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The role of classroom engagement on academic grit, intolerance to uncertainty and well-being among school students during the second wave of the COVID-19 pandemic in India

Jacqueline Kareem[1] [ID] | Shinto Thomas[2] | Aneesh Kumar P.[2] [ID] |
Meera Neelakantan[2]

[1]School of Education, Christ University, Bangalore, India

[2]Department of Psychology, Christ University, Bangalore, India

Correspondence
Jacqueline Kareem, School of Education, CHRIST (Deemed to be University), Bangalore, India.
Email: jacqueline.loleta@christuniversity.in

Abstract

The forced changes and disruptions in educational systems and learning experiences due to the pandemic has impacted students' mental health and well-being. The present study aims to understand the effects of the determinants of well-being on students in India during the second wave (April to August 2021) of the COVID-19 pandemic. The determinants of well-being in this study are academic grit, intolerance to uncertainty and students' engagement in an online learning environment. In this study, well-being is characterized as students' confidence and satisfaction in an online learning and pandemic environment. The data collected from 1174 students (12–19 years) from various states, using standardized tools, were analyzed to find out about the mediating effect of students' engagement on the relationship between academic grit and well-being, and between intolerance to uncertainty and well-being. Further, the model fit analysis of the determinants of well-being is explored. The paper reports that students' classroom engagement does mediate in the path of academic grit and well-being, and in the path of intolerance to uncertainty and well-being. It also evidence the model fit of the influence of the determinants of well-being on that of

school students during the second wave of the COVID-19 pandemic. The study also draws implications and suggestions for educators using the current model of students' well-being.

KEYWORDS
academic grit, India, intolerance to uncertainty, mediation, pandemic, student engagement, well-being

1 | INTRODUCTION

The global pandemic has taken a toll on the educational system and it is pertinent to notice its impact on students' mental health. Though the initial stages involved transitioning from offline to online instruction, through the second wave, students have been acclimatized to the online mode. Hence, it is crucial to understand the indicators and determinants of well-being amidst the transitions. There has been a rise in mental health conditions during the pandemic (Marques de Miranda et al., 2020). Students' mental health suffered drastically due to a lack of peer and social interactions. Social distancing led to the lack of ample interactions, affecting cognitive development at all stages of growth.

1.1 | Adolescent students' mental health and well-being during COVID-19

It is important to consider how adolescent students are impacted by global disasters, stressors, or any major transitions (Schwartz et al., 2021). Existing literature indicates increased levels of anxiety, depression, fatigue, boredom, and worsening of existing psychiatric conditions. American Psychological Association (APA, 2020), reports that 81% of adolescents (aged 13–17 years) experience significantly more stress. A cross-sectional study by Asanov et al. (2021) in Ecuador on 1500 adolescent students indicated that 16% of students had major depression. Similar evidence was found by another study in Greece, which reported a significant rise in anxiety and depression after 1 month of lockdown (Giannopoulou et al., 2021). With school closures and family confinement, it is difficult for students to interact with peers, reducing opportunities for peer and academic engagement (Singh et al., 2020). There has been research on the challenges of online learning and a need to delve deeper into how students thrived and flourished during the pandemic (Camitan & Bajin, 2021). It is a common perception that students find face-to-face interaction more desirable than online learning, but how they cope in today's difficult situations is also significant. Hence, it is equally pertinent to understand the indicators of well-being of students during the pandemic, especially during the second wave.

