

The Effect of Self-Compassion Intervention on Academic Motivation and Academic Stress on Mental Health of Students in Hybrid LearningWaleed Shahid¹, Sheeba Farhan²**Abstract**

The hybrid learning model has been introduced as a model of learning in response to the cessation of the education system due to the COVID-19. It could be an effective strategy in response to educational crisis in the wake of future pandemics. The shift to online and hybrid model was met with reluctance and posed a set of new challenges like demotivation and stress due to the change in the dynamics of the entire education system. The study aimed to incorporate self-compassion interventions into the current hybrid model by means to improve motivation and reduce the stress levels of students. 20 students with age range 18-25 were targeted through convenience sampling in a pre-test post-test design to measure the level of academic stress, motivation and self-compassion. Academic stress scale, Academic Motivation Scale and Self-Compassion – Short Form were used. The research comprised of three phases, pre-intervention, intervention and post-intervention. Eight session plans of self-compassion interventions, self-compassionate motivation and stress reduction through mindfulness were introduced using Kristin Neff's The Mindful Self-Compassion Workbook. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 22. The results showed insignificant difference in Self-Compassion after the intervention ($p=0.24$) while academic motivation and academic stress had a value of $p=0.000$ representing an increase in academic motivation ($p<0.05$) and a decrease in academic stress ($p<0.05$) post intervention. This study will pave way for further researches to find effective measures as means of preparedness for future pandemic and educational crisis.

Keywords: Academic Motivation, Academic Stress, Hybrid Learning, Self-Compassion

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Introduction

The emergent coronavirus disease-2019 (COVID-19) pandemic has led to a significant global crisis (Tabish, 2020) and higher educational institutions were forced to

fully or partially close campuses to prevent the spread of COVID-19 (Sharma, 2020) which ultimately led to a massive disruption in teaching and learning (Bassett & Arnhold, 2020).

A recent survey by the International Association of Universities of higher education institutions across the world showed that more than 90% of institutions replaced classroom instruction by remote teaching or are in the process of developing solutions to continue teaching and learning (Marinoni et al., 2020). The Mental health and levels of motivation of students' with respect to course coverage and their preparedness for assessments was also affected negatively (Elsalem et al., 2020).

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As a response to COVID-19, the majority of the educational institutes around the world were compelled to orient their academic programs to an online model. This orientation had three components; first, adopt a completely online approach, adopting a hybrid approach was a second option and third was to continue with physical classes (Shimabukuro et al., 2021). Hybrid Learning Model is a model that encompasses teaching and learning in an online and offline setting (Masson et al., 2008) providing flexibility and interaction in classrooms (Hwang, 2018). However, the shift towards digitization is a change process that is often met with resistance and avoidance in higher education (Gnaur et al., 2020). In the midst of the COVID-19 pandemic, the future of education lies in the development of technology (Lestari et al., 2020) and e-learning is projected to grow in the academic field (Chen & Chiou, 2012). Heo and Han (2017) said e-learning will be able to be infused effectively with different types of learning (e.g., hybrid learning, flipped learning, web-based learning).

Despite the growth projection, opinions are divided among scholars regarding the effectiveness of the learning method and is said to be determined by individual characteristics of the students (Moallem, 2007) and by reducing barriers and limitations like instructional method in a large size class, class participation posited by the hybrid setting to help students shift from traditional education services with ease (Allen & Seaman, 2007).

Provided the circumstances, the students have experienced elevated levels of stress from moderate to severe due to online learning (Husky et al., 2020). It has been estimated that around 9.0% to 53.5% of students around the globe have suffered from psychological distress symptoms during the COVID-19 pandemic (Cao et al., 2020). Studies have shown that psychosocial factors

and demographic variables such as gender and college year could affect the college student's mental health status (Cao et al., 2020).

During COVID-19 pandemic in KSA, students reported increased psychological distress (Al Ateeq et al., 2020) and pointed out effects of the stress on students including lower grades and poor academic performance (Koerner & Anne, 2002).

Mukhtar (2020) suggested that students reported limited attention span, resource intensive nature and no control over the online learning process led to reduced feeling of capability and motivation (Yang et al., 2020). Beck (2004) defined academic motivation as the rationale for students' attending to, commitments, and attempts concerning learning and accomplishing at school setting, which focused solely on the reasons why individuals decided and continue university education (Monika, 2020). Academic motivation is the cause of behaviors that are related to academic functioning and success, such as how much effort students put forth, how effectively they regulate their work (Usher & Morris, 2012). The self-determination theory of motivation (Ryan & Deci, 2020) assumes people inclination towards learning, mastery and self-connection with others as inherent but such tendencies are not automatic and require supportive conditions (Tang, 2020).

