

Direct, Indirect and Conditional Indirect Effects of Communication and Career Anxiety on Perceived Stress during Interviews in University Students – A PLS SEM Model

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Abstract

By exploring the connections between communication and career anxiety and perceived stress, the current study contributes to a more nuanced appreciation of the university students' emotional and psychological frame of mind during interviews. The study evaluates the direct, indirect and conditional indirect effect of CA on perceived stress PS during interviews. The study also presents a complex research model, based on Preacher, Rucker, and Hayes (2007) model where the independent variable CA has a moderating effect on FCA, which is the mediator. The model is validated using empirical data, sample size 177 with 124 males (70.1%), and 53 (29.9%) females, with PLS-SEM using Smart PLS 3 (3.2.9). To test the hypotheses formulated, two tests were conducted using the same sample; the first one verified the direct and mediating hypotheses, the next verified the moderated mediation hypothesis. The results indicate CA affects PS. Secondly FCA mediates the effect of CA on PS. Moreover, the study confirms the effect of moderation as CA moderates the effect of FCA on PS, such that the relationship between FCA and PS is weaker when CA is small compared to when it's high, however at very higher level the effect is seen to dampen and weaker. The implications are discussed.

Keywords: emotional and psychological experiences, moderated mediation, PLS SEM, anxiety and stress.

1. Introduction

The global outbreak of COVID-19 is intensely changing the lives of all, including university students across the globe. In many parts of the world, as well as in India, everyone has been impacted adversely by the pandemic, especially the students. Many of them are ill-prepared for the challenges, and ill-supported by the local infrastructure and resources. Furthermore, there is concern that the pandemic may exacerbate the impact of inequitable access to jobs which is causing more anxiety among the university students. Therefore, this study based on recent empirical data aims to look into the emotional and psychological experiences of the university students, and to document their anxieties when confronted with future career anxiety exacerbated by their own lack of communication skills during the pandemic, and to assess their experiences, by exploring the direct, indirect and conditional indirect effect of communication anxiety in university students, in India.

Researchers have focused on anxiety among university students due to its pervasiveness (Bitsko et al., 2018), which has become a cause for concern (Reetz et al. 2014). Anxiety stems from diverse causes such as new learning methodologies or responsibilities (England et al., 2017; Misra and McKean 2000). Equally significant is the role played by being judged (Cooper et al., 2018), or cold calling (Broeckelman-Post et al., 2016). The anxiety affects the university students' motivation, performance, and persistence (Bledsoe and Baskin, 2014; Eddy et al., 2015a,b; Broeckelman-Post et al., 2016; Cooper and Brownell, 2016; Cooper et al., 2018), though its levels may differ based on genders (Eddy and Brownell, 2016), ethnicities (Eddy and Hogan, 2014), or courses (Ackerman et al., 2013) etc. The present study concentrates on two types of anxiety, Communication and Future Career anxiety in university students, given the reports of anxiety and stress. The students were asked what type emotions they experienced, when they experienced them, etc. As such, the research responds to a mounting unease in comprehending how the students perform in interviews and how anxiety impacts their performances/ motivation/ persistence (Bledsoe & Baskin, 2014; Eddy et al., 2015a,b; Broeckelman-Post et al., 2016; Cooper & Brownell, 2016; Cooper et al., 2018), especially during interviews which are used as popular tools for selecting by organizations (McCarthy & Cheng, 2014).

Theoretical Framework

Future Career Anxiety

The occurrence of coronavirus illnesses (COVID-19) has significantly influenced life and living of individuals globally, adversely influencing the job market, an issue that is particularly relevant to developing countries like India. This uncertainty about the future career has resulted in anxiety (Mostert & Botha, 2013) predominantly in the undergraduates who have to confront a jobless market. As per the theory of career expansion, these undergraduates aged 23 - 25 years happen to be at the verge of forming career anticipations and commitment (Super, 1980; Tsai et al., 2017), which are being challenged as the world's economy weakens. In the present uncertain times, the students fail to make productive choices pertaining to the future (Hornak & Gillingham, 1980; Kaplan & Brown, 1987).

For measuring future career anxiety, FCA, the present study adopts an abridged modified measurement scale validated and developed by researchers (Tsai et al. 2017; Mahmud 2020). The scale is used as a mediating construct in the study.