Well-being encompasses myriad factors that predict and fuel fulfillment and good physical health. Students' well-being is considered to be a predictor of student outcomes, such as academic attainment (El Ansari et al., 2018) and also as an outcome in itself, which is contributed by many other factors (Kim & Kim, 2017). Seligman (2011) argued that even in difficult situations, human beings are motivated to thrive and not just survive. It is important to note that while there is a common perception among many students that remote learning is less desirable compared to its face-to-face counterpart, its effect on students differs. While there are those who give in when faced with challenges, there are also those who persevere despite difficulties. According to Jose et al. (2012), well-being is considered essential for positive, psychological functioning, and experience and encompasses four constructs—namely life satisfaction, positive affect, confidence, and future orientation. Diener (2000) reports that life satisfaction and positive affect devoid of negative affect contributes to subjective well-being. Hence life satisfaction is perceived to be a cognitive, global appraisal of one's life and

positive affect indicates the frequency of feelings of pleasantness. Confidence and future orientation comprise of a sense of positive self-regard and self-worth with respect to the present and future (Lerner et al., 2000; Roth & Brooks-Gunn, 2003).

1.2 | Academic grit

One of the primary factors that determine students' well-being is grit. Duckworth et al. (2007) defines grit as the ability to persist in the face of struggle and encompasses two elements—an interesting one, capturing the ability to maintain interest, and an effort element, which captures the broader concept of persistence and effort (Duckworth et al., 2007; Duckworth & Quinn, 2009). Students with higher levels of grit are more likely to achieve better academic goals and productivity. They have been found to be more engaged in academic and peer interactions in an educational setting. It is known that students who cope well with academic goals have better engagement, which contributes to better well-being. Hodge et al. (2017) found that students' engagement partially mediates the relationship between grit and academic productivity. The study also suggests that both grit and engagement predict academic productivity. With greater levels of grit, students show deeper interests in learning and thus engage better in academic and nonacademic interactions.

Successful learners exhibit grit (Duckworth, 2016) and it comprises both social and emotional components that help to make learners persistent (Brooks & Seipel, 2018). It is pertinent to improve grit among student learners, because it is one of the most significant predictors of academic success. Teachers and school culture play an important role in developing character and grit among students (Bashant, 2014). Certain practices for improving grit are primarily focused on character building, which encompasses skills like active listening, goal-setting, and building meaningful relationships (Perkins-Gough, 2013). Researchers have found that teachers could use common vocabulary focusing on character strengths to enhance grit among students (Bashant, 2014). In conclusion, it can be said that the quality of interactions and interventions are crucial for developing grit (Pappano, 2013).

1.3 | Intolerance to uncertainty

The concern about the mental health of school-going students has led to many researchers trying to understand the lasting and profound impact of COVID-19.

In the context of the pandemic and the associated uncertainty, the interactions between grit, engagement, and well-being may be dependent on students' ability to cope with ambiguity. COVID-related uncertainty has been found to be associated with negative emotions in adolescents (Q. Li et al., 2021). Intolerance of uncertainty (IU) describes an individual's dispositional incapacity to endure an aversive response triggered by the perceived absence of salient, key, or sufficient information and is sustained by an associated perception of uncertainty (Carleton, 2016). With higher IU, adolescents tend to have higher risk perception, thus affecting their overall well-being (Ladouceur et al., 2000). Social exclusion is found to be mediating the relationship between IU and negative symptoms (Q. Li et al., 2021). With students away from offline classes, a predisposition to IU may negatively impact well-being. The association between IU and well-being has been explored in varied groups of people. However, the literature on Indian school-going adolescents is still nascent.

1.4 | Students' engagement

Engagement is believed to be crucial for academic success and learning. There are myriad ways of defining engagement. Students' engagement is conceptualized through a multidimensional model with emotional, cognitive, and behavioral components (Doğan, 2014). These dimensions aid the study of engagement more holistically.

Emotional engagement refers to students' interests and reactions in the classroom (Skinner et al., 1990). Cognitive engagement refers to dedication for learning and the ability to strategically plan the learning process (Doğan, 2015). The behavioral dimension encompasses the activities in the classroom, including active class participation and volunteering (Doğan, 2015). Evidence indicates that even with high levels of motivation and self-efficacy, academic success is also dependent on how actively students engage in learning (Dörnyei, 2000). Additionally, studies have indicated that students' engagement contributes to academic success (Wang & Holcombe, 2010) and has a positive impact on students' well-being (Creed et al., 2003)

