions better and are better able to advise their children on job alternatives that will provide lasting benefits and advantages (Firdous et al., 2019). According to Yusoff et al. (2013), medical students with highly educated fathers score low on depression, anxiety, and stress, whereas those with mothers who have attained higher education and participate in extracurricular activities score low on anxiety and stress.

Furthermore, ongoing academic pressure and sleep deprivation have been linked to learned helplessness in medical students (Katuna, 2018), and learned helplessness is among the major risk factors of well-being (Henry, 2005), it raises the chances of depression (Legg, 2019). Seligman introduced the theory of learned helplessness in the late 1960s and early 1970s. Learned helplessness is brought on by a persistent belief that an individual's actions in the face of a stressful situation have no control on its outcomes (Raufelder & Kulakow, 2022). This theory was later reformulated by Seligman and his colleagues in 1978. They added an attributional component to the original theory. According to the reformulated theory, learned helplessness results when pessimistic individuals ascribe internal, stable and general causes to uncontrollable stressful events (Swanson et al., 2012).

Demographics also contribute significantly to learned helplessness either directly or indirectly. It has been found that students residing in urban areas attribute internal causes to events more than those residing in rural do (Shifrer & Sutton, 2014), and internal attribution to failure is a common characteristic in individuals who feel helpless and depressed (Metalsky et al., 1995 as cited in Shaw & Anderson, 2021).

Medical year also determines the attribution patterns of students. According to Felaza et al. (2020),

medical students in their clinical years possess highest high intrinsic low controlled (HILC) type academic motivation and low intrinsic low controlled (LILC) academic motivation, and attribution of failure to internal is one of the causes of learned helplessness (Friedlander, 2019).

Academic achievement of the medical students also leaves a significant impact on learned helplessness. Students who encounter failure repeatedly, experience helplessness which is commonly high as a result of constant powerlessness (Naz et al., 2022). In fact, internalizing stable causes following failure itself is learned helplessness (Raufelder & Kulakow, 2022).

Moreover, children's educational and behavioral outcomes are strongly influenced by their parent's education levels. Parents who have acquired higher education continually inspire their kids to have high aspirations for themselves (Dubow et al., 2009). In addition to this, the age of the mother is also a significant contributor in learned helplessness. According to a study, 1.2% of the variation in externalizing difficulties is found to be associated with the father's age and 1.9% of the variance associated with the mother's age. The relationship between parental age and internalizing issues is less obvious with around 0.5% of the overall variation explained by maternal age, and about 0.2% by father's age (Zondervan-Zwijnenburg et al., 2020). Hence, the age of parents, specifically the mother, determines external and internal attributions to adverse situations.

Marital status is another active determinant of learned helplessness. According to Nassan et al. (2012), married medical students experience considerable problems transitioning to college, especially when it comes to making friends on campus and establishing a connection or attachment to the college they go to.

Conceptualization of the Study

Although a larger number of empirical studies have been done on the risk factors of well-being in medical students, there is dearth of empirical work on protective factors of well-being in medical students, which is important to be explored, so that necessary steps can be taken to help improve the well-being of medical students by reinforcing these protective factors. Therefore, the current study was designed to study the protective and risk factors of well-being in medical students within Pakistani context and determine the relative strength of each of these factors to get an idea of the direction of planning and implementation of intervention strategies for enhancing factors that promote the well-being of medical students and de-escalation of those that impair it.

Methodology

Research Design

The current research followed cross-sectional research design.

Sample

A sample of 300 undergraduate medical students, aged 18 to 25 years ($M= 21.94$, $SD= 1.68$), enrolled in MBBS and BDS in public and private medical institutions, with no evident cases of disability, were recruited for this through purposive sampling strategy.

Measures

A demographic information sheet was used to take personal and regional information of the participants. Attribution to Failure Questionnaire and Attribution to Success Questionnaire (Gobel et al., 2013) were used to measure attribution to failure and attribution to success respectively. Each of these questionnaires had 20 items with response options ranging from “strongly disagree” to “strongly agree” on a 6-point Likert scale. The reliabilities of their subscales in the current study was found to be $\alpha=.76$ for internal attribution to failure, $\alpha=.71$ for external attribution to failure, $\alpha=.83$ for internal attribution to success and $\alpha=.67$ for external attribution to success.