Communication Anxiety

Communication and Career anxiety are negative emotions that university students feel when they are concerned about their failure (value) and uncertain about their capability to control the outcome (Pekrun et al., 2007), worsened by their lack of good communication skills. Although, both may be assignment as negative emotions, they may also be considered activating emotions in terms of their influence on students' interests and motivations. Therefore, the outcome of CA and FCA may vary from students to student based on his interest and motivation level (Pekrun et al., 2007). Both CA and FCA are situational type of anxieties which occurs when the university students dread they will present/communicate poorly in interviews for example answer questions incorrectly in front of the interviewer and get a cold-call response (Rocca, 2010; Karim and Shah, 2012), which is known to be quite widespread in university students (Bowers, 1986). Founded on control-value concept (Pekrun, 2006; Pekrun et al., 2007) pertaining to achievement emotion the university students evaluate their value and achievements, and perceive the control they have over their accomplishment, as antecedents to the anxiety they feel during the interviews. These negative

feelings may be experienced by the students prospectively (before the interview or its outcome), or retrospectively (after the interview or its outcome) or during the interview. They may impact student accomplishment through their interaction and influence on cognition and metacognition (Zeidner and Matthews, 2005; Grossberg, 2009; Bledsoe and Baskin, 2014), inspiration (Kim and Pekrun, 2014), and commitment (Pekrun and Linnenbrink--Garcia, 2012). For the present study, CA was measured using 12 items based on prior studies.

Perceived Stress during Interviews

The interviews being high-stake evaluative circumstances of a social kind (McCarthy & Goffin, 2004), gives rise to stress among students during interviews (Heimberg et al., 1986; Powell et al., 2018). Like anxiety differs from individual to individual, perceived stress during the interviews also differs in students. Anxiety and stress has been found to be higher in junior students as compared to the senior ones (Bayram and Bilgel, 2008).

Given the increasing prevalence of anxiety and stress among undergraduates (Castillo and Schwartz, 2013) and use of interventions which increase or decrease anxiety in students (Broeckelman-Post et al., 2016; Cooper et al., 2018), it is important to investigate any potential links between anxiety and stress perceived by student during interviews. The current study aims to scrutinize the university students' CA and FCA anxiety and interview stress during the pandemic, a time when future career options are limited and the future looks bleak. For this purpose, Perceived Stress during interview was measured using two items based on prior studies.

Research Gap and Research Objective

Research has investigated the various causes for perceived stress and anxiety in the university students. However, the relation between Communication anxiety, future career anxiety and perceived stress during interviews has not been thoroughly studied. By exploring the connections between communication and career anxiety and perceived stress, the current study may contribute to a more nuanced appreciation of the university students' emotional and psychological frame of mind during interviews. As such it aims to fill the research gap. The present study's main objective's to find the direct, indirect or conditional indirect effects of Communication Anxiety (CA) on Perceived Stress during the Interviews (PS), as well as the effect of Future Career Anxiety (FCA), in university undergraduates in India.

Research Questions

This research asks two research questions:

1. Do the university students experience Communication Anxiety, Future Career Anxiety and perceive Stress during interviews?
2. Does Communication Anxiety affect Perceived Stress experienced by the university students during interviews directly?
3. Does Communication Anxiety affect Perceived Stress experienced by the university students during interviews indirectly?

To find potential solutions the research questions, two types of anxiety were probed: Communication Anxiety, and Future Career Anxiety. Recognizing the types of anxiety which impacts the students' performance during interviews is vital for thoughtful comprehension of the students' experiences and discovering interventions for enhancing the students' accomplishments.

This is an essential attempt since the interview perceived stress is an acute construct in extant literature which needs more in-depth studies, and has not been theoretically and empirically studied in India. Moreover, an appreciation of the factors contributing towards interview stress may provide potential insight into how to overcome stress and anxiety.

Research Framework and Hypotheses

The study presents the research model, in which CA, FCA, and PS constructs are shown with their hypothesized relationships. This is based on Preacher, Rucker, and Hayes (2007) model where the independent variable CA itself has a moderating effect on the mediator FCA, which is mediating on the dependent variable PS, as shown in Fig 1.

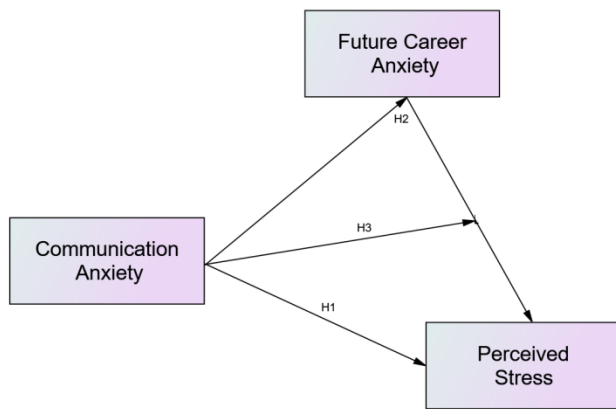


Figure 1: Research Model

Fig 1 shows the Research Model of the moderated mediation process where the independent variable (CA) moderates its own indirect effect on the dependent construct (PS) through mediator (FCA) by moderating the effect of FCA on PS, based on which the following hypotheses were framed:

Hypothesis 1 (H₁): There exists an affirmative significant relationship between CA and PS.

Hypothesis 2 (H₂): The relation between CA and PS is mediated by FCA.

