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Career Decision Making: Role of Family- Peer Belonging, Emotional Regulation and Academic Motivation

Yusra Zaki Aboud[1,*] Rommel Al Ali[2]

1 The National Research Centre for Giftedness and Creativity, King Faisal University, Saudi Arabia. Email: yozaki@kfu.edu.sa
2 The National Research Centre for Giftedness and Creativity, King Faisal University, Saudi Arabia. Email: ralali@kfu.edu.sa

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ABSTRACT

The study aimed to test the influence of family and peer belongings on the career decision-making difficulties through academic motivation and emotional regulation. For this objective, quantitative data were collected from 264 students of Saudi Arabian colleges. Hypothesis results showed that family and peer belongings have a significant impact on emotional regulation and academic motivation. On the other hand, emotional regulation also has a significant impact on career decision-making difficulties. While academic motivation has an insignificant effect on career decision-making difficulties. The study with these findings contributed that strong family and peer support played an integral role in increasing the students ' emotional and academic motivations, which leads to improved career decision making of students. Therefore, career guidance programs should integrate family peer dynamics and focus on building these psychological strengths to better support students' choices. Research limitations to explore the new research framework.

1. Introduction

Career decision-making (CDM) is an important challenge for students, particularly during higher education, which is important to align with their personal abilities, interests, and values with available opportunities in the market [73]. With this significance, students still face various CDM difficulties due to a lack of career information and insufficient readiness to make long-term choices [93]. These difficulties could enhance the negative consequences that could weaken the students' academic focus and also their well-being [65]. Research further suggested that students who are undecided about their careers often demonstrate reduced academic engagement and a higher likelihood of dropping out or changing career paths later on [14]. Even those who appear to have decided may continue to experience internal conflict and discomfort due to a lack of clarity about their own strengths, weaknesses, and values, which undermines commitment and confidence in their future direction [9]. These prior studies emphasized that there should be proper support to provide the students with career-related decision making for increasing their well-being that could

* *Corresponding author.*
E-mail address: yozaki@kfu.edu.sa

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enhance the country's economic growth.

Within this context, it is important to highlight those factor that effects to student's CDM. Among different factors, family and peer belongs becomes an important critical factors to know how the students manage their career decisions [81]. Families that provide support, guidance, and emotional encouragement often help young adults navigate uncertainty and build confidence in their abilities [38]. In the family members, parental involvement not only increase the CDM self-efficacy but it also help to reduce the indecision through offering the reassurance and validation of students' choices [24]. At the same time, peer belonging also creates a sense of social acceptance and shared understanding, allowing students to discuss their aspirations, observe the experiences of others, and normalize the difficulties of CDM [61]. Other study highlighted the view that supportive peer environments are linked with greater exploration of alternatives and reduced fear of failure, since students feel less isolated in their struggles [78]. When both of the family and peers provides a stable belonging, students have access to emotional security as well as practical resources, which together facilitate more informed and confident career planning as per the market demand [61]. Therefore, this study increase the focus to test how family and career belonging could improve the CDM.

In addition, families and peers also influence students by shaping their academic motivation, which in turn improves their ability to handle CDM difficulties. In modern education, academic motivation becomes a critical factor for introducing a passion for studying and preparing students for the workforce [82]. Individuals who improve their academic motivation are more likely to make educated career choices and choose pathways that are relevant to their interests and skills [41]. This is the reason; the academic motivation becomes an important factor in molding an individual's career choices and decisions. It is an important component influencing career maturity [76]. In the literature, it has been identified that family belongings are consistently shown to enhance students' intrinsic motivation, persistence, and commitment to academic goals [37]. Similarly, peer groups that model positive academic behaviors such as goal-setting, persistence, and curiosity create environments in which motivation is reinforced and academic effort is socially valued [40]. As students become more motivated academically, they require more knowledge, explore career alternatives, and engage in proactive decision-making behaviors [27]. This cycle of academic motivation, driven by family and peer influences, reduces career indecision by giving students the skills and confidence necessary to pursue suitable opportunities as per their interests. Seeking this study's evidence, the study sought to improve students' decision-making process through increasing the students' academic motivation after proper positive parental involvement.