Academic motivation was measured by the college version of the Academic Motivation Scale (Vallerand et al., 1992). It consists of 28 items with response options ranging from “does not correspond at all” to “corresponds exactly” on a 7-point Likert scale. The reliabilities of its subscales in the current study was found to be $\alpha=.86$ for internal academic motivation, $\alpha=.87$ for external academic motivation, and $\alpha=.78$ for amotivation.

Learning self-efficacy was measured using the General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) in educational context as was used by Cerino (2014), Hussain (2014) and Wu et al (2020) for assessing the abilities of students to cope with challenging situations in their learning environment. This scale comprises 10 items with response options ranging from “not at all true” to “exactly true” on a 4-point Likert scale. The reliability of this scale in the current study was $\alpha=.81$.

Learned helplessness in the participants was measured with the help of Learned Helplessness Scale (Quinless & Nelson, 1988) that comprises 20 items with response options ranging from “strongly agree” to “strongly disagree” on a 40-point Likert scale. The reliability of this scale in this study was $\alpha=.61$.

Lastly, well-being was measured using Warwick Edinburgh Mental Well-Being Scale (Tennant et

al., 2007). It comprises 14 items that are scored on a 5-point Likert scale with response options ranging from “none of the time” to “all of the time”. The reliability of this scale in the current study was $\alpha=.84$.

Procedure

The process of data collection began after the approval of the topic from the board of studies of the Department of Psychology, Government College University, Lahore and seeking of permission from the authors for the use of psychometric instruments. The sample was collected in Google Forms from easily accessible participants and acquaintances directly, both in-person and through social media sites after taking informed consent form them. Participants were explained the nature of the study and told about their right to withdraw from the study if they no longer wish to continue. The confidentiality of the data was ensured to them and their queries were attended when and where required. The data was collected in six months after which it was entered into the Statistical Package for Social Sciences (SPSS) software version 23.00 for analyses. The results were computed and are explained next.

Results

Table 1

Descriptive Statistics of Demographics

Characteristics	<i>f</i>	(%)
Gender	300	100
Female	171	57
Male	129	43
Region	300	100
Urban	255	85
Rural	45	15
Degree	300	100
MBBS	223	74.33
BDS	77	25.67
Type of College	300	100
Public	155	51.67
Private	145	48.33
Medical Year	300	100
1 st	33	11
2 nd	53	17.7
3 rd	91	30.3
4 th	76	25.3
5 th	47	15.7
Family system	300	100
Joint	104	34.7
Nuclear	196	65.3
Marital status	300	100
Single	263	87.7
Married	23	7.77
Engaged/ committed	14	4.7
Education of father	300	100
School	22	7.3
College graduates	38	12.7
University graduates	228	76
Other	12	4
Education of mother	300	100
School	45	15
College graduates	53	17.7
University graduates	195	65
Other	7	2.3
Work Status of mother	300	100
Working	111	37
Non-working	112	37.3
NA	77	25.7

Income per month	300	100
below 35,000	13	4.3
35,000- 70,000	62	20.7
70,001- 100,000	109	36.3
above 100,001	116	38.7

Table 1 shows the descriptive statistics of the demographics

Table 2
Correlation among Demographics and Study Variables (N=300)

