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Perceived Parental Expectations, and Academic Motivation: Mediating Role of Self- Determination Among College and University Students

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Students' motivation is a significant phenomenon and in the current paper, the mediating role of self-determination between perceived parental expectations and academic motivation was explored. The sample was based on two kinds of students as college and university (N = 328) having an age range of 16-24 years as College students (M = 17.74, SD = .66) and University students (M = 21.39, SD = .74). The sample was recruited from Punjab by using purposive sampling strategy. A correlation with cross-sectional research design was espoused. The assessment measures were the Perception of Parental Expectations Inventory (Sasikala & Karananidhi, 2011), the Self-determination Scale (Sheldon & Deci, 1996), and Academic Motivation Scale (Wilkesmann, Fischer, & Virgillito, 2012) used to assess the study variables. The findings revealed that the academic motivation of the students was correlated with perceived parental expectations and self-determination. Concerning indirect effects, academic expectation had a significant indirect effect on intrinsic, introjected, and extrinsic motivation, through awareness of self. Personal expectation also had a significant indirect effect only on introjected motivation, through awareness of self. Implications of the findings for educational settings, parents, and organizational guidance are discussed in the context of Pakistan culture.

Keywords: Parental expectations, self-determination, academic motivation, students

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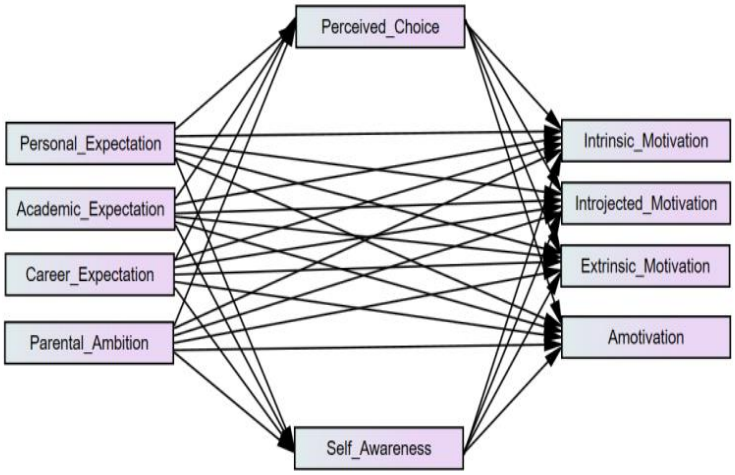
Education of the students is the fundamental block of any society. It is an instrument for self-reliance, social reconstruction, and sustainable economic development for the students (Khalayleh et al., 2021). Any nation that lacks a sound educational culture and philosophy stands the risk of decay because education plays a vital role in the overall development of a country. Academic motivation is one of the most potent factors which affect academic performance. It is an important predictor of students' educational aspirations and achievements (Chow et al., 2012). Academic motivation is also affected by many social, psychological, and personal factors of the students (Lazarides et al., 2016; Naseer & Rafique, 2021; Wang, 2013). Numerous factors psychological internal and external as well as demographic characteristics such as gender, area of study, area of interest, parental role, and attachment styles are the influencing forces to enhance academic achievements and academic motivations among students on all levels (Ali et al., 2021; Asif et al., 2022; Idrees & Malik, 2022; Ishaq et al., 2018; Ishaq et al., 2017; Naseer et al., 2022; Taghipour et al., 2012; Idrees & Malik, 2022; Naseer & Perveen, 2023). The theories of motivation propose that this construct must be conceptualized as a motivational system with diverse mechanisms that influence the Metacognitive processes of an individual (Kubsch et al., 2023). Self-determination theory is one of the significant theories of motivation that focuses on personal components such as optimal function, and growth; self-competence, relatedness, and autonomy motivate the self to initiate specific behavior to achieve some determined goals in life (Deci & Ryan, 2002). It's a multifarious approach, premeditated to portray the human personality and energized behavior (Deci & Ryan, 1985). Achievement motivation was another theory studied intensively by McClelland since the early 1950s (McClelland, 1953). According to this theory, an individual is motivated to achieve by striving for success and avoiding failure. Parents always want to see their children accomplish their life goals to reach success. Numerous external and internal factors are associated with an individual's internal and external motivation reported by the literature. Parental expectations (external factor) and self-determination (internal factor) are one of those forces. Parental expectations are the realistic judgments and beliefs that parents have about their children in terms of their education and future (Glick & White, 2004). Parents of different cultures shape the future directions of their children by providing joint activities and materials. They communicate and insert directly and indirectly their beliefs and expectations to their children (Tenenbaum & Leaper, 2003; Starr et al., 2022). Numerous studies have found a positive connection between parents' expectations and children's academic achievement