Hypothesis 3 (H₃): CA moderates the effect of FCA on PS, such that the relationship between FCA and PS is weaker when CA is small as compared to when it is high.

Research Methodology

Research Design

The investigation uses a quantitative method for collecting the raw data, as the aim is to discover the causal relationship amongst the select factors; such a deductive methodology was chosen as it assists the collection of quantitative information about research questions framed for the investigation. An online survey form was used to gather evidence from language learners to scrutinize their anxiety for future career and interview during the pandemic, in the month of November, 2020. SPSS and Smart-PLS 3 were utilized for data analysis. To test the hypotheses formulated, two tests were conducted using the same samples; the first one verified the direct and indirect/mediating hypotheses, then the next verified the mediating and moderating hypothesis.

Sample Characteristics

The sample comprises 177 respondents with 124 males (70.1%), and 53 (29.9%) females. The age ranged 16 and 24 years of age, with an average age of 18.441, with Std. deviation= 1.159. The study was conducted during the Pandemic period, when there was a lockdown and institutes were closed. The undergraduates were compelled to study from their respective homes and the future looked bleak and fraught with anxiety.

The mean score of CA for the full sample was 24.8249, Standard deviation=7.55343; the mean score for FCA was 5.3051, Standard deviation=3.12570, and mean score of PS was 4.1356, Standard deviation=2.34126. To determine if there was any gender-based difference between the scores of male and females in the sample for the three variables under study, t test with female coded as 0 and male coded as 1 was conducted; the t-test revealed that there was no gender-based difference between the male and female in the sample collected. The mean score of CA for male was 25.1613, Standard deviation=7.48265 and for female mean was 24.0377, Standard deviation=7.73096; the mean score for FCA male was 5.3790, Standard deviation =3.21731 and for female it was 5.1321, Standard deviation2.92231; the mean score of PS for male was 4.2097, Standard deviation=2.43375, while for female it was 3.9623, Standard deviation= 2.12098. The gender-based differences were not statistically significant ($p>0.05$), indicating that both genders felt the same level of CA, FCA and PS.

Common Method Variance

Since the information was collected using a self-reporting strategy in a particular timeframe, evaluating the degree to which the CMV may present threat to the legitimacy of the present study's significant (Podsakoff and Organ, 1986; Tehseen et al., 2017). Harman's one-factorial analytical examination was done for analyzing CMV. It showed that all estimation indicators exposed to factor analysis by using Principal Component extraction technique with a single fixed factor without any rotations (Podsakoff et al., 2003) represented less than 50% of variance, it indicated that CMV isn't present. The main factor showed 33.273 percent of the variance, demonstrating that the CMV difference doesn't represent a threat to the validity.

Data Analysis

The data collected were investigated by utilizing partial least square for structural equation model (PLS-SEM) using latest version of Smart PLS 3 (3.2.9). It is an algorithm-based method which, from the initial step, assesses the measurement model with internal consistency (CR), Convergence (indicator loadings and AVE), plus Discriminant Validity. Subsequent step includes assessing the underlying model which necessitates testing collinearity between the variables, evaluating the pertinence of relations for testing the hypotheses framed. The reasons of selecting PLS are: this investigation aims to explain the variances in the DV (Dependent Variable) instead of confirming existing theories (Hair et al., 2017). Moreover, the sample size is moderate (N 177), and the model is complex, as it includes both moderation and mediation effects (Green et al., 2016). Furthermore, PLS-SEM was used as latent variable values were to be analyzed for finding influential extrapolative relevance (Hwang et al. 2020).

Results

Assessment of Measurement Model

Convergent Validity (CV)

In the model, all constructs were reflective and first-order. Table 1 shows indicator loadings of individual items, Cronbach's alpha, Dillion-Goldstein's rho, composite reliability (CR), and average variance extracted (AVE) for the constructs, which demonstrate that the data possesses validity and reliability. Hair et al. (2017) recommend 0.70 as the verge for loadings for the indicators. Therefore, three items with low loadings were deleted to enhance AVE and achieve 0.50 minimum criterion (Hair et al. 2010). The Cronbach's alpha and CR display interior consistency of the instrument. Cronbach's alpha is not as much favored as CR while using SEM, and is utilized as a moderate measure for reliability and consistency (Hair et al., 2016). For the present study, CR ranging from 0.60 to 0.70 is considered acceptable as it is an exploratory investigation (Hair et al., 2017). The CR values were found to be lower than 0.95 that is considered as undesirable (Hair et al., 2016). As CR is deliberated as copious, and Dillion-Goldstein's rho (ρ_A) considered as the precise degree of construct reliability (Dijkstra and Henseler 2015), it was also computed.