Variables	Learning Self-Efficacy	Internal attribution to failure	External attribution to failure	Internal attribution to success	External attribution to success	Learned Helplessness	Internal Academic Motivation	External Academic Motivation	Amotivation	Well-Being
1. Age	.04	.02	.03	.02	.06	.08	.05	.07	.07	.03
2. Gender	.06	.10	.04	.10	.07	-.09	.07	.04	.10	.00
3. Region	.17**	.03	.01	.24**	.15*	.08	.15**	.20**	.04	.09
4. Medical year	.02	.01	.06	.01	.16**	.04	.13*	.15**	.03	.00
5. Marks (percentage)	.10	.03	.04	.12*	.12*	-.11	.14*	.06	.02	.13*
6. Family system	.03	.03	.08	.02	.07	.04	.02	.07	.04	.04
7. Marital status	.16**	.03	.07	.32**	.35**	.19*	.18**	.23**	.08**	.19**
8. Father's education	.14*	.04	.09	.22**	.17**	.20**	.02	.07	.13*	.03
9. Mother's education	.07	.01	.04	.21**	.19**	-.11	.07	.11	.04	.10
10. Mother's work status	.03	.05	.01	.10	.07	-.00	.05	.04	.11	.03
11. Income per month	.09	.03	.07	.01	.01	-.07	.08	.05	.04	.07
12. Degree	.04	.07	.01	.04	.04	-.00	.03	.09	.06	.04
13. Type of college	.03	.03	.07	.04	.08	.06	.22**	.30**	.07	.06
14. Learning Self-Efficacy	1									
15. Internal attribution to failure	.03	1								
16. External attribution to failure	.04	.56**	1							
17. Internal attribution to success	.57**	.06	.08	1						
18. External attribution to success	.41**	.09	.05	.62**	1					
19. Learned Helplessness	.48**	.11	.02	.41**	.30**	1				
20. Internal Academic Motivation	.33**	.16**	.08	.36**	.17**	.33**	1			
21. External Academic Motivation	.34**	.17**	.20**	.49**	.21**	.74*	.74**	1		
22. Amotivation	.19**	.14**	.06	.31**	.10	-.11	.11	.23**	1	
23. Well-Being	.54**	.07	.03	.46**	.46**	.30*	.30**	.31**	.20**	1

Table 2 shows the results of Pearson Moment Correlation analysis. It shows the relationships between the study variables viz. attribution to success, attribution to failure, academic motivation, learning self-efficacy, learned helplessness and well-being and the demographics.

This follows two Hierarchal Regression analyses. The first hierarchal regression studies the role of attribution to success, attribution to failure, academic motivation, and learning self-efficacy, in predicting learned helplessness, after controlling the demographics, as the literature provides an evidence of significant impact of demographics on learned helplessness.

Table 3

Hierarchal Regression Analysis Predicting Learned Helplessness in Medical Students (N=300)

Variables	Model 1			Model 2		
	B	B	SE	B	β	SE
Constant	47.48		3.39	59.60		3.57
Region	1.06	.07	.886	.03	.00	.76
Medical Year	.15	.03	.26	.20	.04	.22
Marks	-.05	-.09	.03	-.02	-.03	.02
Marital status	1.38	.12*	.68	-.05	-.00	.60
Father's Education	-1.07	-.19**	.35	-.64	-.12*	.30
Mother's Age	.11	.16**	.04	.04	.06	.04
Mother's Education	.01	.00	.32	.05	.01	.26
Learning Self-Efficacy				-.33	-.31**	.06
Internal Attribution to Failure				.12	.14*	.05
External Attribution to Failure				-.06	-.05	.07
Internal Attribution to Success				.03	.04	.06
External Attribution to Success				-.13	-.11	.08
Internal Academic Motivation				-.11	-.24**	.03
External Academic Motivation				.02	.04	.03
Amotivation				.30	.30**	.05
R ²	.11			.42		
ΔR^2				.31**		

Note: In Model 1, we entered variables of region, medical year, marks (percentage), marital status, father's education, mother's age and mother's age to predict learned helplessness. In Model 2, we entered learning self-efficacy, internal attribution to failure, external attribution to failure, internal attribution to success, external attribution to success, internal academic motivation, external academic motivation and amotivation as a predictors of learned helplessness. * $p < .05$, ** $p < .01$.

Table 3 shows that father's education ($\beta = -.12$, $p < .05$), learning self-efficacy ($\beta = -.31$, $p < .01$) and internal academic motivation ($\beta = -.24$, $p < .05$) negatively predicts learned helplessness whereas internal attribution to failure ($\beta = .14$, $p < .01$) and amotivation ($\beta = .30$, $p < .01$) positively predicts learned helplessness when the demographics are controlled. The total amount of variance for learned helplessness accounted for by the aforementioned variables is 42%.

The second hierarchal regression was run to assess the role of attribution to success, attribution to

failure, academic motivation, learning self-efficacy, and learned helplessness in predicting well-being, after controlling the demographics as the literature highlights the significant impact of demographics on well-being.