Furthermore, family and peer belongings also extend beyond academic motivation through increasing students' capacity for emotional regulation, which is a critical skill in managing the stress and uncertainty associated with career choices [60]. Family belongings which provide an emotional support to help which could reduce their regulatory anxiety and develop coping strategies when faced with the challenges of long-term career planning [33]. In parallel, positive peer interactions allow students to share their emotions, seek validation, and learn adaptive responses to setbacks, which collectively buffer against negative affect [15]. Due to this fact, literature supported the view that emotional regulation played an integral role in ensuring that students do not avoid difficult decisions due to fear and stress [84]. Instead, with the support of strong family and peer relationships, students become more resilient, more capable of managing uncertainty, and more confident in navigating the complexities of career development [75]. Therefore, presence of caring and supportive relationships not only enhances decision-making competence among the students but it also promotes long-term academic and emotional well-being.

Above discussion highlighted that substantial research has examined CDM and the multiple

factors that shape this process, including family support, peer belonging, emotional regulation, and academic motivation [21; 81; 92]. These prior studies highlighted the effect of each factor individually, while these studies remain highlighted a majorly focused on individual effect on CDM with a limited attention on combined effect which remains a noticeable gap in the literature concerning how these attributes interact collectively to influence CDM difficulties. Therefore, this study focused on testing the combined effect of family belongings on students' academic motivation, and emotional regulations to improve the CDM difficulties. Furthermore, prior studies on CDM has largely been conducted in Western and Asian contexts, with studies highlighting the role of family support, peer belonging, and individual psychological resources in shaping decision outcomes [3; 16; 81]. However, limited attention has been given to the Saudi Arabian context, where cultural norms, family expectations, and social dynamics may uniquely influence how students approach career-related choices. Furthermore, extant literature focused on direct family and peer belonging influence on CDM, often overlooking indirect effect mechanisms such as academic motivation and emotional regulation, which are essential in helping students translate social support into effective decision-making strategies [35; 80]. This narrow focus has left a gap in understanding how these psychological and motivational processes interact with social belonging to reduce decision-making difficulties. Therefore, after addressing the previous gap, the current study aimed to investigate a more comprehensive relationship, particularly within the Saudi Arabian higher education context, by providing new insights into the indirect pathways through which belonging can enhance students' ability to manage CDM challenges.

With the above objective, research contributed in various ways. Theoretically, this study advances CDM literature by highlighting the combined and indirect effects of family and peer belonging through academic motivation and emotional regulation, which offers a more holistic understanding of CDM. It also addresses contextual gaps through extending existing models into the Saudi Arabian setting, where cultural and familial dynamics played an integral critical role. Practically, the findings also guide educators and counselors to design interventions that strengthen social belonging while simultaneously raising motivation and emotional regulation. Such efforts can equip students with the psychological and social resources needed to effectively navigate career decision-making challenges. The study was further divided into four sections.

2. Literature Review

2.1 Family belonging and emotional regulation

Family belongings are an important concept that is emotionally supported by family members [66]. Family belongings help to form a foundational context where the emotional regulation (ER) skills develop to improve the students' academic performance [86]. Other authors also highlighted that family belongings are important for the ER because families model how to interpret and manage emotions [5; 25]. Social learning theory suggests that parents act as "emotion coaches" through direct instruction, modeling of coping strategies, and regulating the emotional climate of the household [22]. Scharf and Roth [74] study also demonstrated that children exposed to warm, supportive family environments developed higher levels of adaptive regulation strategies compared to children from conflict-ridden families. This is also further supported by the view of Yao et al. [94] where they found that adolescents who perceived higher family support exhibited lower emotional reactivity and greater use of adaptive ER strategies over time. Similarly, Hodge et al. [34] reported that adolescents with high family belonging improves the students emotional attachments. Further research highlighted that the positive influence of family belonging on ER is not culturally bound. This suggests that the family's role in the development of ER is a universal phenomenon, though

specific practices. Together, these findings substantiate H1,
H1: Family belongings has significant effect on emotional regulations.

2.2 Family belonging and academic motivation

Family belonging also exerts a strong influence on academic motivation (AM). AM consisted of drive that is internal which prompts learners to engage in and persist with academic tasks [50]. When children perceive that they are valued and is being supported from their families then it could enhance their internalize learning values and pursue academic goals with persistence and interest [91]. Ryan and Reeve [70] study identifies relatedness as one of three psychological needs that fuel intrinsic motivation. Family belonging fulfills this relatedness need, thereby fostering autonomous motivation. Further theory posited that parental encouragement and support increase students' expectations of success and perceived task value Kong and Wang [42]. These mechanisms explain why family belonging enhances academic motivation. Further empirical study also supported the view with Lerner et al. [48] where they found that family involvement significantly predicted autonomous motivation among adolescents. Similarly, Affuso et al. [2] confirmed that family support enhanced students' persistence and academic self-efficacy, which is leading to sustained motivation. Avcı et al. [10] also reported that parental involvement in schoolwork was positively associated with intrinsic motivation and academic achievement. Other study highlighted that parental warmth and encouragement similarly predict motivation outcomes [67]. Thus, the positive effect of family belonging on academic motivation appears robust across cultural settings, and hypothesis is,
H2: family belongings has significant effect on academic motivation.