Compassion involves being receptive to and affected by the suffering of others (Neff, 2003). In simple terms, self-compassion means compassion for self (Saadatmand & Ghaderi, 2015). Thus, it can be distinguished between mastery (driven by development and understanding) and performance-based learning objectives (Grant & Dweck, 2003). Starting exact work shows that people who are more self-caring will quite often have more prominent life fulfillment, social connectedness, the ability to appreciate individuals on a deeper level, and satisfaction

and less tension, discouragement, disgrace, dread of disappointment, and burnout (Barnard & Curry, 2011; Neff et al., 2005; Neff et al., 2007; Williams et al., 2008). However, during trying times, many individuals are self-critical. Neff (2003) stated that rather than reacting negatively, practicing self-compassion could prove beneficial. Self-compassionate students reported less fear of failure and adopted mastery-oriented versus performance-oriented learning goals. Moreover, in the face of academic failure, self-compassionate students used more emotion-focused than avoidance-focused coping strategies (Neff et al., 2005).

The hybrid system seems to be the most flexible and convenient, owing to the rapidly changing circumstances amidst the pandemic. However, the hybrid educational model comes with its own set of unique challenges since students were forced to adapt to learning with limited access to their friends and mentors which majorly constitute a part of their support systems. Many students battled feelings of isolation, hopelessness, and decreased motivation.

According to a study conducted in 92 different countries, it has been found that COVID-19 pandemic lockdown affected the academic performance of 96.7% participants with varying degrees (Mahdy, 2020). Majority of the students reported that transitioning to online learning during COVID-19 was chaotic, they did not have time to organize their studies, and they were distracted by people or other things, such as technology, television, social media, and pets.

A recent study conducted by Bernheim et al. (2020) during the COVID-19 pandemic indicated that a majority of the respondents did not want to continue their lesson using online learning methods. Some of the challenges faced by these students included

internet connectivity and understanding of the content of their subjects.

Neff and Germer (2012) proposed that COVID-19 had impacting effects on academic motivation. A cross-country research by (Zaccoletti et al., 2020) showed that there was a noticeable reduction in the academic motivation of Portuguese and Italian students as a result of the lockdown. Furthermore, during this period, no control over the learning process led to reduced academic motivation (Ngiam, 2011).

The COVID-19 has created a new normal in multiple ways, changing what was previously considered normal functioning (Ullah et al., 2016). The virus's paradigm shift has not spared the education sector where the entire educational system is in danger of collapsing unless drastic measures are taken immediately. There has been a slew of factors examined and experimented with to help keep the educational sector alive, from school closures to online courses and flipped classroom approaches. In any case, hybrid learning has been made but has only recently regained prominence. Hybrid learning style gained popularity since it combined the advantages of a virtual classroom with the in-person learning experience (Snart, 2010). Hybrid learning is well-known for its usage as a learning medium to keep the educational system alive. Pandemic effects on mental health of individuals have impacted adaptation to new standards, notably in the field of education (Salman et al., 2020).

Individuals and institutions in Pakistan are now taught using a hybrid learning approach, although the move has had an adverse effect on education and how students view hybrid learning methods (Gul & Khilji, 2020). As a result of the hybrid model's limitations, students feel demotivated and stressed out about their education as a whole. The existing hybrid learning experience must be corrected in order for students, teachers, and educational institutions to work properly. The

challenges of internet connectivity, recent abrupt shifts, lack of expertise in technical skills and unavailability of computers or laptops at homes are crucial for managing academic motivation in Pakistan (Rafique et al., 2021). With the new format of classrooms, it's more important than ever to provide interventions to keep students engaged and motivated throughout the learning process. Students' mental health suffers as a result of low motivation, increased stress, and the difficulty to adapt to a new manner of learning.

The literature highlighted stress and motivation issues among students of mental health in hybrid learning. The role of self-compassion interventions has been supported by literature to facilitate motivation and overcoming stress level whereby the study aims to check the efficacy of self-compassion interventions for overcoming level of stress and facilitate motivation.

Method

Research Design

The study relies on quantitative survey analysis by promoting primary or first-hand information obtained through online respondents. A pre-test-post-test design was used to establish the connection between self-compassion and academic stress and academic motivation. In order to conduct this study, convenience sampling was used.

Participants

Students were divided into two groups: control group ($n=20$) and experimental group ($n=20$). Participants within the age range of 18-25 were selected. The undergraduate students (male and female) currently enrolled in a hybrid educational system of private universities of Karachi Pakistan were recruited for research purposes.

Measures

Informed Consent Form

Participants' agreement to participate in the research was sought via the use of an

informed consent form. Information about the study's aim, confidentiality, and participants' ability to withdraw was included.

Demographic Information Form

A demographic information sheet was given to the chosen participants, which asked for information such as their name, date of birth, gender, socioeconomic position, school, and whether or not they had taken part in hybrid learning before.

Academic Stress Scale

The Scale comprises of 40 items and measures academic stress on a 5-point Likert-type scale (1=not stressful to 5=extremely stressful), the ratings indicate how distressing each item is for the individual who received them. The test-retest correlation was 0.82 (Rajendran & Kaliappan, 1990).