Table 1

Results of Measurement Model

Constructs	Indicators	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	Results
FCA	FCA1	0.757	0.863	0.874	0.863	0.680	Reliable
	FCA2	0.774					
	FCA3	0.931					
PS	PS1	0.727	0.770	0.786	0.776	0.635	Reliable
	PS2	0.861					
	CA10	0.648					
	CA11	0.669					
	CA2	0.689					
	CA3	0.808					
	CA4	0.694					
	CA5	0.661					
	CA6	0.678					
	CA8	0.661					
CA	CA9	0.650	0.890	0.891	0.888	0.470	Reliable
M	Moderato						Reliable
LA*FCA	r		1	0.778	1	1	Reliable

Table 1 also shows there is a difference in the values of alpha and CR for Interview Anxiety, but it isn't unusual because Coefficient alpha may be lesser than CR as it undervalues consistency (Peterson and Kim, 2013; Raykov, 2001).

Discriminant Validity (DV)

Apart from the convergent validity, the discriminant legitimacy was tested for evaluating that the measures do not correlate (Ringle et al. 2010). Customarily, it was assessed using two methodologies, cross-loadings as well as Fornell and Larcker's (1981) techniques were used. For the first, the indicator's outer loadings for the related construct have to be more prominent than the entirety of its loadings for all the others (Hair et al., 2016). The indicators' external loadings on the related constructs were more noteworthy than their loadings for different constructs, thereby establishing DV as shown in Table 2. Secondly, Fornell and Larcker (1981) criteria were used and the square root of the construct's AVE was contrasted with the connections with every other construct. As per norm the AVE should be more than 0.5, however AVE for CA was somewhat beneath the suggested value; nevertheless, the CR was reliable. Table 3 shows that the square-roots of AVE (appearing on the diagonal) for the variable is more noteworthy than relationships between the construct in correlation matrix (Felipe et al., 2016), demonstrating the DV is established. Estimations on diagonal (Bold) show to square-roots of AVE and off-diagonals show correlation between constructs as indicated in Table 2:

Table 2
Cross Loadings and Fornell Larcker Criteria

		CROSSLOADINGS			FORNELL AND LARCKER CRITERIA			Results
		FCA	PS	CA	FCA	PS	CA	
FCA	FCA1	0.75	0.541	0.496	0.824			Valid
	FCA2	0.77	0.567	0.491				
	FCA3	0.93	0.779	0.478				
PS	PS1	0.56	0.727	0.442	0.772	0.797		Valid
	PS2	0.65	0.861	0.542				
	CA10	0.34	0.439	0.648				
CA	CA11	0.35	0.452	0.669	0.589	0.62	0.686	Valid
	CA2	0.42	0.408	0.689				
	CA3	0.491	0.484	0.808				
	CA4	0.38	0.455	0.694				
	CA5	0.43	0.357	0.661				
	CA6	0.42	0.396	0.678				

	CA8	0.374	0.425	0.661				
	CA9	0.380	0.406	0.650				
M CA*FC A	Moderator				0.673	0.339	0.323	1 Valid

Subsequently, DV was measured using Heterotrait-Monotrait (HTMT) ratio (Hair et al., 2019), which demonstrated that HTMT values for each construct was lower than the prescribed limit 0.85 (Henseler et al., 2015). The HTMT estimations between variables were distinct and different from each other, thereby establishing discriminant validity among them as indicated in Table 3.

Table 3

Heterotrait-Monotrait (HTMT) Ratio for Constructs

	FCA	PS	CA	Moderating Effect 1
FCA				---
PS	0.767			---
CA	0.589	0.618		---
Moderating Effect 1	0.639	0.316	0.298	---

Assessment of the Structural Model

Next, PLS-SEM inner model outcomes were measured, for which testing if the collinearity issues existed, before structural relations between constructs were assessed (Hair et al., 2016). Moreover, the model's in-sample predictive accurateness in addition to its out-of-sample predictive influence was proven (Shmueli et al. 2019). Variance Inflation factor (VIF) is utilized for distinguishing collinearity. VIF estimations above 3.33 (Diamantopoulos and Sigouw 2006) or between 3-5 show collinearity exists (Mason and Perreault Jr, 1991). Table 4 displays all the estimations for the present model met the standards, indicating that it was free from collinearity issues.