1.5 | Present study

With the closing down of schools in March 2020 and with the online mode continuing through the second wave in India, it is understood that students have been acclimated to the change in the mode of education. However, the studies on the prevalence of mental health disorders are comparatively higher than inquiries on how students thrived in the pandemic through online education. Due to lack of peer interactions, face-to-face classroom engagement, and family confinement, it can be assumed that students' well-being would be dependent on myriad, intrinsic factors in contrast to traditional contexts. Academic grit and intolerance uncertainty is found to be impacting students' well-being during the pandemic (Jumat et al., 2020). There has been evidence that indicates the challenges of online learning. However, there is a need to delve deeper into how students thrived and flourished during the pandemic (Camitan & Bajin, 2021). It is a common perception that students find face-to-face interaction more desirable than online learning. However, how they cope in the undeniably difficult situation is important. With the aforementioned literature on the indicators of the well-being of students, it is important to understand the role of academic grit, tolerance to uncertainty, and students' engagement on well-being. Hence, the present study delves into the inquiry of understanding the mediating role of students' engagement in the relationship between academic grit and intolerance to uncertainty with students' well-being. The study's hypotheses are given below:

Hypothesis 1 – *There is a mediating role of the student's engagement in the relationship between academic grit and students' well-being.*

Hypothesis 2 – *There is a mediating role of the student's engagement in the relationship between intolerance to uncertainty and students' well-being.*

2 | METHOD

The study adopted a correlational design. It examined the mediating role of students' engagement in two relationships (i) between academic grit and students' well-being (ii) between intolerance to uncertainty and students' well-being during the second wave of the pandemic. Furthermore, the study tested a conceptual model built on academic grit, intolerance to uncertainty, students' engagement, and students' well-being. Notably, academic grit and intolerance to uncertainty have been designed as independent variables, while students' well-being has been designed as a dependent variable, and students' engagement has been designed as the mediator.

2.1 | Sample and procedure

The participants were students in privately funded schools across India. Data were collected from March 2021 from students who fulfilled two inclusion criteria: (1) Students should be presently studying in grades 6–12 or they should have completed school in the past 6 months and (2) they should have had the experience of online classes

during the pandemic. The unified district information system for education plus (UDISE+) report of 2019–2020 showed that there are 2.49 crore students in grades 6–12 in private schools. To determine adequate sample size, the sample size calculator was used, which indicated that the 99% confidence level for a sample of 666 is adequate. Hence, a study of 1174 was considered adequate and the data was used for further analysis. A convenient sampling method was adopted to collect data. Details of the sample profile are given in Table 1.

TABLE 1 Sample profile

Categories	Count	Percentage
Class/standard/grade		
6 Std	79	6.7
7 Std	41	3.5
8 Std	162	13.8
9 Std	101	8.6
10 Std	168	14.3
11 Std	61	5.2
12 Std	232	19.8
1-year UG	330	28.1
Gender		
Male	401	34.2
Female	728	62.0
Others	15	1.3
Prefer not to say	30	2.6
Religion		
Hinduism	741	63.1
Islam	234	19.9
Christianity	91	7.8
Others	27	2.3
Prefer not to say	60	5.1
Atheist	21	1.8
Family type		
Joint family	298	25.4
Nuclear family	876	74.6
Place of stay in last 1 year		
Staying with family	1131	96.3
Staying in hostels or PG	43	3.7
Place of residence		
Rural	227	19.3

(Continues)

TABLE 1 (Continued)

Categories	Count	Percentage
Semiurban	159	13.5
Urban	521	44.4
Metropolitan city	267	22.7
Number of siblings		
0–1	957	81.5
2–3	141	12.0
More than 3	76	6.5
Father's occupation		
Self-employed	498	42.4
Government employed	163	13.9
Private sector	424	36.1
Unemployed	67	5.7
Homemaker	22	1.9
Mother's occupation		
Self-employed	141	12.0
Government employed	94	8.0
Private sector	201	17.1
Unemployed	47	4.0
Homemaker	691	58.9
Received online classes before COVID-19		
No	974	83.0
Yes	200	17.0

The research data was collected during the second wave of the pandemic (March to August 2021) when students continued to have online classes from 2020. The research protocols were reviewed and approved by the institutional review board at the authors' institution. Further, consent forms were obtained from the participants, and the data collection process began on a voluntary basis. The survey instrument was formulated using REDCAP software, which took approximately 10 min on average to be completed. There were 1572 student participants in the survey, which was sent through email. Responses with missing values and outliers were discarded and 1174 responses were included in the data analysis.