2.3 Peer belonging and emotional regulation

Peer belonging represents the acceptance, inclusion, and positive regard from one's peer group to improve emotional regulations (ER) [55]. During adolescence, peers become increasingly central to social life, and acceptance within peer groups significantly influences emotional outcomes. When individuals feel they belong among peers then it enhances the emotional ability to improve appropriate regulation [17]. Conversely, peer rejection or exclusion creates stress and increases emotional vulnerability, often leading to dysregulation [49]. Thus, peer belonging is a critical context for emotional development. Fatta et al. [23] empirically found that children who were well accepted by peers displayed fewer emotional and behavioral difficulties, mediated by stronger ER skills. Salerni and Messetti [72] study also validated that peer acceptance predicted improvements in ER and reduced externalizing behaviors. They also highlighted that peer support buffered against stress and promoted positive coping strategies. Moreover, research reveals bidirectional relationships. Allen et al. [4] found that children with stronger peer belongings enhanced regulation. Other studies have also shown that increasing peer belonging (through cooperative learning or peer mentoring) leads to improved ER outcomes [51]. Collectively, these findings reinforce H3
H3: Peer belongings has significant effect on emotional regulation.

2.4 Peer belonging and academic motivation

Peer belonging also increases the AM. A strong sense of belonging among classmates raises engagement, collaboration, and persistence in learning tasks [29]. Peers act as role models and sources of encouragement, shaping students' attitudes toward school and learning. Theoretical frameworks highlight this connection. Self-Determination Theory suggests that peer belonging fulfills the need for relatedness, which directly fuels motivation [79]. Empirical findings consistently support these claims. Bouchard et al. [13] reported that peer belonging was a strong predictor of

academic effort and intrinsic motivation among urban adolescents. Núñez-Regueiro and Wang [59] found that relatedness with peers significantly contributed to academic engagement. Shao et al. [77] confirmed that peer belonging indirectly influenced achievement by enhancing motivation and engagement among junior high school students. Further, intervention studies show that creating peer-supportive learning environments (e.g., cooperative learning strategies) significantly boosts academic motivation [54]. These findings suggest that fostering peer belonging is a viable strategy for enhancing academic outcomes, supporting H4.

H4: Peer belongings have a significant effect on academic motivation.

2.5 Emotional regulation and decision-making difficulties

ER refers to those strategies that help individuals to monitor their values and modify their emotional responses [12]. Decision-making difficulties involve indecision, procrastination, or failure to act due to emotional interference [58]. Poor ER is often associated with heightened anxiety, impulsivity, and avoidance, which complicate the decision-making process. Theoretically, emotions provide critical input for decision-making. When effectively regulated, emotions enhance adaptive choice by guiding attention to relevant cues [6]. Conversely, dysregulated emotions disrupt cognitive processes, bias evaluations, and increase conflict between alternatives. Wang et al. [90] also empirically found that cognitive reappraisal strategies enhanced decision-making under risk, while suppression hindered performance. Kornacka et al. [43] demonstrated that maladaptive ER predicted greater indecision and poorer task performance. Clinical studies further show that individuals with ER deficits, such as those with anxiety disorders, experience elevated decision-making difficulties [1]. Therefore, ER is a critical factor in decision-making competence, validating H5.

H5: Emotional regulations has a significant impact on decision-making difficulties.

2.6 Academic motivation and decision-making difficulties

AM influences not only performance but also the quality of decisions students make regarding their educational and career paths [27]. Motivated students can set clear goals, seek relevant information, and commit to choices aligned with their aspirations [45]. Lack of motivation, on the other hand, often results in indecision and procrastination. Theoretically, motivation provides the energy and direction for decision-making processes. Self-Determination Theory highlights that intrinsic motivation enhances goal clarity, while motivation increases decision difficulties [36]. Expectancy-value theory also suggests that students with higher perceived value and expectancy are more decisive in academic choices [30]. Paixão and Gamboa [62] empirically reported that pupils with higher AM experienced lower levels of career indecision. More recent studies confirm that AM enhances decision readiness, particularly in transitional phases such as choosing majors or career paths [11]. Other studies further highlighted that motivation-enhancing strategies like goal-setting workshops and counseling significantly reduce indecision and procrastination [69]. Thus, AM is a strong predictor of reduced decision-making difficulties, confirming H6.