and motivation at the school level (Cornelius, 2012; Froiland & Davison, 2014). Parental expectations have always remained a critical factor for adolescents' motivation and achievements. Jacobs (2010) studied a sample of Australian students and found parental expectation was the strongest predictor of student success and motivation. Parental aspirations and expectations significantly predict students' expectations that lead to their motivation (Benner & Mistry, 2007). In most studies, the role of demographic characteristics such as age, gender, socio-economic status, area of interest, and duration of goal setting in academic motivation was also observed. In China Hu and Luo (2021) observed that the senior students of rehabilitation sciences of special curriculum showed higher levels of motivation than the juniors who were students of the general curriculum. So motivation is a very potent factor for learning sciences. Another study with grade 7 and grade 8 school students indicated that fathers' and mothers' expectations of long-term and short-term goals planning have a positive relationship with their profile of motivation (Lazarides et al., 2016). Räty and Kasanen (2010) found after controlling the family socio-economic status among school students parental expectation has a positive effect on the educational achievements of the students which leads to academic motivational behavior. In another study students' self-concept was partially mediated between parental expectations and students' achievement. The participant characteristics such as gender and socio-economic status were also controlled to seek the relationship between study variables (Grossman et al., 2011). Yamamoto and Holloway (2010) explored that parental expectations were moderately related to the children's motivation after controlling the socio-cultural and ethnic characteristics. Several researchers found that academic motivation is also affected by the students' factors like self-determination. Tóth-Király et al. (2022) investigated among high school students that self-determination is positively associated with students' motivation, particularly intrinsic motivation. Othman and Leng (2011) found research a significant relationship among self-esteem, self-concept, Self-determination, motivation, and learning strategies in predicting students' academic achievement. Zeng et al. (2023) reported that determination, self-concept, and academic achievement, with self-determination, is potential predictors of academic achievement for students with learning disabilities and academic achievements lead to enhance academic motivation. In previous studies, the link between parental expectation, self-determination, and students' motivation was observed directly including demographic characteristics with full constructs. But in the current study, Pakistani culture based on historical basis and literature perceived parental expectations and academic motivation with direct

as well as first time indirect effect of self-determination depicted in model 1.

Figure 1: *Theoretical Model of Perceived Parental Expectations (Personal, Academic, Career Expectations and Parental Ambition), Self-Determination (Perceived-Choice and Self-Awareness) and Academic Motivation (Intrinsic, Introjected, Extrinsic and Amotivation) Among Students.*



In previous literature, most studies conducted in western culture seek the relationship between parental expectation and academic motivation with self-determination. Particularly the sample of the study was children and adolescents (Cornelius, 2012; Froiland & Davison, 2014; Jacobs, 2010) Pakistan has a collectivist culture and has more expectations with their children, especially for those who are going to join some specific professional degree or profession in practical life. So, the current study highlighted the importance of parental expectations and self-determination in linking the students' academic motivation with cross-sectional study and compared the differences between college students who are preparing themselves for MDCAT and ECAT as well as those who are joining some particular profession after completing their graduated degree.

Objectives of the Study

The main objective of the study was to evaluate the mediating role of self-determination between perceived parental expectations and academic motivation of college and university students. Another objective is to seek the differences of perceived parental expectations,

self-determination, and academic motivation between MDCAT and ECAT students and last semester students of university.

Hypotheses

1. Self-determination is likely to mediate the relationship between perceived parental expectations and academic motivation among college and university students.
2. There are likely to be differences in perceived parental expectations, self-determination, and academic motivation between MDCAT and ECAT students and last semester students of university.

Method

Sample

The sample of the study was comprised of 328 students including college students (n = 158) and 8th semester students (n = 170). A purposive sampling strategy was used to select the participants from different colleges and universities in Punjab. Their age range was 16-24 years as the mean age of the college students was 17.74 (SD = .66) and university 8th-semester students had 21.39 (SD = .74). Correlation with cross-sectional research design was adopted. The students having parents alive were included. The students who recently completed FSC/ICS/FA and are preparing for the ECAT/MCAT as well as students in the final semester of the university were included. The students having some physical or psychological disability and engaged in some part-time jobs were excluded. The majority of the participants 61.6% have 4-8 numbers of siblings. 32.8% of the students were first born, 35.4% were second born, and 31.1% were last born while only .6% was single children. The majorities of the participants' mothers as 77.43% were housewives and belongs to middle family status of 73.78%.