Academic Motivation Scale

There are 28 items graded on a Likert scale from 1 to 7 with subscales measuring intrinsic motivation, extrinsic motivation and amotivation. The AMS has a Cronbach alpha of 0.89 (Vallerand et al., 1992).

The Self-Compassion Scale – Short Form

The SCS is appropriate for ages 14 and up (8th grade reading level). The SCS-SF has only 12 items and demonstrated adequate internal consistency (Cronbach's $\alpha \geq 0.86$ in all samples) and a near-perfect correlation with the long form SCS ($r \geq 0.97$ all samples). Items are rated on a five-point response scale ranging from 1 (almost never) to 5 (almost always) (Raes et al., 2011).

The Mindful Self-Compassion Workbook

Kristin Neff and Christopher Germer wrote the Mindful Self-Compassion Workbook, which was released in 2018. There are self-compassion treatments in the workbook, and it covers a wide range of topics such as mindfulness, motivating oneself, handling unpleasant emotions, and appreciating one's own efforts (Neff & Germer, 2018).

Procedure

With their permission, participants were assessed on their motivation using the Academic Motivation Scale, stress using the Academic Stress Scale, and self-compassion using the Self-Compassion Scale – Short Form for students aged 18-25 who were taking part in the hybrid learning experience, students with low academic motivation, self-compassion and high academic stress were then underwent a series of Kristin Neff's interventions from The Mindful Self-

Compassion Workbook for self-compassion. Eight, bi-weekly, one-hour long group sessions were conducted. Participants were asked to complete the Academic Motivation Scale, Academic Stress Scale, and Self-Compassion Scale – Short Form again after the intervention concluded to assess the efficacy of the treatments. Statistical Package for Social Sciences (SPSS) version 22 was used to analyze the pre and post obtained results of intervention.

Session Plan

Session	Aim	Intervention	Outcome
Session 1	The aim of this session was to introduce self-compassion and how self-compassion can be beneficial.	Explaining students what self-compassion means and helping them understand importance and benefits of self-compassion.	At the end of the session the participants had acquired an understanding of self-compassion and its benefits.
Session 2	The aim of this session was to help students understand the importance of mindfulness as an integral part of self-compassion and how mindfulness can help reduce their stress levels	For this session used affectionate breathing. In addition to affectionate breathing an intervention incorporating the 5 senses to be more mindful was introduced. An alternate to affectionate breathing was "mindfulness in daily life" where students were required to pick an element from their daily life functioning and then using one of the sense to savor the moment.	At the end of the session the participants were able to practice affectionate breathing and using their senses to anchor to the present.
Session 3	The aim of this session was to help students ward off resistance that they had regarding the new academic paradigm and helped them in accepting the new dynamics of learning.	To break resistance the intervention "How do I cause myself unnecessary suffering" was looked into. This helped students understand how resistance was consequential and had a physical, emotional and a mental impact.	At the end of the session the participants were able to notice their resistance and reluctance they had with the new method of learning and helped them reframe that internal resistance to be more accepting of change.

Session 4	The Session aimed to teach students self-compassionate motivation.	In order to find one's compassionate voice to increase motivation students were required to find their critical voice first and contemplating on how it is serving them and then to find their compassionate voice and help silence the inner critical voice. After that the students wrote to themselves a self-compassionate letter .	At the end of the session the participants were able to identify their critical voice and discover their compassionate voice
Session 5	The aim of this session was to help students identify their core values to help them find meaning and purpose in life and use those values to be guided. The session also aimed to help students learn how past experiences have helped them overcome obstacles and difficult time.	For this session core values were looked into through an activity "discovering our core values" An exercise "Silver lining" was also included where the student had to think of a past struggle that had now been resolved and that look into that situation to see what learning they got out of that situation.	At the end of the session the students were able to identify their core values and were able to use them to reframe their perspective regarding the current situation drawing from learning they may have acquired in the past.
Session 6	The aim of this session was to help students be aware of their challenging emotions and be able to make peace with them by following the soften-Soothe-Allow method. The session also aimed to help students be aware of the physical sensations and how they were connected with their emotions.	For this session we worked with difficult emotions where individuals were required to find a comfortable position and think of an unpleasant situation and notice the emotions they felt and label them correctly. After labeling and being aware of the how emotions feel in the body we used the technique " Soften-Soothe-Allow."	At the end of the session the students were able to identify their emotions and understand how emotions and physical sensations are connected and how they can be used to one's advantage.
Session 7	The aim of this session was to help students actively generate positive emotions to help reduce their levels	For the following session the following interventions were utilized: "savor walk" and/ or "savoring food", "gratitude for the small and	At the end of the session students were able to practice gratitude and savoring techniques and

	of stress and to increase motivation through savoring and gratitude. This session aimed to help students develop a habit of appreciating self and steering clear from focusing on their inadequacies.	the big things” worksheet and “How do I relate to my good qualities?” and “Developing self-appreciation.” Worksheets.	were able to identify with their strengths.
Session 8	The aim of this session was to conduct a post-test to see whether the interventions had any effect on the levels of student academic motivation, academic stress and self-compassion.	Academic stress, Academic Motivation Scale and Self-Compassion Scale- Short Form were conducted and a summary of the whole process, covering the key points of all the sessions.	The participants took the test again and were taught and equipped with all the necessary skills that were required to be self-compassionate.