Table 4

Hierarchical Regression Analysis Predicting Well-Being in Medical Students (N=300)

Variables	Model 1			Model 2			Model 3		
	B	β	S E	B	β	SE	B	β	SE
Constant	45.19		4.4	12.63		4.87	29.86		7.11
Marks (percentage)	.10	.14*	.04	.04	.05	.04	.03	.04	.04
Marital status	-2.92	-.17**	1.03	.24	.01	.91	.27	.02	.90
Mother's age	-.09	-.08	.06	-.02	-.02	.05	-.01	-.01	.05
Learning self-efficacy				.58	.36**	.09	.48	.30**	.10
Internal Attribution to Failure				.09	.07	.08	.12	.09	.07
External Attribution to Failure				-.06	-.03	.10	-.08	-.04	.10
Internal Attribution to Success				-.01	-.01	.10	-.01	-.00	.09
External Attribution to Success				.52	.28**	.12	.48	.25**	.12
Internal Academic Motivation				.07	.10	.05	.04	.05	.05
External Academic Motivation				.02	.03	.05	.03	.04	.05
Amotivation				-.15	-.10	.08	-.05	-.04	.08
Learned helplessness							-.30	-.19**	.09
R^2	.06			.39			.41		
ΔR^2				.33**			.02**		

Note: In Model 1, we entered variables of marks (percentage), marital status, and mother's age to predict well-being. In Model 2, we entered learning self-efficacy, internal attribution to failure, external attribution to failure, internal attribution to success, external attribution to success, internal academic motivation, external academic motivation and amotivation as predictors of well-being. In Model 3 we entered learned helplessness as a predictor of learned helplessness. * $p < .05$, ** $p < .01$.

Table 4 shows that learning self-efficacy ($\beta = .30$, $p < .01$) and external attribution to success ($\beta = .25$, $p < .01$) are significant positive predictors of well-being, whereas learned helplessness ($\beta = -.19$, $p < .01$) is a significant negative predictor of well-being. The total amount of variance for learned helplessness accounted for by the aforementioned variables is 41%.

After this, mediational analysis was run using the Hayes Model to explore the mediating role of

learned helplessness in the relationship of learning self-efficacy, academic motivation, and attribution to success, with well-being.

Figure 1

Mediating Role of Learned Helplessness between External Attribution to Success and Well-Being

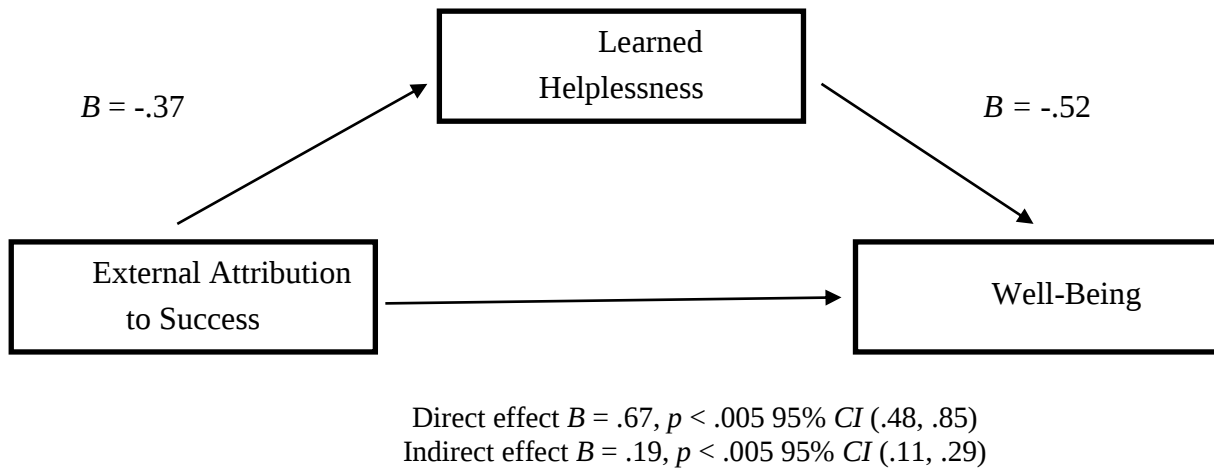


Figure 1 shows that learned helplessness partially mediates the relationship between external attribution to success and well-being.