Measures

The following assessment tools were used in this study. Urdu versions of the measures were used after getting formal permission from the director of Institute of Applied psychology. All the tools were translated by following MAPI guideline.

Demographic Information Sheet

It included queries of age, gender, education, siblings, birth order, parents' education, parents' profession, parents' monthly income, and socio-economic status.

Perception of Parental Expectations Inventory (Sasikala & Karunanidhi, 2011)

The perception of parental expectations inventory (Sasikala & Karunanidhi, 2011) was used to measure the perceived expectations by the students. This inventory consisted of 30 items with four subscales i.e., personal expectations, academic expectations, career expectations, and parental ambitions having 4-point response categories. Scaled scores were used for analysis. The items of parental expectation are like "my parents expect me not to make them ashamed by my behavior", and "My parents expect me to manage my time in a useful manner". The overall Cronbach's alpha reliability of the inventory was .90 and the Cronbach's alpha reliability of the sub-scales were .78, .76, .65, and .71 and the current reliability of the scale is .83 and subscales having -72, 73, 71 and 69 respectively.

Self-Determination Scale (Sheldon & Deci, 1996)

It was designed to assess individual differences in the extent to which people tend to function in a self-determined way. The self-determination scale is a short, 10-item scale with 5 points Likert scale. It has further two subscales i.e. awareness of oneself and perceived choice in one's actions. The subscales can either be used separately or they can be combined into an overall SDS score. In current study scaled scores were used. The items of awareness of oneself "I always feel like I choose the things I do" and the items of perceived choice "I sometimes feel that it's not me choosing the things I do". The Cronbach's alpha reliability of the scale is .68 and the current reliability of the scale is .72 and subscales having .67 and .69 respectively.

Academic Motivation Scale (Wilkesmann, Fischer, & Virgillito, 2012)

The Academic Motivation Scale was used to measure the academic motivation of students. The academic motivation scale consisted of four subscales i.e. intrinsic motivation, interjected motivation, extrinsic motivation, and a motivation. The sample items of the scale are "because I experience pleasure and satisfaction while learning new things", and "because with only a high-school degree I would not find a high-paying job later on". Academic motivation is a five-point Likert scale and full scale comprising 19 items. The overall reliability of the scale was .90.The subscales were .84, .77, .74, and .79 and the current reliability of the scale is .73, while subscales having .81, .78, .73, and .72 respectively.

Procedure

An authority letter from the concerned institution was taken and permission was sought from the concerned authorities of the universities and colleges for data collection. Formal prior permission from the respective authors regarding using the assessment measures was also obtained. A consent form was presented to the participants to seek their understanding and voluntary participation in the current study. Only those students included in the study were willing and the anonymity of the participants and confidentiality of the data was maintained. No compensation was offered in return for participation in the study.

Results

The main purpose of this study was to investigate the mediating role of self-determination in the relationship between perceived parental expectations and academic motivation.

Table 1: *Psychometric Properties of PPEI, SDS & AM Scales and Sub Scales (N=238)*

Scales and Sub Scales	*k*	*M*	*SD*	*Range*		*α*
				Potential	*Actual*	
PPEI	30	100.92	12.28	30-120	58-120	.83
PE	10	35.55	5.02	10-40	24-40	.72
AE	8	27.69	4.12	8-32	11-32	.73
CE	5	16.54	2.65	5-20	5-20	.71
PA	7	21.02	3.85	7-28	11-28	.69
SDS	10	30.87	8.26	10-50	13-50	.72
PC	5	13.70	5.66	5-25	5-25	.67
SA	5	17.18	5.30	5-25	6-25	.69
AM	19	73.15	10.14	19-95	43-95	.73
IM	8	32.30	5.41	8-40	14-40	.81
I'edM	3	12.41	2.24	3-15	3-15	.78
EM	5	20.54	4.06	5-25	5-25	.73
Am	3	5.48	1.97	3-15	3-15	.72

Note. PPEI = Perception of Parental Expectation Inventory; PE = Personal Expectation; AE = Academic Expectation; CE = Career Expectations; PA = Parental Ambition; SDS = Self-Determination Scale; PC = Perceived Choice; SA = Self-Awareness; AM = Academic Motivation; IM = Intrinsic Motivation; I'edM = Introjected Motivation; EM = Extrinsic Motivation; Am = Amotivation.