Ethical Considerations

Informed consents were obtained from all participants, and they were reassured that no personal identifiable information would be shared with anyone not directly engaged in the research. The researcher was present on

hand to answer any questions that arose throughout the course of the treatments and questionnaire filling. Anytime they wanted, study participants had the right to withdraw from the study with no further obligation.

Results

Table 1

Table showing Demographic Information (N=20)

Gender	N	%
Male	7	35%
Female	13	65%
Birth Order		
Only Child	1	5%
First Born	9	45%
Middle Born	7	35%
Last Born	3	15%
Relationship Status		
Single	12	60
Engaged	5	25
Married	3	15
Semester		
4 th	6	30
5 th	3	15
6 th	4	20

7 th	4	20
8 th	3	15
Online Medium Used by Participants		
Microsoft Teams	12	60%
Zoom	7	35%
Google Meet	1	5%

Table 2

Table showing Paired Sample *t*-test for Before and After Interventions (*N*=20)

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Self-compassion pre-test Self-compassion post-test	.90	3.33	1.20	.24
Academic Motivation pre-test Academic motivation post-test	18.60	7.36	11.29	.000
Academic stress pre-test Academic stress post-test	21.95	15.06	6.51	.000

There was a significant difference in the mean score for the pre-test and post-test of the subscales of self-judgment ($M=2.00$, $SD=1.33$) and the subscale of over identified ($M= 2.35$, $SD= 1.42$), each score decreasing after the intervention with $t= 6.69$ for self judgment and $t=7.38$ for over identified.

The intervention technique that is disclosed to the participants and applied is not just a practice of self-compassion but in

collaboration with mindfulness. Hence, the difference in the mean pre-test and post-test of the mindfulness subscale is essential to determine the impact of the intervention. There was a significant difference in the score between the pre-test mindfulness subscales ($M= 4.5$, $SD= 1.47$) and the post test of mindfulness subscale ($M= 6.45$, $SD= 1.50$) with $t= -6.62$, $p= 0.00$.

Table 3

Table Showing Paired Sample *t*-test for Self-Compassion Subscales: Before and After Interventions (*N*=20)

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Self-kindness Self-Kindness A	-1.90	1.33	-6.31	.000
Self-judgment Self-judgment A	2.00	1.33	6.69	.000
Common Humanity Common humanity A	-1.55	1.35	-5.11	.000
Isolation Isolation A	1.95	1.19	7.32	.000

Mindfulness				
Mindfulness A	-1.95	1.37	-6.62	.000
Over identified				
Over identified A	2.35	1.42	7.38	.000

In the Table 3, the values show a negative sign because the results of the post-test of the factor was larger than the pre-test, which shows an increase in the post-test

measurement of that subscale, this includes mindfulness, common humanity and self-kindness.

Table 4

Table Showing Paired Samples test for Academic Motivation Subscales (N=20)

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
IM To Know IM To Know-A	-3.65	2.58	-6.32	.000
IM Towards accomplishment IM Towards Accomplishment-A	-4.00	1.94	-9.18	.000
IM Experience Stimulation IM Experience Stimulation	-4.50	2.03	-9.86	.000
EM Identified EM Identified-A	-3.15	2.13	-6.60	.000
EM Introjected EM Introjected-A	-4.35	1.72	-11.27	.000
EM External Regulation EM External Regulation-A	-3.40	2.52	-6.03	.000

Note: IM= Intrinsic motivation, EM= Extrinsic motivation. A= post-test*

The next variable that required an in depth understanding and comparison was the motivation before the intervention and after the intervention. All subscales have significant results and that clearly depicted the increase in the score of every subscale in the post-test for academic motivation. The largest difference was in the pre-test and post-test of EM introjected ($M=-4.35$, $SD=1.73$) with a value of $t=-11.28$, $p=.000$.

The Internal motivation subscales had two which had a large difference in the t values and means. There was a significant difference in the score between the pre-test of internal motivation- accomplishment subscales ($M=12.15$, $SD=2.25$) and the post test of mindfulness subscale ($M=16.15$, $SD=2.87$) with $t=-9.19$ $p=0.00$.

Furthermore, a significant difference was found in the mean scores for the pre-test of

internal motivation- Stimulation ($M=11.85$, $SD= 2.82$) and the post-test of the subscale stimulation ($M=16.35$, $SD=2.3$) with the $t=9.87$.