H6: Academic motivation has significant impact on decision-making difficulties

3. Research methods

The study objective was to explore the influence of family and peer belongings on improving CDM difficulties through AM and ER. To test this objective, a quantitative research approach was employed. Quantitative research methods provide objective, reliable, and measurable data that allow for clear analysis and generalization of findings across larger populations [28]. On the other hand, the survey-based study was cross-sectional in nature, as data were collected at a single point

in time. Cross-sectional research provided a sample response in one time, which allows for quick and efficient analysis of relationships between variables [28]. Cross sectional data collected from 300 students of Saudi Arabia colleges. Survey instrument distributed via non-probability convenient sampling technique. The 264 questionnaires returned and were valid for hypothesis testing.

4. Conceptual Framework and Instrument

In this study, validated instruments used for ER, CDM difficulties, AM, and belongingness were used, where every construct was rated on a 5-point likert. Among the constructs, ER was adapted from Gratz and Roemer [31], which was selected due to its relevance in assessing adult learning and decision-making contexts. ER comprises four dimensions, namely emotional participation, diminished control over, externalization, and neglect. Among these dimensions, five items measured emotional participation and externalization, and the other two dimensions, namely diminished control over and externalization, were composed by four items. Alongside this, the CDM difficulties questionnaire, which is adapted from Rochat [68] was used to assess barriers faced by students in the CDM process and it was measured by three dimensions, namely lack of readiness, lack of information, and inconsistent information, which are further measured by each dimension with 5 items. To assess motivation, the study employed the AM scale of [85]. The academic motivation scale is structured from two dimensions namely intrinsic motivation and extrinsic motivation. Each of the dimensions comprises 5 items. Finally, the general belonging scale was incorporated to evaluate students' perceptions of peer and family belongingness. From these dimensions, family belonging comprises 6 items and peer belonging comprises 5 items. Variables depicted in Figure.1 below,

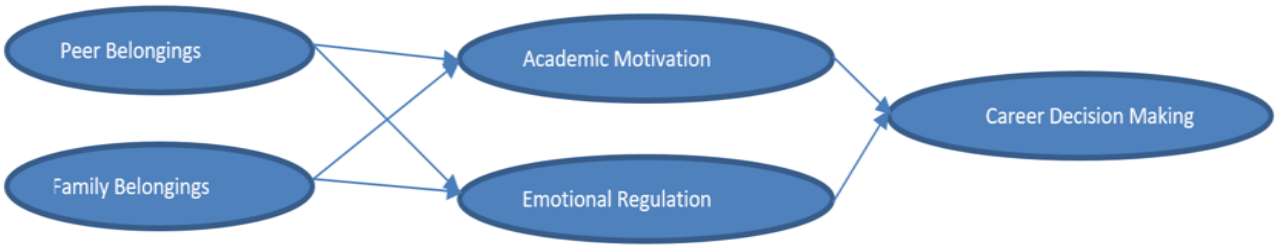

Fig.1: Conceptual Framework

5. Data Analysis and Results

5.1 Demographic Analysis

The section in the Table.1 shows the distribution of students across majors, showing meaningful differences by gender and field of study. Within the education and Psychology College, female students were most strongly represented in psychology (41.09%), followed by fine arts (23.28%) and special education (19.17%). Male students, on the other hand, were concentrated in physical education (27.27%) and psychology (38.18%), with smaller proportions in special education (18.18%) and kindergarten (16.36%). Interestingly, fine arts was entirely female-dominated (23.28% of females vs. 0% of males), while physical education was entirely male-dominated (27.27% of males vs. 0% of females). These results suggest gendered patterns in major selection within this college, reflecting both academic interests and traditional societal expectations about suitable fields for males and females. In the arts and science colleges, the gender distribution appeared more balanced across subfields. In the Arts College, both male and female students were most concentrated in English Language (39.39% of females, 40.11% of males), followed by Arabic Language and Islamic Studies, with relatively equal representation. Similarly, in the science college,

females and males were proportionally distributed across Biology, Physics, and Chemistry, with Physics having the largest share (38.88% females, 37.03% males). This indicates that, in contrast to the education and Psychology College, where strong gendered differences emerged, the arts and science colleges reflected more equal representation of males and females across their disciplines.