Table 1 above showed the mean and *SD* of the sample for full and all subscales. The value of the Cronbach's alpha demonstrated that all subscales and total scales have sufficient reliability.

Table 2: *Correlations Matrix Between Study Variables (N = 328)*

Variables	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender	-.37***	-.20***	.02	.02	.14**	.04	-.13*	-.01	-.09	.08	.17**	.10	.19**	.22***	-.12*
2. SY	-	.84***	-.21***	-.16**	-.23***	-.19**	-.08	.17**	.21***	.04	-.12*	-.06	-.16**	-.22***	.09
3.AI		-	-.29***	-.24***	-.28***	-.25***	-.15**	-.01	.05	-.06	-.16**	-.12*	-.19***	-.25***	.14*
4. PPE			-	.83***	.81***	.75***	.72***	.17***	.07	.19***	.30***	.17***	.23***	.26***	-.06
5.PE				-	.56***	.46***	.42***	.15*	.06	.16***	.18***	.14*	.09	.18***	-.14*
6.AE					-	.59***	.39***	.14*	.02	.20***	.28***	.22***	.25***	.20***	-.12*
7. CE						-	.47***	.05	.01	.07	.25***	.09	.24***	.29***	-.04
8.PA							-	.15*	.11*	.12*	.27***	.06	.18***	.17***	.15*
9.S'lfD								-	.77***	.73***	.30***	.26***	.26***	.20***	-.13*
10. PC									-	.14*	.15*	.09	.11*	.06	-.06
11.SA										-	.31***	.31***	.29***	.24***	-.13*
12.AM											-	.75***	.79***	.75***	-.02
13.I'icM												-	.58***	.41***	-.18***
14.I'edM													-	.61***	-.10
15. EM														-	-.17***
16. Am															-
M			100.92	35.55	27.69	16.54	21.02	30.87	13.70	17.18	73.15	32.30	12.41	20.54	5.48
SD			12.28	5.02	4.12	2.65	3.85	8.26	5.66	5.30	10.14	5.41	2.24	4.06	1.97

Note. Gender (male vs. female); SY = School Year (2nd semester vs. 8th semester); AI = Academic Institution (college vs. university); PPE = Perception of Parental Expectation; PE = Personal Expectation; AE = Academic Expectation; CE = Career Expectations; PA = Parental Ambition; S'lfD = Self-Determination; PC = Perceived Choice; SA = Self-Awareness; AM = Academic Motivation; I'icM = Intrinsic Motivation; I'edM = Introjected Motivation; EM = Extrinsic Motivation; Am = Amotivation; $^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$; *M* = Mean; *SD* = Standard Deviation.

The perception of parental expectation along with its subscales was significantly and positively correlated with the combined scores of self-determination and its awareness of self-subscription. These correlations were non-significant with the career expectation subscale. Although, the strength of significant correlations was weak. There were moderately strong correlations between the perception of parental expectation and self-determination, and the academic motivation scale and its subscales, except for a couple of correlations. A motivation subscale was negatively correlated with all combined scores and subscales of perception of parental expectation and self-determination. While its correlations with the perceived choice subscale, perception of parental expectation scale, and career expectation subscale were non-significant. The self-awareness subscale was positively and significantly correlated with the combined scores of academic motivation, and intrinsic, interjected, and extrinsic motivation subscales with moderate strength (see Table 2).

Table 3: *Direct and Indirect Effects of Personal, Academic, and Career Expectations and Parental Ambition on Motivation Through Perceived Choice and Self-Awareness (N = 328)*

	Direct Effects						Indirect Effects			
Predictors	PC	SA	I'ic M	I'ed M	EM	Am	I'ic M	I'ed M	EM	Am
	β	*β*	*β*	*β*	*β*	*β*	*β*	*B*	*β*	*β*
PC			.06	.08	.03	-.07				
SA			.26***	.25***	.22**	-.10				
PE	.05	.08	.02	-.14*	.02	-.17*	.02	.02*	.02	-.01
AE	-.02	.21**	.19**	.15*	-.02	-.09	.05*	.05*	.05*	-.02
CE	-.07	-.12	-.03	.16*	.27***	-.04	-.04	-.04	-.03	.02
PA	.13*	.06	-.05	.06	.01	.29***	.02	.02	.02	-.01