When considering the differences of the pre-test and post-test of self-compassion in males and females, the results are insignificant for the females while there is a slight decrease in

self-compassion for males. The pre-test for males had $M=42.00$, $SD=3.0$ while the posttest had $M= 39.57$. The pre-test for females hardly had a change in the over self-compassion, where the pre-test has $M=38.08$, $SD=3.20$ and the posttest for self-compassion revealed $M=38.00$, $SD=2.51$.

Table 5

Table Showing the Correlation between Academic Motivation, Academic Stress, and Self Compassion (N=20)

Variables	M	SD	1	2	3
Academic Motivation	3.73	0.29	–	–	
Academic Stress	3.56	0.35	-.40*	–	
Self-compassion	3.69	0.45	.02	-0.35	-

The Table 5 shows that self-compassion interventions tend to reduce the academic stress as reflected through negative sign. The self-compassion shows weak positive

correlation with academic stress and academic motivation.

Discussion

The aim of the study was to analyze the impact of practicing self-compassion in students who have been facing academic stress and low academic motivation due to the COVID-19 pandemic. The research was to highlight the utility of the hybrid learning system and understand how to improve the conditions for learning. The pandemic had created an uproar of uncertainty which was inducing stress, however, the shift in learning methodology for students was a huge contributing factor to academic stress.

Previous studies have unveiled the reduction in depression, anxiety, and stress symptoms due to practicing self-compassion through mindfulness (Neff & Germer, 2012). The results of this study have shown increased

mindful self-compassion. Self-compassion has been seen to be the strongest predictor of mental health outcomes out of all positive psychological positive constructs (Kotera et al., 2018).

This mindful self-compassion has been seen in the present study to be positively correlated to academic motivation. This coincides and corroborates with the previous literature. It has been reported that the self-kindness and mindfulness component of self-compassion has been associated with reduced fear of failure and higher self-esteem. This in turn increases academic performances and ultimately academic motivation (Neff et al., 2007).

The results of the present study showed that practicing self-compassion was a significant

predictor of academic motivation. The main components of motivation that are affected by self-compassion are seen to be, intrinsic motivation through accomplishment and extrinsic motivation through being introjected and experience identification. This corresponds with the results of another research conducted by Kord & Pashasharifi (2015) that revealed the positive correlation between self-compassion and intrinsic motivation.

In lieu of prior research, self-compassion seems to alter the perception of what one might consider a weakness. When people view themselves with more kindness and compassion and leave room for mistakes, they create room for the belief that things are in their control and can be changed. Their locus of control is more internal, and this increases their motivation to improve their performances (Breines & Chen, 2012).

In another research, self-compassion contributed to increased self-efficacy and control beliefs about their learning. This meant that people with high self-compassion viewed they had more control over their behaviors and their processes of learning. Mindfulness, in particular predicted self-efficacy, the belief that people are capable of certain things. This self-efficacy belief contributes to increased motivation as well (Manavipour & Saedian, 2016). In this study mindfulness predicts a significant difference in the mean of the population's academic motivation with $p < 0.05$. In another study conducted on sample of Turkish university students, it confirms that self-compassion has an association with self-efficacy which increases the belief of control and ultimately motivation (Iskender, 2009). One of the reasons that self-compassion has been seen to increase self-improvement and motivation is that it sheds a new light on what we consider weaknesses and provides a safe and non-judgmental way to combat the beliefs about those weaknesses (Brienes & Chen, 2012).

To build upon our results, self-compassion has also proven to be negatively associated with academic stress in this particular study. The results have not been shown to be significant in the Pearson correlation analysis, however it is present, nonetheless. There were significant differences in the results for academic stress, with a decrease in it after the mindfulness self-compassion intervention was provided to the sample. It has been reported in multiple prior studies that self-compassion and particularly mindfulness has a negative association with stress. The second hypothesis is accepted based on these findings of the research and supporting evidence of the literature. This means that a more effective method of teaching and applying self-compassion techniques in educational contexts may help the students cope with adversities and overcome the stress induced in an educational environment.

It has been reported that students with low self-compassion have been seen to experience higher levels of stress which leads to the origination of emotional burnouts and signs of depression. Self-compassion contributes to higher resilience and a more positive perception of setbacks and outcomes; this in return helps face adversity and reduces the stress induced by difficult situations (Lee & Lee, 2020).

The pandemic itself had been a stressful event and the additional burden of learning through a new medium, leaving behind traditional classes, was building up on the stress. There was a significant decrease in the stress despite not being significantly related to self-compassion intervention. Previous literature confirms this association, however, there is no specific identification to what factors are implied by people that may contribute to the reduction of academic stress.