Table 1
Sample Characteristics

Major	College	Female	%	Male	%
Education and psychology	Psychology	30	41.09	21	38.18
	Special Education	14	19.17	10	18.18
	Kindergarten	12	16.43	9	16.36
	Fine arts	17	23.28	0	0
	Physical education	0	0	15	27.27
	Sociology	8	9.87	7	11.29
	Total	**73**	**%100**	**55**	**%100**
Arts	Arabic language	12	36.36	9	36.07
	English language	13	39.39	10	40.11
	Islamic dep	8	24.24	6	24.01
	Total	**33**	**%100**	**25**	**%100**
Science	Biology	12	33.33	9	33.33
	Physics	14	38.88	10	37.03
	Chemistry	10	27.77	8	29.62
	Total	**36**	**%100**	**27**	**%100**
Total		**150**	**%100**	**114**	**100%**

5.2 Construct reliability and validity

5.2.1 Convergent validity

The Structural Equation Modeling (SEM) technique was employed using AMOS software, where hypotheses were tested in two measurement and structural models. From the measurement model, convergent validity results for the study constructs demonstrate strong reliability and validity across all measured dimensions. Cronbach's Alpha values for all constructs range from 0.792 to 0.893, which exceeds the value of 0.7, indicating good internal consistency [39]. In the same vein, Composite Reliability (CR) values range between 0.832 and 0.913, where all values are greater 0.70 cutoff, confirming the constructs' reliability [32]. Furthermore, Average Variance Extracted (AVE) values for each dimension range from 0.504 to 0.593, surpassing the minimum acceptable threshold of 0.50, which supports adequate convergent validity [26]. The above results highlighted the construct convergent validity. Table 2 predicts above results.

Table 2
Convergent Validity

Construct / Dimension	Cronbach's Alpha (α)	CR	AVE
Emotional Regulation			
Emotional Participation	0.851	0.873	0.5182
Diminished Control Over	0.833	0.863	0.543
Externalization	0.803	0.853	0.524
Neglect	0.792	0.832	0.504
Career Decision-Making Difficulties			
Lack of Readiness	0.874	0.882	0.563
Lack of Information	0.863	0.883	0.573
Inconsistent Information	0.852	0.873	0.553
Academic Motivation Scale (AMS)			
Intrinsic Motivation	0.873	0.892	0.593
Extrinsic Motivation	0.844	0.863	0.544
General Belonging Scale (GBS)			
Peer Belonging	0.882	0.903	0.573
Family Belonging	0.893	0.913	0.583

5.3 Discriminant validity

The results in Table.3 demonstrate satisfactory discriminant validity among all constructs based on the Fornell-Larcker criterion where square root of AVE in diagonal values will be greater in the construct [26]. In this matrix, all diagonal values exceed their respective inter-construct correlation, which highlights constructs discriminant validity, which is supporting to the measurement model.

Table 3
Discriminant Validity

Construct / Dimension	1	2	3	4	5	6	7	8	9	10	11
1.EP	**0.763**										
2.DCO	0.521	**0.737**									
3.EXT	0.482	0.502	**0.724**								
4. NEG	0.453	0.443	0.422	**0.710**							
5. LOR	0.352	0.364	0.343	0.312	**0.750**						
6.LOI	0.303	0.323	0.302	0.283	0.552	**0.757**					
7.INI	0.292	0.314	0.284	0.272	0.525	0.532	**0.743**				
8.INM	0.333	0.344	0.323	0.293	0.484	0.504	0.472	**0.770**			
9.EXM	0.282	0.294	0.274	0.252	0.423	0.445	0.435	0.604	**0.737**		
10. Peer Belonging	0.261	0.283	0.253	0.233	0.385	0.405	0.394	0.555	0.506	**0.757**	
11. Family Belonging	0.312	0.334	0.304	0.283	0.434	0.456	0.445	0.596	0.537	0.585	**0.763**

Note: EP-emotional participation, DCO-diminished control over, EXT-externalization, NEG-neglect, LOI-lack of information, INI-inconsistent information, INM-intrinsic motivation, EXM-extrinsic motivation, PEB-peer belongings, FEB-family belongings