Table 4

Outer and Inner VIF

	OUTER VIF	INNER VIF			
	VIF		FCA	PS	CA
PS ₁	1.646	FCA	---	2.542	---
PS ₂	1.646	PS	---		---
FCA ₁	2.606	LA	1	1.554	---
FCA ₂	2.135	Moderating Effect 1	---	1.854	---
FCA ₃	2.111				
CA ₁₀	3.126				
CA ₁₁	2.862				

CA ₂	1.542
CA ₃	1.794
CA ₄	1.974
CA ₅	2.004
CA ₆	1.665
CA ₈	1.795
CA ₉	2.076
M CA*FCA	1

Path analysis was conducted for validating the hypotheses formulated. Structural model was assessed using a non-parametric bootstrap test using a 5,000 re-sample for creating the β and t values. Next, as recommended by Hair et al. (2017), the Coefficient of Determination (R^2), and Effect sizes (F^2) and in-sample predictive accurateness (Dolce et al. 2017) were checked. R^2 value of 0.347 and 0.686 were achieved for FCA and PS, respectively. 68.6% variance of PS was jointly explained by CA and FCA. The R^2 estimate of 0.2 is considered appropriate in behavioral sciences research (Rasoolimanesh et al. 2017). Moreover, R^2 of FCA too signifies considerable predictive accurateness. The effect size (f^2) was measured. F^2 value of 0.35, 0.15, and 0.02 reveals effect size that is large, medium, and small respectively (Cohen 1988), thereby illustrating the size effects, which cannot be estimated using the p -values. In explaining FCA and PS, CA indicated an effect size of 0.531 and 0.1. In producing F^2 of PS, CFA presented a large effect, 0.893. Lastly, the model predictive relevance of the endogenous construct was assessed by means of Stone-Geisser's Q^2 (Geisser 1974; Stone 1974). Blindfolding method using distance $D=7$ omission revealed the Q^2 estimations for FCA (0.206), PS (0.357); Q^2 above zero (Hair et al. 2014) established the predictive relevance for the two constructs (Fornell and Cha 1994). To measure good fit of the model, the standardized root mean square residual (SRMR) was calculated (Henseler et al., 2016), a SRMR value of 0.073, was obtained that was below the verge of acceptance 0.08. Additionally, estimation of normed fit index (NFI) was 0.794 that was very close to the acceptable estimation 0.80 (Latan et al., 2017).

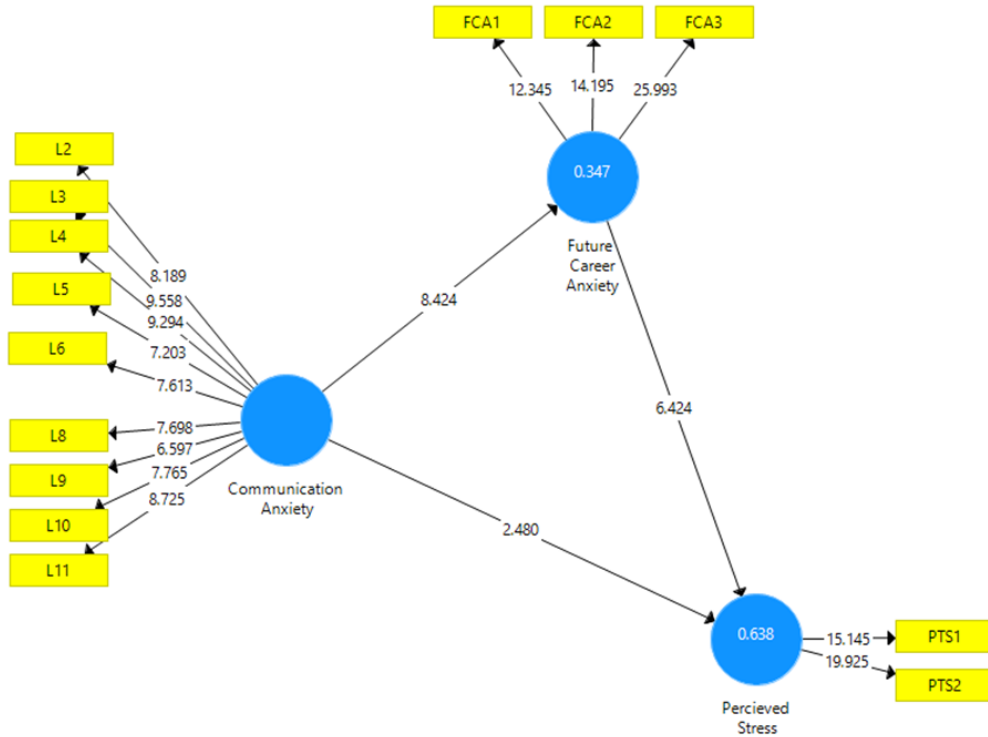


Figure 2: Direct and indirect effects of CA and FCA on PS

Hypotheses Testing – Direct Effect

As shown in Table 5, the study assessed first the direct effect of CA on PS during interviews experienced by university students. The effect of CA on PS was a significant affirmative effect ($\beta=0.253, t=2.480, p=0.013, CI=0.076, 0.413$), supporting H1. Moreover, FCA was found to have a critical positive effect on PS, indicating that mediation can be tested.