*Note.*PE = Personal Expectation; AE = Academic Expectation; CE = Career Expectations; PA = Parental Ambition; PC = Perceived Choice; SA = Self-Awareness; I'icM = Intrinsic Motivation; I'edM = Introjected Motivation; EM = Extrinsic Motivation; Am = Amotivation; $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$, *β = Standardized coefficient of prediction.*

Structural equation modeling (SEM) was used to test the predicting role of self-determination and perception of parental expectation on academic motivation. This path analysis was conducted to test these multiple and complex relationships between subscales of self-determination, parental expectations, and academic motivation. Path analysis provides a better statistical perspective of comparing different theoretical models and seeing which model fit better based on the collected data. For this analysis, subscales of all study variables' measures were used. The absolute model fit was χ^2 (7, 327) = 252.66, $p < .05$. The values of fit indices of this initial model

were found not in the satisfactory range (Bentler & Bonett, 1980; Hu & Bentler, 1999; MacCallum, et al., 1996); Goodness of Fit Index (GFI) = .86, Comparative Fit Index (CFI) = .69, Normed Fit Index (NFI) = .70, Root Means Square Error of Approximation (RMSEA) = .32. Apparently, this initial model was not strongly supported by the data. In order to further condition and find a better fit of the model, some modifications were introduced in the statistical model. The absolute model fit of the modified model was χ^2 (3, 327) = 9.74, $p < .05$. The values of fit indices of the model were found in the satisfactory range (Bentler & Bonett, 1980; Hu & Bentler, 1999; MacCallum et al., 1996) Goodness of Fit Index (GFI) = .99, Comparative Fit Index (CFI) = .99, Normed Fit Index (NFI) = .99, Root Means Square Error of Approximation (RMSEA) = .08. The personal expectations had significant and negative direct effects on interjected motivation and motivation. The academic expectations had significant and positive direct effects on awareness of self and intrinsic and interjected motivation. The career expectations also had significant and positive direct effects on intrinsic and interjected motivation. The parental expectations had a significant and positive direct effect only on perceived choice and motivation. From self-determination, only self-awareness had significant direct effects on intrinsic, interjected, and extrinsic motivation. Concerning indirect effects, academic expectation had a significant indirect effect on intrinsic, interjected, and extrinsic motivation, through awareness of self. The personal expectation had a significant indirect effect only on interjected motivation, through awareness of self. All other indirect effects were found non-significant (Table 3).

Figure 2: *Path Model of Perceived Parental Expectations on Academic Motivation through Self-Determination*

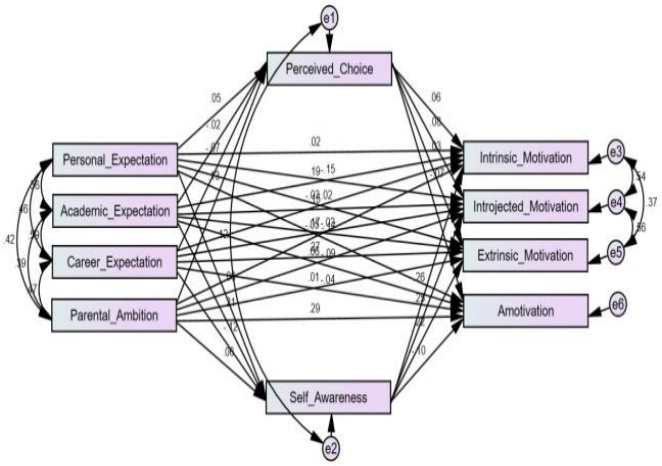


Table 4: *Independent Sample t-test for Academic Institutional Differences Among Study Variables (N = 328)*