Data were subjected to descriptive and inferential tests using SPSS (v 20) and AMOS (v 22).

2.2 | Measurement tools

The data collection tool comprised of nine sections: consent for participation, demographic details, participants' profile, academic grit scale, students' classroom engagement scale, intolerance to uncertainty scale, and students' well-being scale.

2.2.1 | Academic grit scale

It is a 12-item scale developed by Clark and Malecki (2019) and each item is rated on a 5-point Likert scale ranging from 1 (not like me at all) to 5 (very much like me).

2.2.2 | IU scale

It is a 12-item scale developed by Carleton et al. (2007) to measure the IU. The scale measures prospective anxiety (seven items) and inhibitory anxiety (five items). The responses of the scale vary from 1 (not at all characteristic of me) to 5 (entirely characteristic of me).

2.2.3 | Students' engagement scale

The scale is an adaptation of the Students' engagement scale developed by Doğan (2014). The original scale has three dimensions (emotional, cognitive, and behavioral engagement). But in the current study, we are using the adaptation of agentic engagement (five items) and emotional engagement (five items). They are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

2.2.4 | Students' well-being scale

The current study measures students' well-being, adopting the model used in the study by Jose et al. (2012). Well-being is measured in terms of satisfaction with life (three items) and confidence (four items). The items are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To establish the reliability of the scales, Cronbach's α values were computed and reported in Table 2. All the scales have passed the reliability test as α values < .70.

TABLE 2 Means, standard deviation, Cronbach's α, and Pearson's coefficient of correlation.

	Ag	AE	EE	PA	IA	Cf	SWL
Ag	--						
AE	0.429**	--					
EE	0.414**	0.570**	--				
PA	−0.169**	−0.077**	−0.111**	--			
IA	−0.378**	−0.234**	−0.226**	0.694**	--		
Cf	0.442**	0.376**	0.436**	−0.113**	−0.303**	--	
SWL	0.326**	0.281**	0.377**	−0.122**	−0.236**	0.577**	--
Mean	2.823	2.746	2.168	2.920	2.769	3.894	3.681
SD	0.599	1.008	0.876	0.736	0.871	0.868	0.957
Cronbach's α	.696	.882	.846	.710	.746	.859	.762

Abbreviations: Ag, academic grit; AE, agentic engagement; Cf, confidence; EE, emotional engagement; IA, inhibitory anxiety; PA, prospective anxiety; SWL, satisfaction with life.

**The significance level of all the values is $p < .01$.

3 | ANALYSIS AND RESULTS

In the data analysis, arithmetic means, standard deviation, Pearson's correlation, regression weights, both direct and indirect, and total effects for significance were used. Structural equation modeling (SEM) analysis was used to compute model fit indices to establish a conceptual model fit.

3.1 | Descriptives and correlation

The data were analyzed to determine whether they met the assumptions of normality and multicollinearity. To check the normality of data, skewness, and kurtosis values were computed. They are as follows: academic grit (0.168, 0.166), agentic engagement (0.016, −0.756), emotional engagement (0.644, −0.049), prospective anxiety (0.096, −0.088), inhibitory anxiety (0.242, −0.337), confidence (−0.903, 0.817), and satisfaction with life (−0.685, 0.023). Tabachnick and Fidell (2019) considered the skewness and kurtosis values within ±1.5 limit for normal distribution. Hence, all the data considered have passed the tests of normality. Furthermore, to check the assumption of multicollinearity, a linear regression test was conducted, wherein the variance inflation factor (VIF) values of all independent variables were as follows: academic grit (1.435), agentic engagement (1.601), emotional engagement (1.566), prospective anxiety (1.977), and inhibitory anxiety (2.256), which interestingly was <10, reflecting thereby the permissible values, while indicating that the multicollinearity assumption was met.