According to a study, people who are high in self-compassion use cognitive restructuring

i.e., changing the way they perceive an event, to alter the view of a negative event and also treat themselves with more kindness. They do not use escape or avoidance as a defense mechanism but there are no specific methods of coping outlined in the research (Allen & Leary, 2010). This study shows that the subscales of self-appreciation can be used to significantly predict a lowered academic stress as an outcome. This implies that with the exposure to stressful events, appreciating themselves and their efforts no matter what the outcome was, allowed people to make room for themselves and eventually reduce their academic stress. This is further confirmed through another study conducted by Neff et al. (2007), where results have shown that self-compassion promotes emotion-focused coping strategies and is negatively related to avoidance coping strategies, which are the real cause of stress. Adding onto this literature, a study showed that self-compassion simultaneously worked to reduce academic stress while increasing motivational factors. These intrinsic factors of motivation act as mediators for academic stress and its reduction due to high self-compassion (Kord & Pashasharifi, 2015). Moreover, stressful events are a normal part of educational settings. Self-compassion for oneself reduces the negative perception of these events. The increase in particular components of self-compassion, particularly appreciation and kindness result in a decrease in the perceived academic stress (Shirmohammadi et al., 2021). There was a significant positive correlation between academic motivation and academic stress. It is necessary to understand that academic stress causes burnout and emotional upheaval. This disturbance may result in the inability to focus on the work. In return, academic motivation and academic performance would be lowered.

Conclusion

To conclude the research, it has been identified that self-compassion strategies are effective but do not show a significant change from pre-test to post-test. In addition, they do not correlate significantly to academic stress and academic motivation. More studies conducted in Pakistan on these factors might unveil some differences due to the sample or other confounding variables affecting the results of the research. Academic motivation has been seen to increase in post-test with a decrease in the academic stress. The reason for these changes cannot be directly related to self-compassion interventions.

Implications

When considering in general, understanding how self-compassion can help students could lead to better overall academic performance, general functioning, and mental health outcomes for students.

Pakistani students have faced a lot of challenges during the pandemic because of the educational system itself. There is a need to equip the students with methods and techniques that would help them cope with the stressors and adversities of daily life.

The present study can be used to further investigate the various self-compassion components in Pakistani students and whether it can help not only improve motivation and decrease stress. Self-compassionate teachings will also enhance the mental resilience of the students. There is a huge gap in the research that can be filled in.

Limitations & Recommendations

The study was conducted on a small sample of university students. These findings may not be similar in teenagers. These techniques need to be worked on in order to have students be equipped to face life well before they step out in the practical domain.

It is also necessary to understand the differences in gender for academic motivation in a variety of Pakistani cities,

outside of Karachi and in people belonging to a wide range of social strata.

Follow up sessions should be added to check-in with the students to observe lasting effects of self-compassion interventions. The pandemic may have the scope of this study and there were many confounding factors in this study that were not controlled for. The increase in academic motivation could be due to a faster adjustment to the situation during the time the intervention was being applied gradually.

Contribution of Authors

Waleed Shahid: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing- Original Draft
Sheeba Farhan: Supervision, Writing- Reviewing & Editing

Conflict of Interest

There is no conflict of interest declared by authors.

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References

- AlAteeq, D. A., Aljhani, S., & AlEesa, D. (2020). Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA. *Journal of Taibah University Medical Sciences*, 15(5), 398-403.
- Allen, A. B., & Leary, M. R. (2010). Self-Compassion, stress, and coping. *Social and Personality Psychology Compass*, 4(2), 107-118.
- Allen, E., & Seaman, J. (2007). *Online nation: five years of growth in online learning*. Needham, MA: The Sloan Consortium.
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15, 289– 303.

- Bassett, R. M., & Arnhold, N. (2020, April 30). COVID-19's immense impact on equity in tertiary education. World Bank Blogs. <https://blogs.worldbank.org/education/covid-19s-immense-impact-equity-tertiary-education>. Last accessed 07/10/2020
- Beck, C. T. (2004). Post-traumatic stress disorder due to childbirth: the aftermath. *Nursing Research*, 53(4), 216-224.
- Bernheim, A., Mei, X., Huang, M., Yang, Y., Fayad, Z. A., Zhang, N., Diao, K., Lin, B., Zhu, X., Li, K., Li, S., Shan, H., Jacobi, A., & Chung, M. (2020). Chest CT Findings in Coronavirus Disease-19 (COVID-19): Relationship to Duration of Infection. *Radiology*, 295(3), 200463. <https://doi.org/10.1148/radiol.2020200463>
- Breines, J. G., & Chen, S. (2012). Self-compassion increases self-improvement motivation. *Personality & Social Psychology Bulletin*, XX(X), 1-11. DOI: 10.1177/0146167212445599
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>.
- Chen, B. H., & Chiou, H. H. (2012). Learning style, sense of community and learning effectiveness in hybrid learning environment. *Interactive Learning Environments*, 22(4), 485–496. <https://doi.org/10.1080/10494820.2012.680971>