Variables	College Students (n = 158)		University Students (n = 170)				95% *CI*		Cohen's
	M	*SD*	*M*	*SD*	*t*	*p*	*LL*	*UL*	*d*
PPE	104.65	9.37	97.47	13.64	5.50	.00	4.61	9.74	0.43
PE	36.79	5.00	34.39	4.77	4.44	.00	1.34	3.46	0.27
AE	28.86	2.57	26.59	4.92	5.17	.00	1.41	3.13	0.41
CE	17.31	2.14	16.01	2.92	4.58	.00	.74	1.86	0.34
PA	21.66	3.81	20.49	3.83	2.78	.00	.34	2.01	0.10
S'lfD	30.92	7.78	30.83	8.73	.10	.92	-1.72	1.90	0.02
PC	13.39	5.59	13.99	5.73	-.95	.34	-1.83	.64	0.05
SA	17.53	4.29	16.86	6.11	1.14	.25	-.49	1.82	0.32
AM	74.85	8.84	71.56	11.50	2.89	.00	1.06	5.54	0.11
I'icM	32.99	5.09	31.64	5.64	2.27	.02	.18	2.52	0.85
I'edM	12.85	2.01	11.99	2.36	3.53	.00	.38	1.34	0.67
EM	21.61	3.21	19.55	4.50	4.73	.00	1.20	2.91	0.50
Am	5.20	1.97	5.74	1.94	-2.48	.01	-.96	-.11	0.03

Note. PPE = Perception of Parental Expectation; PE = Personal Expectation; AE = Academic Expectation; CE = Career Expectations; PA = Parental Ambition; S'lfD = Self-Determination; PC = Perceived Choice; SA = Self-Awareness; AM = Academic Motivation; I'icM = Intrinsic Motivation; I'edM = Introjected Motivation; EM = Extrinsic Motivation; Am = Amotivation.
$^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$; *M* = Mean; *SD* = Standard Deviation.

In terms of academic institution differences, college students were significantly higher than university students on perceived parental expectation combined scores and its subscales (i.e., personal expectation, academic expectation, career expectation, parental ambition). The differences were not significant for self-determination and its subscales. The college students were significantly higher than university students on academic motivation combined scores and three of its subscales (i.e., intrinsic, introjected, and extrinsic motivation). The university students were significantly higher than college students on a motivation (Table 4).

Discussion

The purpose of the current study was to find out the mediating role of self-determination between parental expectations and students' academic motivation. This study highlighted the importance of parental expectations and self-determination in linking the students' academic motivation with cross-sectional study and compared the differences between college students who are preparing themselves for the MDCAT and ECAT as well as those who are joining some

particular profession after completing their graduate degree. To seek the mediating effect of self-determination, structural equation modeling (SEM) through AMOS v.24 was used.

The findings showed that the overall scales without focusing on their subscales showed a statistically strong and positive correlation with each other. It means that higher levels of perceived parental expectations increased the students' academic motivation followed by higher levels of self-determination. To support our findings few studies highlight the influence of parental expectations on students' academic motivation. For example, Rodríguez Martínez et al. (2017) found that students' motivation in math, their interest to learn more, and confidence in their abilities are influenced by the perceived parental expectations. Furthermore, it was also found that the subscales of perceived parental expectations except parental ambitions like; personal, academic, and career expectations all were significantly and positively correlated with the self-awareness of the students and all these subscales did not show any correlation with the students' perceived choices. It means that higher parental expectations (personal, academic, career) lead to higher levels of self-awareness in students other than parental ambitions. In other words, parental expectations from their children regarding their academic performance, their personal growth, and their career help to enhance the level of self-awareness in their children. For instance, a significant positive influence of parental expectations on students' self-determination was also found in a previous research study in which the participants of the study responded that encouragement from the parents about personal, career, and academic competency helps them make better decisions (Zeng, Ju, & Hord, 2023).

Similarly, the current study also displayed the relationship between the subscales of parental expectations and subscales of academic motivation (i.e., intrinsic, extrinsic, interjected, and a motivation). The results indicated that personal expectations showed a positive significant correlation with intrinsic and extrinsic motivation and a significant negative correlation with a motivation while did not show any relation with interjected motivation. It means that higher levels of personal perceived parental expectations increase the intrinsic and extrinsic motivations of students and decrease the interjected motivation. It would be described in a way that parents' expectations from their children related to their personal growth would help them to feel intrinsically and extrinsically motivated, while it could also help them to reduce the feelings of making themselves down in case of failure. It might be possible that in perceived personal parental expectations, a child perceives that their

parents want him/her to be a good person; morality and values become the focus of expectations; therefore, the students mostly showed less concern to do something to look good in front of others instead they focused on personal growth for themselves.