Further, the means and standard deviation were computed for the study variables and detailed on Table 2. All the mean values were above average values. Pearson's correlation analysis was used to determine the degree and direction of the relationship between academic grit, students' classroom engagement, intolerance to uncertainty, and students' well-being. From Table 2, it is evident that there are significant low to moderate correlations between the study variables.

3.2 | Mediation analysis

SEM was used to determine whether the independent variables were a significant predictor of the dependent variable, and whether there was a mediating effect of the mediator in the prediction path. Before proceeding with the mediation analysis, the correlation between all variables of the study was reported (Table 2). The correlation values have satisfied the assumption that the variables are significantly correlated. Structural equation modeling using maximum-likelihood estimates (MLE) was adopted to test the mediation hypotheses. The most common SEM estimation procedure is MLE, a procedure that iteratively improves parameter estimates to minimize specified fit function. The MLE selects the set of values of the model parameters for a fixed set of data and underlying statistical model that maximizes the likelihood function. To analyze the mediation effect, bias correction percentile method was used to calculate the direct, indirect, and total effects (Figures 1–3).

3.2.1 | Hypothesis 1: Student engagement mediates between academic grit and students' well-being

The goodness-of-fit index (GFI) of the model examining the mediator's role of students' engagement between academic grit and students' well-being is as follows: χ^2/df is 5.642 ($p = .001$), lower than 6, which indicates a moderate fit. The root mean square error approximation (RMSEA) is 0.063, which is in the range of 0.05–0.08, indicating thereby a good fit. The normed fit index (NFI) is 0.990, the comparative fit index (CFI) is 0.992, and GFI is 0.994, which are all in the range of 0.90–0.99, reflecting thereby a good fit (Tabachnick & Fidell, 2019). Thus, it may
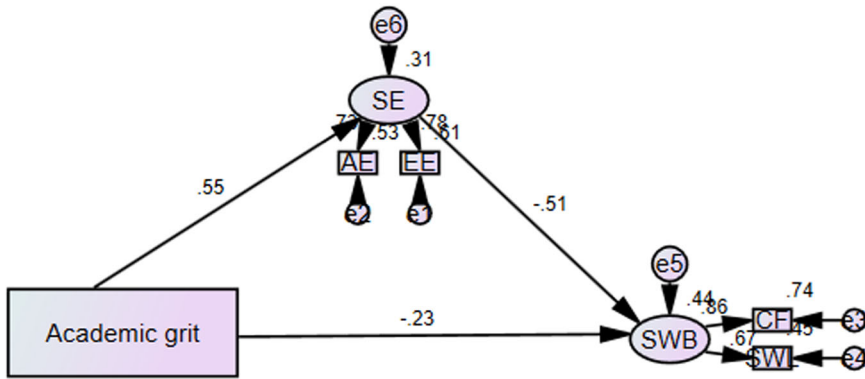
FIGURE 1 Path diagram of the mediator role of student engagement between academic grit and Students' well-being.
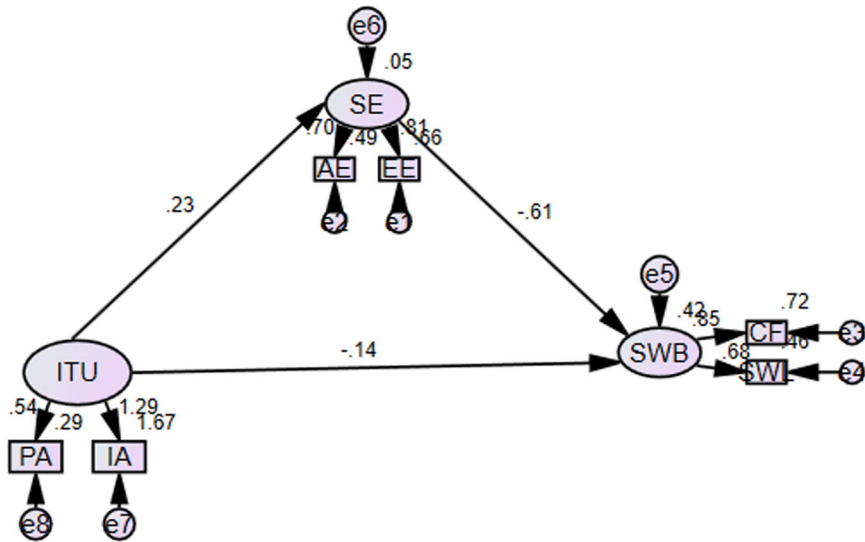