Figure 2

Mediating role of Learned Helplessness between Internal Attribution to Success and Well-Being

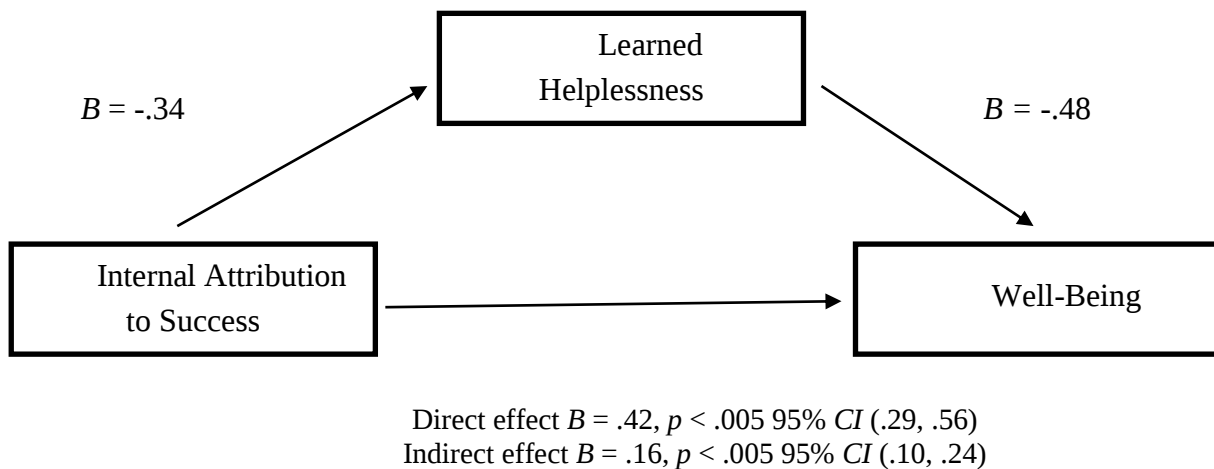
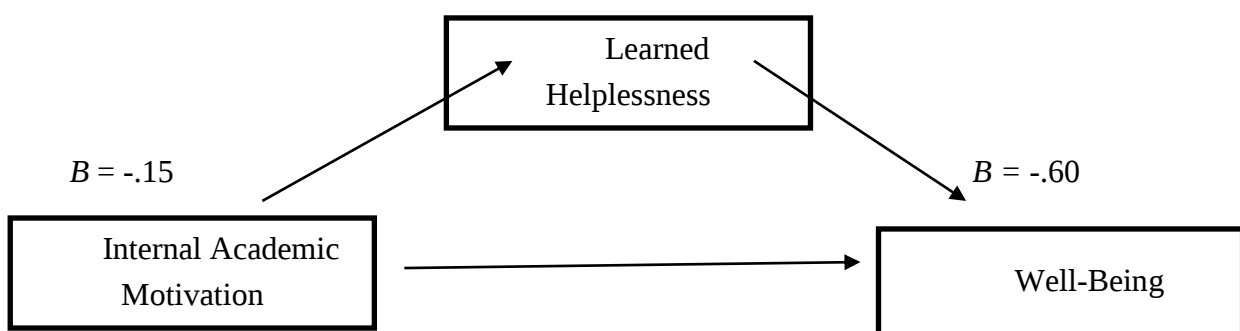


Figure 2 shows that learned helplessness partially mediates the relationship between internal attribution to success and well-being.

Figure 3

Mediating Role of Learned Helplessness between Internal Academic Motivation and Well-Being