5.4 Empirical Analysis

5.4.1 Model Fitness

Table 4. Illustrates that the standard chi-square index value is 1.822, falling within an acceptable range. The sensitivity of this metric is influenced by the sample size, which accounts for the observed value. While achieving such an ideal scenario is impractical, it requires reliance on other more practical indicators based on an approximate match. Both the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI) exhibit high levels of conformity. Furthermore, the Quality of Fit Index (GFI) and the Normed Fit Index (NFI) exceed the 0.90 threshold, indicating strong alignment with economic conformity standards. Additionally, the Parsimony Goodness of Fit Index (PGFI), the Normed Fit Index (PNFI), and the Comparative Fit Index (PCFI) all suggest a satisfactory level of compliance. The comprehensive evaluation of these matching indicators confirms the model's strong overall alignment. Hence, it is logical to conclude that the path analysis reflects the theoretical framework proposed in the literature and research studies. The current study revealed that the assumed path model fit well with the sample data. Each variable in the model demonstrated a significant association with family belonging, with peer belonging showing a particularly strong link. Emotional regulation was closely associated to difficulty in making career decisions, while academic motivation had a relatively minor impact.

Table 4
Path analysis indicators and their levels of acceptance and values

Model Fit Indicator	Abbreviation	Recommended Threshold	Observed Value	Assessment
Chi-square	χ^2	Preferably not significant	1.822	Not significant
Chi-square/df Ratio	CMIN/DF	Between 1–5	0.911	Acceptable
Goodness-of-Fit Index	GFI	≥ 0.90	0.998	Good
Root Mean Square Error of Approximation	RMSEA	< 0.08	0.000	Good
Comparative Fit Index	CFI	≥ 0.90	1.000	Good
Tucker-Lewis Index	TLI	≥ 0.90	1.001	Good

5.5 Hypothesis results

Table 5 results demonstrate that both family and peer belongings significantly influence the emotional and academic outcomes of college students. Specifically, family belongings showed a strong positive influence on emotional regulation (β = 0.300, t = 5.56) and academic motivation (β = 0.530, t = 4.77), indicating that students who are supported by their families are more capable of managing their emotions and staying motivated in their studies. Similarly, peer belongings positively predicted emotional regulation (β = 0.443, t = 4.82) and academic motivation (β = 0.389, t = 3.89). This highlights that a sense of acceptance and inclusion among peers fosters not only emotional stability but also drives students to remain focused on their academic goals. Together, these findings suggest that both family and peer contexts serve as critical pillars for promoting positive emotional and academic functioning among college students. The results further reveal that emotional regulation and academic motivation directly affect students' decision-making abilities. Emotional regulation significantly reduced decision-making difficulties (β = -0.212, t = 4.16). Likewise, academic motivation had an insignificant influence on decision-making (β = 0.127, t = 1.54).

Table 5
Regression Results

Path	B	SE	t-value	Decision
FEB→ ER	0.300	0.054	5.56	Supported
FEB → AM	0.530	0.111	4.77	Supported
PEB → ER	0.443	0.092	4.82	Supported
PER → AM	0.389	0.100	3.89	Supported
ER→CDM difficulties	-0.212	0.051	4.16	Supported
AM→CDM difficulties	0.127	0.083	1.54	Supported

6. Discussion

Many studies have been particularly interested in how individuals make CDM. Therefore, the purpose of this study was to gain further insight into the ways that AM, emotional regulation, and perceived belonging affect career decisions. A hypothesized path model was developed and tested to evaluate the relationship between belonging and CDM. A sample of 264 undergraduate students filled out multiple survey instruments to establish the model's constructs, which included AM, peer Belonging, familial Belonging, emotional regulation, and CDM difficulties. The data was assessed using AMOS software, which enabled path model analysis and tested six hypotheses. Hypothesis results showed that peer belongings significantly increase the AM of the students. This relationship shows that peer relationship is a major factor in determining how motivated students are for their studies. According to Shao et al. [77], students who have positive relationships with their peers are more engaged and perform better on academic challenges. This is also further supported with Vania et al. [87], who discovered that students' AM is significantly predicted by the caliber of peer relationships they formed online during the COVID-19 pandemic. They also discovered that solely online interactions result in lower-caliber peer relationships, which may hurt motivation. This suggests that positive peer relationships might considerably influence AM. According to the findings of the current study, peer belonging had a greater effect on AM.