FIGURE 2 Path diagram of the mediator's role of the students' engagement between intolerance to uncertainty and students' well-being.

be determined that the created model does have a good fit and that it can be used for testing the mediation. The analysis results of the direct and indirect effect and the total effect of the mediator on the dependent variable have been shown in Table 3. All the values in the table are standardized β coefficients.

From Table 3, it is clear that the prediction of academic grit affects student's engagement significantly (β = .554, $p < .01$), prediction of academic grit affects students' well-being significantly (β = .226, $p < .01$) and the prediction of students' engagement affects students' well-being significantly (β = .510, $p < .01$). To look at the mediating effect of students' engagement, both the direct and indirect effects were computed. It is evident from the table that the direct path coefficient of 0.226 is significant. When the mediator is added into the model, the indirect effect has increased to 0.283 and is significant. The total effect of 0.509 is significant. Hence, there is partial mediation effect of a student's engagement on the relationship between academic grit and student's well-being. Hypothesis 1 is accepted and it is concluded that a student's engagement does mediate between academic grit and a student's well-being.
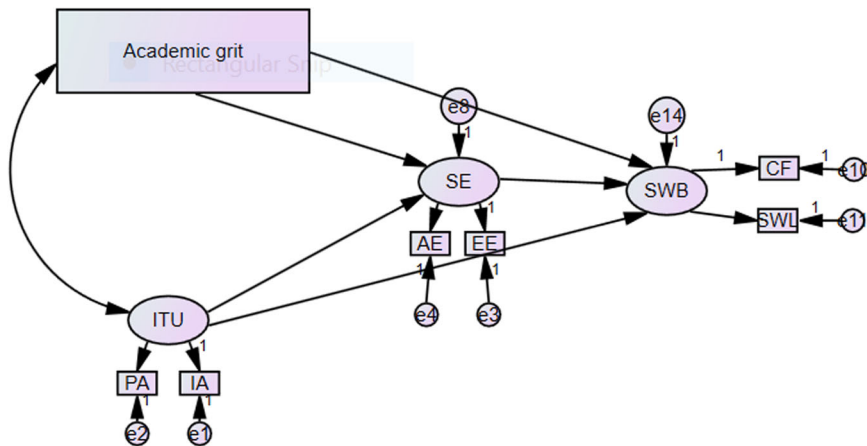
FIGURE 3 Conceptual model of academic grit, students' engagement, intolerance to uncertainty, and students' well-being.

TABLE 3 Standardized coefficients of mediator role of student engagement between academic grit and Student wellbeing.

Variables	β	Direct effect	Indirect effect	Total effect	Decision
Student engagement < academic grit	.554**	0.226**	0.283**	0.509**	Partial mediation
Student wellbeing < academic grit	.226**				
Student wellbeing < student engagement	.510**				

*The significance level of all the values is $p < .05$.