- Elsalem, L., Al-Azzam, N., Jum'ah, A. A., Obeidat, N., Sindiani, A. M., & Kheirallah, K. A. (2020). Stress and behavioral changes with remote E-exams during the Covid-19 pandemic: A cross-sectional study among undergraduates of medical sciences. *Annals of Medicine and Surgery*, *60*, 271–279. <https://doi.org/10.1016/j.amsu.2020.10.058>
- Gnaur, D., Hindhede, A. L., & Andersen, V. H. (2020, October). Towards hybrid learning in higher education in the wake of the COVID-19 crisis. In *European Conference on e-Learning* (pp. 205-XV). Academic Conferences International Limited.
- Grant, H., & Dweck, C. S. (2003). Clarifying Achievement Goals and Their Impact. *Journal of Personality and Social Psychology*, *85*(3), 541–553. <https://doi.org/10.1037/0022-3514.85.3.541>
- Gul, R., & Khilji, G. (2020). *Challenges and Possibilities to Online Education amid COVID-19 Outbreak in Balochistan, Pakistan*. Unpublished manuscript.
- Heo, J., & Han, S. (2017). Effects of motivation, academic stress and age in predicting self-directed learning readiness (SDLR): Focused on online college students. *Education and Information Technologies*, *23*(1), 61–71. <https://doi.org/10.1007/s10639-017-9585-2>
- Husky, M. M., Kovess-Masfety, V., & Swendsen, J. D. (2020). Stress and anxiety among university students in France during Covid-19 mandatory confinement. *Comprehensive Psychiatry*, *102*, 152191. <https://doi.org/10.1016/j.comppsy.2020.152191>
- Hwang, A. (2018). Online and Hybrid Learning. *Journal of Management Education*, *42*(4), 557–563. <https://doi.org/10.1177/1052562918777550>
- Iskender, M. (2009). The relationship between self-compassion, self-efficacy, and control beliefs about learning in Turkish university students. *Social Behavior and Personality*, *37*, 711–720.
- Koerner, F. A., & Mary Anne, F. (2002). Understanding family communication patterns and family functioning: The roles of conversation orientation and conformity orientation. *Annals of the International Communication Association*, *26*(1), 36-65.
- Kord, B., & Pashasharifi, H. (2015). The Role of self-compassion and academic stress: Mediated intrinsic and extrinsic motivation. *Journal of Educational Psychology Studies*, *12*(21), 127-144.
- Kotera, Y., Adhikari, P., & Van Gordon, W. (2018). Motivation types and mental health of UK hospitality workers. *International Journal of Mental Health and Addiction*, *16*, 751–763.
- Lee, K.J., & Lee, S.M. (2020). The role of self-compassion in the academic stress model. *Current Psychology*. <https://doi.org/10.1007/s12144-020-00843-9>
- Lestari, S. D., LEON, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and consequences of innovation and business strategy on performance and competitive advantage of SMEs. *The Journal of Asian Finance, Economics and Business*, *7*(6), 365-378.
- Mahdy, M. A. A. (2020). The Impact of COVID-19 Pandemic on the Academic Performance of Veterinary

- Medical Students. *Frontiers in Veterinary Science*, 7. <https://doi.org/10.3389/fvets.2020.594261>
- Manavipour, D., & Saeedian, Y. (2016). The role of self-compassion and control belief about learning in university students' self-efficacy. *Journal of Contextual Behavioral Science*, 5(2), 121-126.
- Marinoni, G., van't Land, H., & Jensen, T. (2020). The Impact of COVID-19 On Higher Education Around the World. International Association of Universities Global Survey Report. https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_h_e_survey_report_final_may_2020.pdf. Last accessed 07/10/2020
- Masson, A., MacNeill, A., Murphy, C., & Ross, V. (2008). *The Hybrid Learning Model - A Framework for Teaching and Learning Practice*. Learning & Technology Library (LearnTechLib). <https://www.learntechlib.org/p/45165/>.
- Moallem, M. (2007). Accommodating Individual Differences in the Design of Online Learning Environments. *Journal of Research on Technology in Education*, 40(2), 217-245. <https://doi.org/10.1080/15391523.2007.10782506>
- Monika (2020). Psychological Impact of COVID-19 on University Students. *International Journal of Engineering Applied Sciences and Technology*, 5(5), 298-301. <https://doi.org/10.33564/ijeast.2020.v05i05.051>
- Mukhtar, M., Sudarmi, S., Wahyudi, M., & Burmansah, B. (2020). The Information System Development Based on Knowledge Management in Higher Education Institution. *International Journal of Higher Education*, 9(3), 98-108.
- Neff, K. (2003). Self-Compassion: An Alternative Conceptualization of a Healthy Attitude Toward Oneself. *Self and Identity*, 2(2), 85-101. <https://doi.org/10.1080/15298860309032>
- Neff, K., & Germer, C. (2018). *The Mindful Self-Compassion Workbook: A Proven Way to Accept Yourself, Build Inner Strength, and Thrive*. Guilford Publications.
- Neff, K. D., Hsieh, Y. P., & Dejitterat, K. (2005). Self-compassion, Achievement Goals, and Coping with Academic Failure. *Self and Identity*, 4(3), 263-287. <https://doi.org/10.1080/13576500444000317>
- Neff, K. D., & Germer, C. K. (2012). A Pilot Study and Randomized Controlled Trial of the Mindful Self-Compassion Program. *Journal of Clinical Psychology*, 69(1), 28-44. <https://doi.org/10.1002/jclp.21923>
- Neff, K. D., Rude, S. S., & Kirkpatrick, K. (2007). An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality*, 41, 908-916.
- Ngiam, J., Khosla, A., Kim, M., Nam, J., Lee, H., & Ng, A. Y. (2011, January). Multimodal deep learning. In *Proceedings of the 28th International Conference on Machine Learning*, WA, USA.
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical*