Table 5

Test 1 Direct and Indirect Effect

H	Effects	Std. Beta	Std D	t Values	p Values	LLCI	ULCI	Results
DIRECT	Communication Anxiety -> Perceived Stress	0.253	0.102	2.480	0.013	0.076	0.413	Accepted
INDIRECT	Communication Anxiety -> Future Career Anxiety -> Perceived Stress	0.367	0.072	5.073	0.000	0.260	0.500	Accepted
TOTAL	Communication Anxiety -> Perceived Stress	0.620	0.073	8.466	0.000	0.477	0.723	Accepted

R ²	Perceived_ Stress	0.63
Q ²	(=1-	8
SSE/SSO)	Perceived_ Stress	0.35
		7
		0.07
SRMR	Saturated Model	3

Hypotheses Testing –Indirect Effect

Table 5 displays the result of the inner model of PLS-SEM exploration. Muller et al. (2005) proposed a construct may be regarded as a mediator if it satisfies the following conditions: The principal condition is that without a potential mediator the relation among IV and DV should be significant. Next, the predictor (CA) should significantly affect the mediator (FCA). Controlling for impact of predictor (CA), the mediator (FCA) should considerably impact DV (PS). Table 7 demonstrates that the mediation exists as all conditions are fulfilled. Moreover, the indirect effect by the mediator construct (CA to PS) was substantial. The result of bootstrapping using SmartPLS shows the indirect effect (Table 7), which are significant ($\beta = 0.367, t = 5.073, p < .01$). Finally, it was observed that a change in significant path coefficient was observed in the presence of the mediation, the estimation of path coefficient increased from 0.253 to 0.367. Notwithstanding, the substantial effect between CA and PS (t -value = 2.480) stayed substantial despite the existence of the mediator (t -value: 5.073). The significance of CA->PS relation shows a significant increase in the path coefficient for this relation which proposes partial mediation exists (Baron & Kenny, 1986; Muller et al., 2005). The total effect of Communication Anxiety -> Perceived Stress was $\beta = 0.620, t = 8.466, p = 0.000, CI = 0.477, 0.723$). Utilizing the product coefficients approach (Hayes and Scharkow 2013), the hypothesis (H3) was validated. The indirect effect of CA on PS through CFA was established as significant as shown in Table 5. The bias-corrected bootstrap confidence interval at 95% presented mediation of CFA in the relation between CA and PS. The outcomes confirmed the indirect effect was much stronger than the direct effect. Therefore, the outcomes supported the hypothesis of partial mediation.

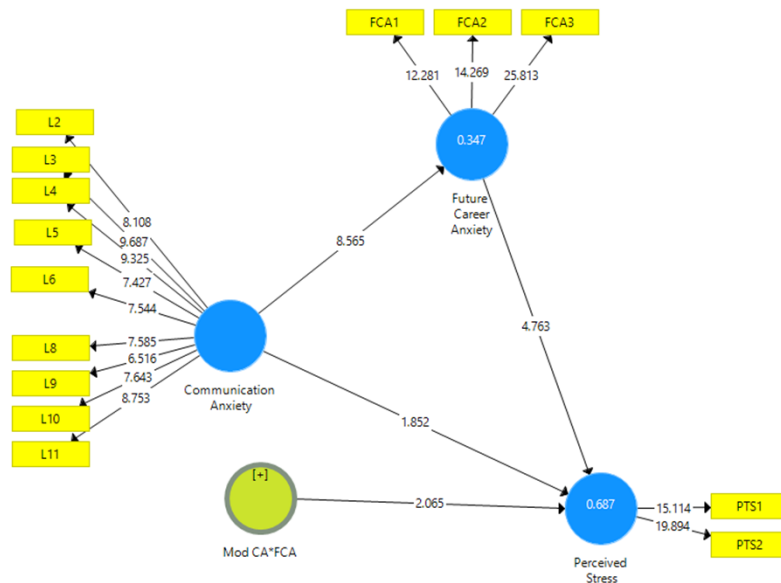


Figure 3: Direct, Indirect and Conditional Indirect Effects of CA and FCA on PS

Hypotheses Testing – Conditional Indirect Effect

The model for indirect conditional effect was tested for finding the moderation of effect of CA on the relation between FCA and PS (Preacher 2007 model).

Table 6

Test 2 Conditional Indirect Effect

H	Effects	Std. Beta	Std D	t Values	p Values	LLCI	ULCI	Results
DIRECT	Communication Anxiety -> Perceive Stress	0.220	0.119	1.852	0.064	0.018	0.400	Rejected
	Communication Anxiety -> Future Career Anxiety -> Perceived Stress	0.497	0.141	3.519	0.000	0.325	0.749	Accepted
TOTAL	Communication Anxiety -> Perceive Stress	0.717	0.103	6.987	0.000	0.542	0.876	Accepted
MODERATED MEDIATION	Mod CA*FCA -> Perceived Stress	-0.210	0.102	2.065	0.039	-0.379	-0.082	Accepted
R ²	Perceived Stress	0.687						
Q ² (=1-SSE/SSO)	Perceived Stress	0.361						
SRMR	Saturated Model	0.073						