**The significance level of all the values is $p < .01$.

3.2.2 | Hypothesis 2: Students' engagement mediates between intolerance to uncertainty and students' well-being

The GFI of the model examining the mediator's role of students' engagement between academic grit and students' well-being is as follows: χ^2/df is 3.194 ($p = .001$), lower than 6, which indicates a moderate fit. The RMSEA is .043, indicating thereby a good fit; NFI is 0.991, CFI is 0.999, GFI is 0.994, which are all in the range of 0.90–0.99, reflecting thereby good fit (Tabachnick & Fidell, 2019). Thus, it may be determined that the created model does have a good fit, and that it can be used for testing the mediation. The analysis results of the direct, indirect, and total effect of the mediator on the dependent variable have been shown in Table 4. All the values in the table are standardized β coefficients.

From Table 4, it is clear that the prediction of intolerance to uncertainty affects students' engagement significantly ($\beta = -.228$, $p < .01$), prediction of intolerance to uncertainty affects students' well-being significantly ($\beta = -.137$, $p < .01$) and the prediction of students' engagement affects students' well-being significantly ($\beta = .605$, $p < .01$). To look at the mediating effect of students' engagement, both the direct and indirect effects were computed. It is evident from Table 4 that the direct path coefficient of −0.137 is significant. When the mediator is added to the model, the indirect effect has increased to −0.138 and is significant and the total effect of −0.275 is significant, hence there is a partial mediation effect of students' engagement on the relationship between intolerance to uncertainty and students' well-being. Hypothesis 2 is accepted and it is concluded that students' engagement does mediate between intolerance to uncertainty and students' well-being.

TABLE 4 Standardized coefficients of the mediator's role of students' engagement between intolerance to uncertainty and students' well-being.

Variables	β	Direct effect	Indirect effect	Total effect	Decision
Student engagement < intolerance to uncertainty	−.228**	−.137**	−.138**	−.275**	Partial mediation
Student well-being < intolerance to uncertainty	−.137**				
Student well-being < student engagement	.605**				

**The significance level of all the values is $p < .01$.

3.3 | Testing the conceptual model

A conceptual model formulated by the authors was tested for a model fit in analysis of moment structures (AMOS). The following indices produced by AMOS were used in this study: the χ^2 statistic, which is the test of the absolute fit of the model, GFI, adjusted goodness of fit index (AGFI), NFI, CFI, TLI, parsimony ratio, p of Close Fit (PCLOSE), and the RMSEA.

The results indicated a good model fit: $\chi^2 = 26.469$ ($p = .002$); $\chi^2/df = 2.941$; GFI = 0.994; AGFI = 0.980; NFI = 0.990; CFI = 0.993; IFI = 0.993; RFI = 0.977; TLI = 0.985; PCLOSE = 0.781; and RMSEA = 0.041. Values for the GFI, AGFI, NFI, IFI, RFI, TLI, and CFI above the 0.90 level indicates a good fit. The RMSEA value of <0.05 was indicative of a good fit to confirm the hypothesised model. It is seen that the conceptual model is a good fit.

The results indicated that there was significant positive correlation between academic grit, students' engagement, and students' well-being as well as significant negative correlation between intolerance to uncertainty and academic grit, students' engagement, and students' well-being. There is a partial mediation of students' engagement in the path of academic grit and students' well-being. There is a partial mediation of students' engagement in the path of intolerance to uncertainty and students' well-being. There is a good model fit of the proposed conceptual model indicating significant direct and indirect effects of academic grit and intolerance to uncertainty on students' well-being.

4 | DISCUSSION

Existing research in the area of students' mental health demonstrates the positive relationship between academic grit and psychological well-being (Jelińska & Paradowski, 2021; Lan & Moscardino, 2019; J. Li & Li, 2021) and the negative relationship between intolerance to uncertainty and psychological well-being (Ulukan, 2021; Zhuo et al., 2021). Less is known about this relationship, mainly about the mediators, but these factors are important to understand why and how students' engagement improves students' well-being, although sometimes it does not.