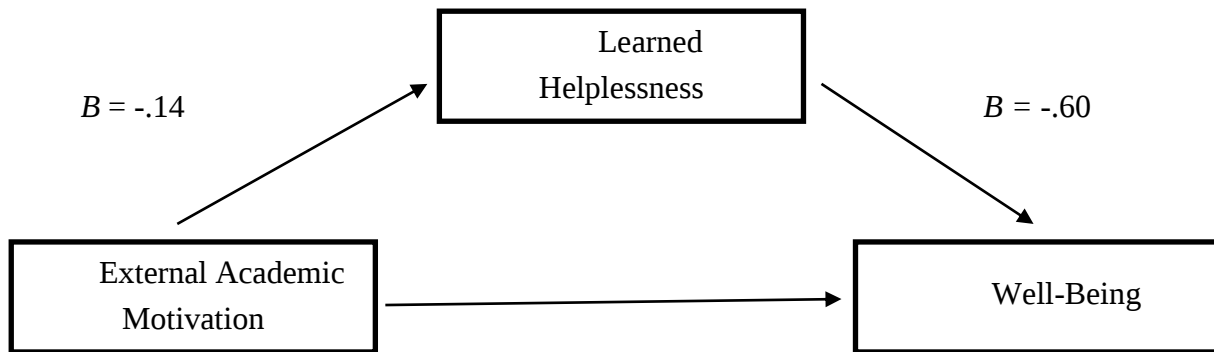


Direct effect $B = .12, p < .005$ 95% CI (.05, .20)
 Indirect effect $B = .09, p < .005$ 95% CI (.05, .14)

Figure 3 shows that learned helplessness partially mediates the relationship between internal academic motivation and well-being.

Figure 4

Mediating Role of Learned Helplessness between External Academic Motivation and Well-Being

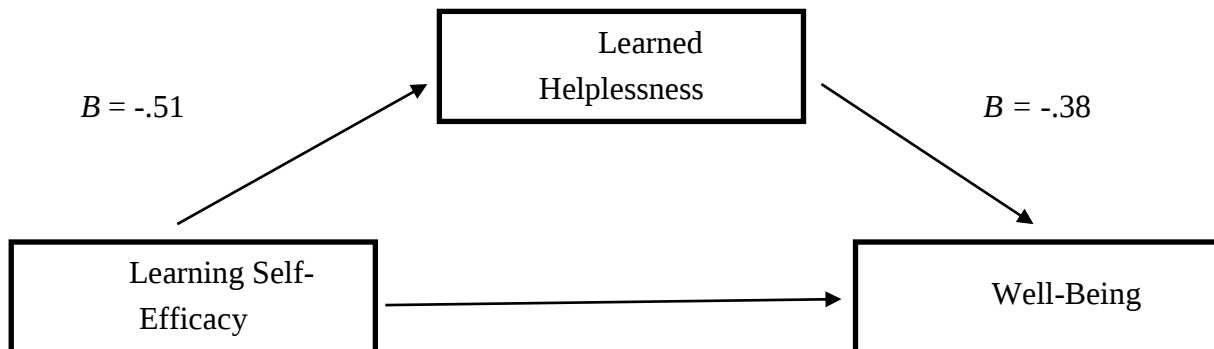


Direct effect $B = .12, p < .005$ 95% CI (.05, .19)
 Indirect effect $B = .08, p < .005$ 95% CI (.05, .12)

Figure 4 shows that learned helplessness partially mediates the relationship between external academic motivation and well-being.

Figure 5

Mediating Role of Learned Helplessness between Learning Self-Efficacy and Well-Being



Direct effect $B = .67, p < .005$ 95% CI (.50, .84)
 Indirect effect $B = .19, p < .005$ 95% CI (.10, .30)

Figure 5 shows that learned helplessness partially mediates the relationship between learning self-efficacy and well-being.

Discussion

The aim of the current study was to assess the psychological correlates of learned helplessness and well-being, and mediational role of learned helplessness in well-being and its correlates among medical students in Punjab, Pakistan. Appropriate statistical analyses were run for the purpose of attaining the objectives of this study. The results revealed significant inter-correlations among the study variables and demographic variables (see Table 2 & 3). The results of first hierarchal analysis run after controlling the effect of demographics revealed that learning self-efficacy and internal academic motivation negatively predicted learned helplessness. One reason for this is that motivation appears to be a predictor of academic achievement, happiness, academic perseverance, and learning (Kusurkar et al., 2011), thus preventing negative factors such as learned helplessness. Results also showed that amotivation and internal attribution to

failure positively predicted learned helplessness (see Table 3). According to existing literature, students and teachers frequently attribute student failure to their lack of capacity, absence of motivation, lack of input and poor luck (Shaikh et al. 2020).