However, the study's findings also showed that students' AM is strongly influenced by their sense of family belonging. Research has repeatedly demonstrated that students' AM is greatly impacted by their sense of family belonging [64]. Students' motivation and success are greatly influenced by a variety of factors, including their family background, expectations, interactions, and involvement [95]. Students who are considered to be at risk are especially affected by this [46]. However, depending on cultural traits and levels of performance, the precise forms and sources of

familial influence can change [7]. Motivation is a critical mediating variable between these determinants and educational attainment, even though the family environment, characteristics of the students, and motivation all together influence academic accomplishment [53]. These studies' results shown that family should have proper belongings to increase the student's motivations that could lead to improve their academic performance.

Further results shown that peer belongings also significantly increase the emotional regulations. These findings indicating that peer pro-social conduct and high levels of parental relationship quality have been observed to minimize the negative connection between emotional dysregulation and teenage antisocial behavior. These findings are consistent with a study by Venkataramani et al. [88] that found strong relationship between friends and emotional delegation. Nepon et al. [56] also further noticed that individuals who experience peer rejection, exclusion, or victimization often encounter heightened psychological disturbances, potentially leading to a cycle of diminishing self-control and worsening mental health problems over time. Furthermore, Arslan and Coşkun [8] indicates that school belonging is linked positively to academic resilience, social functioning, and psychological well-being, and negatively to emotional dysregulation. Furthermore, Liu et al. [52] demonstrated in their study that the mediating function of poor ERin the relationship between childhood psychological maltreatment and psychosocial problems in college students emphasizes the importance of belonging and social support as protective elements against emotional distress. These findings highlight that family belongings are an integral factor in improving the emotional well-being of students.

In other perspectives, peer belongings also significantly increase the ER of students. These findings show that family belonging has a significant and detrimental influence on the ER of Saudi college students. This result is consistent with Delgado et al. [18] study, which indicated that bonds between parents and adults are more predictive of emotional stability than interactions with the peer group. In the context of Saudi Arabian college students, this finding holds particular importance because Saudi culture is highly family-oriented, where family ties, guidance, and collective values play a central role in shaping students' identities and emotional well-being. Students who maintain strong family belonging are likely to experience greater emotional stability, which can protect them against stressors such as academic pressure, career uncertainty, and social expectations. Strengthening family support systems, therefore, becomes a vital strategy for universities to enhance students' overall psychological resilience and academic performance.

Moreover, ER negatively effects to the CDM difficulties. The results of the study pointed towards a notable connection, demonstrating that as an individual's ER levels rose, so did their struggles with making decisions about their career path. Previous studies have put forth the same idea where highlighted that there would be a significant correlation between poor ER and difficulties in making career decisions [19; 63; 83]. It is also supported with other studies where they also suggested a direct link between heightened emotional problem levels and the challenges in navigating career choices [57; 89]. Additionally, Lee and Jung [47] study highlighted that individuals encountering obstacles in CDM often tend to undergo emotional regulation, including feelings of anxiety, negative sentiments, and maladaptive coping mechanisms. These findings enforced that Saudi Arabian colleges should offer ER training programs to help students manage anxiety and negative emotions when facing career choices. Furthermore, universities should embed psychological support and counseling services into career development centers to reduce CDM difficulties linked with emotional challenges.

Lastly, AM has an insignificant influence on CDM difficulties. These results indicate that there was no significant link between these two variables. This discovery was contradictory to what was expected, as a previous study had shown that AM is crucial in influencing students' CDM process.

Studies have shown that AM plays a significant role in shaping career maturity [71]. Moreover, there is a positive correlation between AM levels and career decisions, as well as CDM. Research also suggests that an increase in learning motivation can improve students' CDM abilities [20]. Furthermore, the AM of university students has been found to positively impact their decisiveness in choosing a career, highlighting the importance of motivation in determining career paths [44]. Based on the findings, Saudi Arabian colleges should strengthen career-counseling programs to complement students' AM with practical guidance. Additionally, universities should integrate career planning workshops and mentorship initiatives to bridge the gap between motivation and effective CDM.

7. Implications and Recommendations

Various implications of study findings. Theoretically, firstly, research contributed important insights on the role of belongings in increasing the students' AM among Saudi college students. The findings reveal that positive peer relationships significantly boost students' motivation toward their studies, highlighting the growing importance of peer influence in academic settings within a culture traditionally focused on family ties. This expands the understanding of social factors that affect motivation in the evolving educational environment. Second, the study also contributed to highlighting the crucial role of family belonging in supporting both AM and emotional regulation, which reflects the continuous centrality of family in Saudi students' academic and psychological lives. This contribution highlights how family dynamics remain a vital source of encouragement and emotional balance for students navigating academic challenges. Thirdly, study results also contributed that peer and family belongings affect positively the student's emotional regulation, with family belonging showing a particularly strong impact. This reveals the dual importance of social support from both peers and family, and specifically emphasizes how family ties play a dominant role in maintaining emotional well-being for Saudi students. This adds nuance to the understanding of how belonging shapes emotional health in a culturally specific context. Finally, the research challenges previous assumptions by showing that AM does not have a significant direct effect on CDM difficulties among Saudi students. This finding suggests that, despite being motivated academically, students may still struggle with career choices due to other factors, such as cultural expectations or external pressures. This contribution encourages a reconsideration of the factors influencing career decisions in this context.