Our major hypothesis posits that academic grit has a positive, indirect impact on students' well-being, while intolerance to uncertainty has a negative, indirect impact on students' well-being. Our data supported these hypotheses. Academic grit helps students to stay focused and constantly try to achieve their long-term goals. Here, students' well-being is not determined by academic grit alone, but by various other factors, such as student–teacher interaction, student–teacher connectedness, connectedness to the school, school environment, and peer relationships, which play a significant role (Deb et al., 2016; Govorova et al., 2020; Wulanyani & Vembriati, 2018). Grit, mainly academic grit as a personal characteristic or as a process influences well-being. The findings reveal that it has a direct and indirect impact on well-being. The indirect impact is through school connectivity. Academic grit and consistency in interest and perseverance in attaining long-term goals drive students to maintain better connectivity and engagement in school, even though those under study did not get any instant gratification or results. These characteristics can help students to continue their efforts in making meaning out of unpredicted and unfamiliar situations.

In the context of COVID-19, students' engagement is a key determinant of their well-being, as everything around the learning environment has undergone an unexpected, drastic change. Their interaction and involvement in the environment are key to their well-being. The grit helps them to maintain a deep interest and stay focused on the new environment, even though everything around them is constantly changing and new. That is, grit is helping students to have better engagement, which in turn results in less psychological distress and better well-being (Mackenzie & Abdulrazaq, 2021). Friendly and healthy communication, a friendly environment in school mainly with teachers, peers, and others, and a supportive environment are key elements that contribute to students' well-being. Lack of a supportive environment, mainly in the family and school would have a detrimental impact on well-being (Lombardi et al., 2019). Together with grit, the school climate and family environment are also very important.

The second part of the hypothesis states that intolerance to uncertainty has a negative, indirect impact on students' well-being. It means that students' capacity to deal with unpredictable situations or readiness to embrace chaos and sail through it also determines their well-being (Dong & Ni, 2020; Osamika et al., 2021). In a scenario like the current one, students' readiness to embrace change is key to understanding their well-being. Students' resistance and adaptive capacity to unexpected change determine how well they engage in the new environment and individuals with higher resistance and less adaptive skills would have poor engagement in the new environment, which would, in turn, result in poor well-being (Valsaraj & Nayak, 2017). That means intolerance to uncertainty has a negative, indirect impact on students' well-being. The context of COVID-19 remains the same throughout the study and the findings can be generalized to developing countries, where there are similarities in schooling systems.

5 | CONCLUSION

The present study shows that students' engagement mediates the path of academic grit and tolerance of uncertainty to students' well-being. Being engaged in the learning process helps students to get opportunities to be self-aware as well as become aware of situations around them. A character's strengths can act as protective factors to buffer stress. Effectively engaging students in meaningful tasks and providing support would enhance their well-being in challenging situations such as the pandemic.

The recommendations from the study are schools and educational institutions should understand the relevance of the personal strengths of students. Strategies aimed at improving adaptive skills, and character strengths (grit) would help students to improve their well-being (Ocharo & Hasegawa, 2016; Panesi et al., 2020). Grit interventions can enhance students' academic and behavioral outcomes (Hwang & Nam, 2021). Students with higher levels of grit may take up more challenging tasks (Alan et al., 2019) and experience better well-being (Bono et al., 2020). The study recommends developing strategies and programs focusing on grit and students' engagement. School counselors, administrators, and mental health professionals should focus on strength-based interventions in schools (Thomas et al., 2018). Having a positive classroom environment can foster well-being among students and become an antidote to adverse experiences (Paul & Kumar, 2021).

The limitations of the study are that it does not look into the interaction between academic grit and intolerance to uncertainty or students' well-being. The data were collected online and hence risks of self-report measures may have impacted the study. The data does not represent the experiences of students who were not able to access online education. It also does not explore the role of the socioeconomic status, cultural factors, and demographic variables on the mode.

ORCID

Jacqueline Kareem [iD] https://orcid.org/0000-0002-1759-5827
Aneesh Kumar P. [iD] https://orcid.org/0000-0003-1081-7201

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