The study hypothesized that ‘Hypothesis 3 (H₃). CA moderates the relation between FCA and PS, such that the relation is stronger when CA is high’, that is CA has a moderation effect on the relationships between FCA and PS. Moderation investigation was done by using a repeated indicator approach. Table 4 displays the results for the influence of the moderator on FCA and PS relationship which indicates that CA moderates the latter. Hence the hypothesis H₃ is validated (Table 5). Successively, the index of moderated mediation was evaluated to check the conditional effect (Hayes, 2015). The result $\beta = -0.210$, $t = 2.065$, $p = 0.039$, $CI = (-0.379, -0.082)$ was as anticipated. The null of zero did not fall between confidence intervals, it was inferred the indirect effect is conditional on the level of CA. These outcomes validate the moderated mediation hypothesis (H₃). Therefore, CA meaningfully moderated its own indirect effect on PS. Furthermore, the direct effect of CA on PS (i.e. moderation mediation model) did not result in substantial result ($\beta = 0.220$, $t = 1.852$, $p = 0.064$, $CI = (0.018, 0.400)$). Hence, the results support the hypothesis of total mediation.

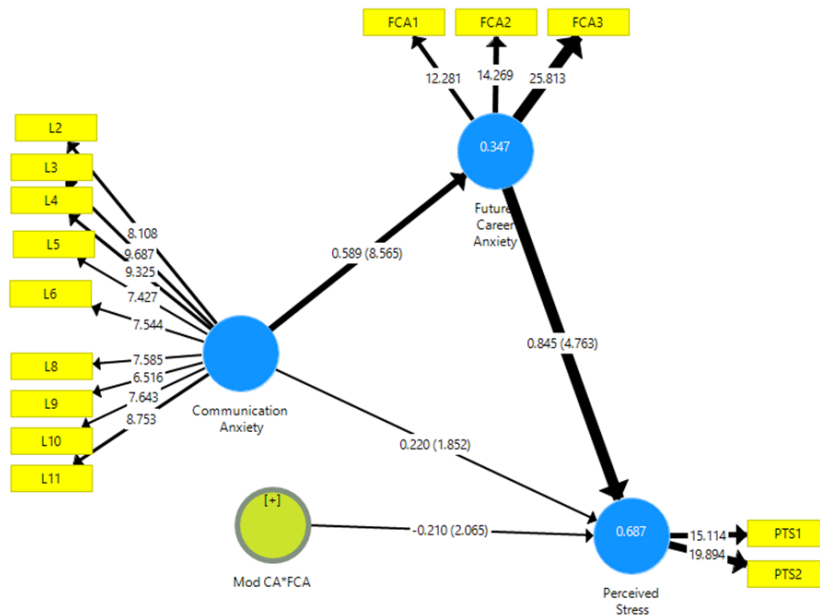


Figure 4: Direct and Indirect and conditional Indirect Effects of CA and FCA on PS (Relative)

Fig 4 shows the relative path and t values for the moderated mediation model that shows that indirect effect of CA on PS is more robust than its direct effect:

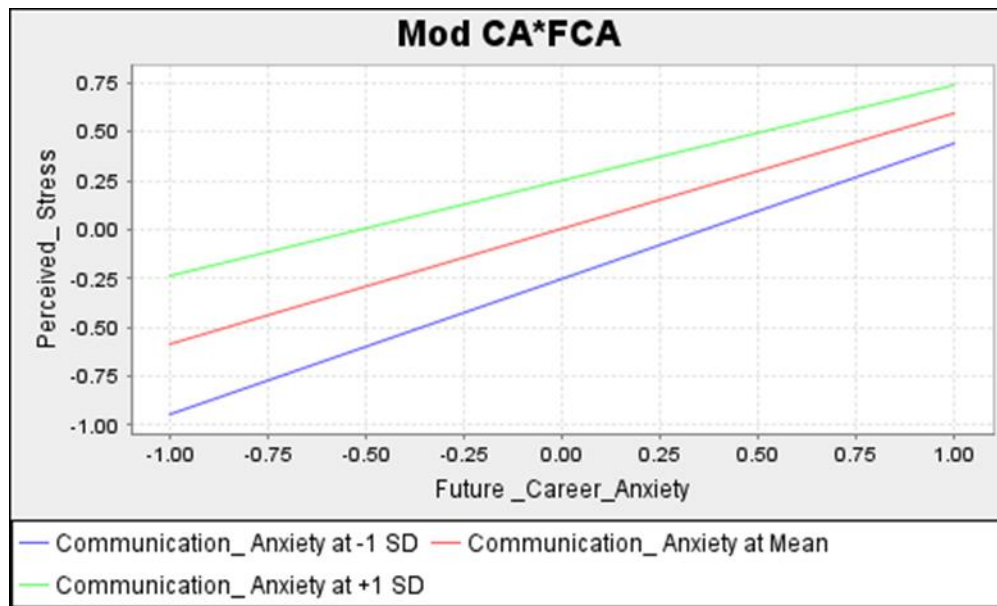


Figure 5: Moderation- Slope Showing Conditional Indirect Effect on PS

The slope shows the effect of moderation CA and FCA on the dependent variable Perceived Stress among the university students during interview (Fig 5), which displays CA moderates the effect of FCA on PS, such that the relationship between FCA and PS is weaker when CA is small compared to when it's high, however at very higher level the effect is seen to dampen and weaker as seen by the converging lines:

Discussion

This study examined the potential links between communication anxiety and/or performance in interview and the perceived stress experienced by the university students during the pandemic, a time that is fraught with uncertainty about future as well as future career. It is perhaps not surprising that communication and future career anxiety were found to significantly affect students' performance in interviews. While perceived stress is not tantamount with anxiety, it is a direct precursor of anxiety. Therefore, when the university students expect poorly performance due to communication anxiety during the interviews, their professional objective may be thwarted altogether, resulting in a phenomenon known as performance avoidance (Elliot and Harackiewicz, 1996). This may result in decreased motivation and accomplishment (Elliot and Church, 1997; Richardson et al., 2012), leading to the students experiencing hopelessness (Pekrun and Stephens, 2010). Moreover, there is a scarcity of research works concerning the causes for higher anxiety in some students as compared to others. The present research establishes two more reasons for the stress experienced by the students during interviews, which adds to prior research which found other negative experiences to cause stress including negative stereotypes, poor educational counseling, and belief in the myth that only a few can succeed (Mallow and Greenburg, 1982; Mallow, 2006). The twin constructs investigated also contribute in aggravating the students' anxieties. The finding of the current study indicates students' anxiety is driven by future career prospects or rather the lack. Communication anxiety is known to exist in classrooms (Broeckelman-Post et al., 2016; Cooper et al., 2018) and to vary by demographics, yet not impact student success. However, the present study differs as it indicates the effect of communication anxiety on interview anxiety which may dampen the students' success. It affirms studies which have revealed lower student performance in communication is connected to elevated anxiety levels (Akgun and Ciarrochi, 2010), especially during interviews; however, students with moderate level of anxiety have been found to be better (Keeley et al., 2008), which may be explained using Yerkes–Dodson law, that illustrates a bell-shaped curved relation between anxiety and performance, with extremely low and extremely high anxiety hampering performance, but moderate anxiety improving performance (Yerkes and Dodson, 1908).

Grounded on control-value concept of achievement emotion (Pekrun, 2006; Pekrun et al., 2007) it may be assumed that the emotion felt by the students during the interviews are the expressions of their assessment of their value and the control they feel during the interview. The control-value theory proposes these considerations and responses may be controlled (Pekrun, 2006; Boekaerts and Pekrun, 2015). They may be taught to adjust their assessments of value and control thereby coping with the emotional reactions (Pekrun, 2006; Carter, 2010). Stress is negatively associated with persistence (Barthelemey et al., 2015); therefore, the students feeling stress had the same physiological reactions as anxiety, but the source of the response was measured more identifiable (Endler and Parker, 1990). Moreover, the study reveals stress and anxiety are very closely related. It may help in developing strategies that can be tested to help the students cope with stress experienced during the interviews, increasing their active coping for better adjustment and performance (Shields, 2001), increasing self-efficacy and motivation to build resilience (Dweck, 1986; Bandura, 1989). These might help students present themselves in a manner which helps in self-verification (Moore, Lee, Kim, & Cable, 2017), or be preferred/appreciated by interviewers (Kristof-Brown, 2000), or viewed as affable/sincere and competent (Amaral, Powell, & Ho, 2019;) and honest (Jansen et al., 2012).

The present study has significant pedagogical implications in varied contexts. Nevertheless, there are some limitations also. The results are based on a sample of students from one university

in India; thus, the results cannot be generalized to other universities. As the students decided to respond to the survey or not, the sample may be biased toward those students who are more likely to share their anxiety experiences. Moreover, the study is based on the perceived experiences of the students and does not have information on performance of the students who appeared in interviews or the outcome of the interviews.

Conclusion

The study sought to evaluate the university students' Communication Anxiety, Future Career Anxiety and perceive Stress during interviews. The study of the mediation and moderated-mediation analyzing CA among the university undergraduates seems appropriate and essential within context of COVID-19 epidemic. The results complement the extant literature by illuminating the mechanism that aggravates the students' anxiety. The findings provide an understanding of the causes for anxiety. The consequences specify that applying interventions to overcome anxiety in the context of future career uncertainty during the pandemics may be the need of the hour.

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