- Psychology & Psychotherapy*, 18(3), 250-255.
- Rafique, G. M., Mahmood, K., Warraich, N. F., & Rehman, S. U. (2021). Readiness for Online Learning during COVID-19 pandemic: A survey of Pakistani LIS students. *The Journal of Academic Librarianship*, 47(3), 102346.
- Rajendran, R., & Kaliappan, K. V. (1990). Efficacy of behavioral program in managing the academic stress and improving academic performance. *Journal of Personality and Clinical Studies*, 6(2), 193–196.
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Saadatmand, Z., & Ghaderi, Z. (2015). Extra-analysis of the educational content methods, thinking and philosophy education, and family education in the development of critical thinking education in primary education in national studies. *Academie Royale Des Sciences D Outre-Mer Bulletin Des Seances*, 4(3), 140-146.
- Salman, M., Asif, N., Mustafa, Z. U., Khan, T. M., Shehzadi, N., Hussain, K., Tahir, H., Raza, M. H., & Khan, M. T. (2020). *Psychological Impact of COVID-19 on Pakistani University Students and How They Are Coping*. Unpublished Manuscript. <https://doi.org/10.1101/2020.05.21.20108647>
- Sharma, A. (2020). Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2): a global pandemic and treatment strategies. *International Journal of Antimicrobial Agents*, 56(2), 106054-106054. DOI: 10.1016/j.ijantimicag.2020.106054
- Shimabukuro, T. T., Cole, M., & Su, J. R. (2021). Reports of anaphylaxis after receipt of mRNA COVID-19 vaccines in the US—December 14, 2020-January 18, 2021. *Journal of American Medical Association*, 325(11), 1101-1102.
- Shirmohammadi, M., Zolfaghari, M., Shahhosseini, H., Mokhtaran, M., & Mohebbi, S. Z. (2021). Development and evaluation of a gamified smart phone mobile health application for oral health promotion in early childhood: a randomized controlled trial. *Biomedical Central Oral Health*, 21(1), 1-9.
- Snart, J. A. (2010). *Hybrid Learning: The Perils and Promise of Blending Online and Face-to-Face Instruction in Higher Education: The Perils and Promise of Blending Online and Face-to-Face Instruction in Higher Education*. ABC-CLIO Corporate.
- Tabish, S. A. (2020). COVID-19 pandemic: Emerging perspectives and future trends. *Journal of Public Health Research*, 9(1), 1786-1786. DOI: 10.4081/jphr.2020.1786
- Tang, W., Hu, T., Hu, B., Jin, C., Wang, G., Xie, C., Chen, S., Xu, J., 2020. Prevalence and correlates of PTSD and depressive symptoms one month after the outbreak of the COVID-19 epidemic in a sample of home-quarantined Chinese university students. *Journal of Affective Disorders*, 274, 1–7. <https://doi.org/10.1016/j.jad.2020.05.009>.
- Ullah, R., Richardson, J. T., Malik, R. A., & Farooq, S. (2016). Perceptions of the learning environment, learning preferences, and approaches to studying among medical students in

- Pakistan. *Studies in Educational Evaluation*, 50, 62–70. <https://doi.org/10.1016/j.stueduc.2016.07.001>
- Usher, E. L., & Morris, D. B. (2012). Academic Motivation. *Encyclopedia of the Sciences of Learning*. 36–39. https://doi.org/10.1007/978-1-4419-1428-6_834
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52(4), 1003-1017.
- Williams, J. G., Stark, S. K., & Foster, E. E. (2008). Start today or the very last day? The relationships among self-compassion, motivation, and procrastination. *American Journal of Psychological Research*, 4, 37– 44.
- Yang, Y., Peng, F., Wang, R., Guan, K., Jiang, T., Xu, G., & Chang, C. (2020). The deadly coronaviruses: The 2003 SARS pandemic and the 2020 novel coronavirus epidemic in China. *Journal of Autoimmunity*, 109, 102434.
- Zaccoletti, S., Camacho, A., Correia, N., Aguiar, C., Mason, L., Alves, R. A., & Daniel, J. R. (2020). Parents' perceptions of student academic motivation during the COVID-19 lockdown: A cross-country comparison. *Frontiers in Psychology*, 11, 592670.