Prenatal Academic expectation showed a positive significant correlation with intrinsic, extrinsic, and interjected motivation, and a significant negative correlation with a motivation. It means that higher levels of perceived parental expectations about the academic performance of their children enhance the intrinsic, extrinsic, and interjected motivations of students and decrease the motivation in students. The possible reasons for these findings might be because in perceived academic parental expectations the students mostly take their academic performance as a focal point to think. Their parents' expectations regarding academic performance help them to learn with interest so they can fulfill their parents' expectations which also leads to introjected motivation as they always think to maintain their academic status in the eyes of their parents. It could also be possible that higher levels of intrinsic, extrinsic, and introjected motivation reduced the motivation level in students. Career Expectations showed a positive significant correlation with extrinsic, and introjected motivation and no correlation with intrinsic and a motivation. This means that a higher level of parental career-related expectations increased extrinsic and introjected motivation. The possible reason might be that the career is all about a person's occupation that is undertaken for some external incentives to progress in life. So, career-related expectations are linked with some life opportunities to grow in life and compete with others which were found in the current study findings.

Parental ambitions showed a positive significant correlation with extrinsic, introjected, and a motivation while no correlation with intrinsic motivation. This means that higher parental ambition from their children decreases the personal interests of their children about something while enhancing the external motivations to mold themselves according to their parent's wishes and desires and sometimes causes a motivation in their children. Hence, the overall findings of a correlation between subscales of parental expectations and academic motivation indicated that the personal, career, and academic parental expectations could help students to be more intrinsically and extrinsically motivated while, parents' ambitions could impose a burden on their children to prove what others want from them ultimately lose motivation. As it's mentioned in a previous research study that high level of parental expectations leads to a

higher level of grades, and persistence to stay in school due to interest in the learning process (Vartanian et al., 2007).

Some of the correlations between self-determination subscales (i.e., perceived choices and Self-awareness) and academic motivation subscales (i.e., intrinsic, extrinsic, introjected, and a motivation) were found correlated. The perceived choices showed a statistically significant and positive correlation with introjected motivation only. On the other hand, self-awareness showed a statistically significant and positive correlation with intrinsic and extrinsic motivation and a significant negative correlation with a motivation while, a significant negative correlation with introjected motivation. This suggests that higher self-awareness levels in students would cause higher levels of intrinsic and extrinsic motivation while lower the motivation in students. Findings also suggested that introjected motivation becomes high with a high level of perceived choices because having control over which type of behavior a person needs to show in which condition indirectly leads to social desirability which is the main focus of students having introjected motivation.

Self-determination subscales mediated the relationship between perceived parental expectations and academic motivation subscales. These results are consistent with the previous theoretical and empirical literature. Self-determination increases the concordance between the behavior and intrinsic motivation of students in a way that behaviors are regulated by personal goals and values (Sheldon et al., 2017). On the opposite hand, if a student feels less self-determined the behaviors feel externally controlled and forced (Ryan & Deci, 2000). The direct effects of self-awareness on intrinsic, extrinsic, and introjected motivation are consistent with the theoretical background of self-determination theory. Parental expectations, especially personal and academic expectations play an important role in developing intrinsic motivation and personal values and goals to achieve more. The results revealed that perceived academic expectations of students indirectly affected their intrinsic, extrinsic, and introjected motivation. These findings provide empirical support to the self-determination theory assumptions. Considering that the COVID-19 pandemic has highly impacted the academic motivation of students. Factors like personal hygiene, school closures, and online classes have impacted the academic motivation of students (Asif et al., 2020; Hidalgo-Camacho et al., 2021; Idrees et al., 2022).

There are studies on gender differences regarding parental expectations found that parents show high academic expectations from their daughters as compared to their boys in African American families (Hudley & Graham, 2001). But in the current study

demographic characteristics in terms of educational level were investigated and found that parents normally in Pakistani culture hold more expectations and are more energetic at the college level as compared to university students. As the current study was conducted on Pakistani students so the cultural difference could be a possible factor for such findings. In a nutshell, the current study highlighted the importance of perceived parental expectations and provided evidence about the underline mechanism of its effect on academic motivation through the self-determination of college and university students.

Conclusion

The current study highlighted the importance of perceived parental expectations and self-determination and academic motivation in college and university students. The perceived parental expectations and academic motivation were found to be positively correlated with the mediating effect of students' self-determination. A higher level of parental expectations leads to higher self-awareness which leads to higher levels of students' academic motivation.

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