Practically, at first study demonstrated the significance of peer belongings in enhancing AM which suggested that that Saudi universities should create more opportunities for students to build strong peer connections. Initiatives such as peer mentoring programs, group learning activities, and student clubs can foster a supportive academic community that enhances motivation and engagement. Secondly, given the strong impact of family belonging on both AM and emotional regulation, universities should develop strategies to involve families more closely in the educational experience. Family-oriented events, communication platforms that connect students and their families, and family-inclusive counseling services would help strengthen students' support systems and promote their academic and emotional well-being. Thirdly, since both peer and family belonging contribute to better emotional regulation, institutions should offer comprehensive emotional support programs. These could include workshops on emotional skills, resilience training, and social activities that encourage peer bonding, alongside services that promote family engagement. Such programs would improve students' ability to manage stress and maintain psychological health.

Fourthly, recognizing that ER reduces CDM difficulties, which enforced that there should be a career centers in in Saudi universities that should integrate emotional wellness into their services.

Providing students with tools to manage anxiety and emotional challenges related to career uncertainty will help them make more confident and informed career choices. Fifthly, the finding that AM alone does not significantly ease CDM difficulties implies that motivation-enhancing efforts should be complemented with practical career planning support. Universities should offer career workshops, internships, mentorship opportunities, and labor market education to better prepare students for the realities of the job market and CDM processes. Finally, this study stresses the need for culturally sensitive support services that align with Saudi Arabia's family-oriented and collectivist culture. Universities should ensure that counseling and career services respect cultural values, involve families where appropriate, and provide resources in culturally relevant ways. This approach will enhance the effectiveness of support programs and better meet students' unique needs.

Study has various recommendations. For instance, study recommends organizing workshops for parents to enhance their children's independence and confidence in their career choices, and encouraging them to engage in dialogue about their children's career aspirations. Family affiliation reduces emotional distress and hesitation in making career and academic decisions. In addition, Universities should incorporate stress management and decision-making strategies into their curricula to help students overcome career anxiety. Since poor emotional regulation, as the study results show, strongly predicts difficulties in making career decisions, counseling programs should prioritize emotional resilience alongside traditional career counseling.

8. Conclusion

This study provides valuable insights into how AM, emotional regulation, and perceived belonging influence CDM among Saudi Arabian undergraduate students. For this purpose, survey based data was collected from the students of Saudi Arabia colleges. The key findings highlighted key significant role of peer belonging in boosting AM and emotional regulation, which is emphasizing the importance of positive social interactions among students. Simultaneously, family belonging emerges as a crucial factor not only in motivating students academically but also in supporting their emotional stability, reflecting the deeply rooted family-oriented values within Saudi culture. Moreover, ER is shown to play a pivotal role in reducing difficulties related to CDM, underscoring the need for emotional well-being in navigating career uncertainties. Contrary to some previous research, AM alone does not appear to directly alleviate CDM difficulties, suggesting that motivation must be paired with practical guidance and support to effectively aid students in their career paths. Collectively, study findings contributed culturally embedded relationships between belonging, motivation, emotional regulation, and career choices. It contributed to guide to Saudi universities to adopt holistic and culturally sensitive approaches that raises a peer connection, engage families, and provide emotional and career support tailored to students' unique social and cultural contexts. By doing so, institutions could be able to better prepare students to overcome academic and career challenges, enhancing both their psychological resilience and career readiness.

9. Future Research Directions

This study focused on Saudi university students; future research could explore whether family belonging holds the same value in individualistic versus collectivistic cultures or whether peer influence varies across other educational systems. Study focused on quantitative survey based data. Future studies could use in-depth interviews instead of path analysis to reveal why family belonging increases ER more than peer relationships do. The study on belonging while ignored other factors. Therefore, other factors could also be investigated, such as socioeconomic status or the role of social media in reshaping the influence of peers or family on individuals' career and academic decisions.

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