The role of learning self-efficacy in predicting learned helplessness is consistent with previous studies (e.g., Demirbilek & Atila, 2021; Wu & Tu, 2019), and the role of amotivation and internal academic motivation in predicting learned helplessness is in line with (Legault, 2006; Staribratov & Babakova, 2019), and attributional style as a predictor of learned helplessness is consistent with (Hwang, 2019; Raufelder & Kulakow, 2022; Vines & Nixon; Zhang et al., 2014).

The results of the second hierarchical analysis revealed a significant positive role of external attribution to success and learning self-efficacy and significant negative role of learned helplessness in predicting well-being among medical students (see Table 4). One reason behind this is that attributional patterns and self-esteem have a huge influence on how mental well-being of the students, with the former one having stronger effect than the latter one (Okadigbo & Unachukwu, 2022). These results are in line with existing literature (e.g. Ajam, 2016; Esteve, 2003; Henry, 2005; Kurtovi et al., 2018; Siddiqui, 2018).

The results also revealed significant mediating role of learned helplessness in the relationship of external attribution to success (see Figure 1) and internal attribution to success (see Figure 2) with well-being. These findings are in line with the studies of Ozment and Lester (2001), and Sparr and Sonnentag (2008), and the reformulated theory of learned helplessness showing that negative attributional styles where individuals assign internal, stable and uncontrollable causes to the events, feels a lack of control over the situation and develops feelings of helplessness as a result (Swanson et al., 2012).

The mediating role of learned helplessness in the relationship of internal academic motivation (see Figure 3) and external academic motivation (see Figure 4) with well-being is consistent with earlier studies, for example Butkowsky and Willows (1980) and Valås (2001) that learned helplessness has an effect on academic motivation, which is linked to students' well-being. This can be explained by the fact that learned helplessness completely eliminates a student's willingness to put out the effort necessary to achieve educational success. In other words, it diminishes the student's drive for academic success by making him believe that any action would result in failure (Azemi et al., 2021).

The fifth mediation analysis also supported revealed mediating role of learning helplessness in the relationship between learning self-efficacy and well-being (see Figure 5). These results are also consistent with previous researches (e.g. Sorrenti et al., 2018). Low self-efficacious students frequently evaluate their capacity to do tasks critically. They attempt to find probable failures in the learning activity they are working on rather than pushing hard for achievement. Since they already lack confidence, when they fail, they quit without even attempting to work hard or meaning ton (Wu & Tu, 2019), which negatively affects their well-being.

Implications

The findings of this study have implications in clinical and educational settings. The results of the current study points out the factors influencing the psychological well-being of medical students and highlight the necessity to mitigate their effects in order to improve their functioning and overall well-being. In order to improve students' mental health, strategies must be developed and put into place to change their perceptions of what leads to success and failure through feedback, instructor expression, and other contextual manipulations. The findings of this study also lead counsellors to focus on issues influencing medical students' wellbeing.

Limitations and Suggestions

Medical students find it challenging to spare time for research because the field of medicine demands both physical and mental focus, time, and energy. As a result, the data were gathered from the medical students of personal contacts that restricted the data to Punjab only. As a result of this, the results cannot be generalized to entire medical population. Moreover, the surveys were lengthy and required self-reporting, which could have had an impact on the outcomes.

In order to generalize the findings, it is suggested that future studies should include medical students from all provinces of the country. Future researchers are also advised to use shorter versions of questionnaires. Additionally, qualitative research is suggested for a more thorough exploration of the phenomena covered in the current study.

Conclusion

In order to help the medical students excel their academics in the best of their potentials, it is essential to work on promoting the protective factors of well-being and eliminating the risk factors of well-being in medical students. Professors, parents, acquaintances and friends can lend a hand in this by encouraging and supporting the medical students, recognizing their efforts and encouraging them to work

harder while believing in their inherent abilities, such as commitment, learning strategies, enthusiasm, skills, and motivation. Receiving internal and stable reasons for their success from their professors will assist them in channeling their energy in the right direction. On the other hand, receiving unstable reasons for failure, such as poor learning techniques or insufficient effort, can encourage students to assume that these factors can be altered to achieve desired results. College counsellors can also focus on these things to help those students who are struggling with their academics or experiencing stress-related issues due to their studies.

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