



Analyzing Factors Affecting Career Choice

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Abstract— Career choice is one of the most significant decisions in an individual’s life, influencing both personal and professional development. Understanding the determinants of students’ career choices is essential for higher education institutions to develop effective recruitment and program strategies. This study examines the key factors influencing career choice among undergraduate students at the Mongolian University of Science and Technology (MUST). A questionnaire-based survey was administered to 410 students from ten schools. The instrument demonstrated high internal consistency, with Cronbach’s alpha coefficients exceeding 0.7 across all scales. Descriptive, reliability, and regression analyses were employed to test the research hypotheses based on Social Cognitive Theory and Social Cognitive Career Theory. The results indicate that sectoral conditions, university-related activities, and financial resources have significant direct and indirect effects on students’ career choices, while personal interests and self-efficacy function as mediating variables. Conversely, social influences such as family and peer advice exert minimal impact on decision-making. These findings suggest that Mongolian students’ career decisions are increasingly shaped by individual motivations and labor market realities, highlighting the need for universities to strengthen career guidance, industry collaboration, and evidence-based enrollment strategies.

Keywords—social cognitive theory, higher education, internal consistency of questionnaire, mediating variables, regression analysis

I. LITERATURE REVIEW

The theoretical foundation of career choice is based on Albert Bandura’s “Social Cognitive Theory” (1986) and the “Social Cognitive Career Theory” (1994) developed by Lent and his colleagues [1] [2]. Social cognitive theory conceptualizes the interaction among environmental conditions, individual characteristics, and behaviors [1]. It suggests that an individual’s career development is influenced by goals often formed by interest, self-efficacy, and outcome expectations.

Self-efficacy refers to a person’s belief in their capability to perform a task or activity, while outcome expectations are shaped by factors such as anticipated financial rewards, social status, and personal satisfaction. The theory suggests that individuals who set clear goals can overcome challenges and direct their behavior and actions toward achieving long-term success [1].

The Social Cognitive Career Theory builds on Bandura’s framework by emphasizing the role of personal interest. According to this theory, career goals influence behavior and decisions, and such goals are shaped by personal interests. In turn, interests are modeled as being influenced by self-efficacy and outcome expectations [2].

A summary of relevant studies that have identified the factors influencing career choice is presented in Table I.

TABLE I. SUMMARY OF LITERATURE REVIEW ON CAREER CHOICE

No	Researcher	Country	Sample size	Statistics method	Affecting factors	Research result
1	Bui Ngoc Tuan, 2024 [3]	Vietnam	1605 high school students	Descriptive, Exploratory factor analysis, regression analysis	Personal beliefs, family influence, societal demand, school marketing, and career guidance.	Labor market demand has the strongest influence on career choice, followed by the influence of career guidance counselors, teachers, and family. While universities and students’ interests and skills have a positive impact on career choice, their influence is relatively weak.

No	Researcher	Country	Sample size	Statistics method	Affecting factors	Research result
2	Duman O. and Ercan S., 2022 [4]	Turkey	1 st group 14, 2 nd group 8	Focus group interview	Family, peers, teachers, industry development, business opportunities, school marketing, social media influence, and personal interests.	University promotional activities, family influence, and professional video presentations.
3	Nimra Sharif et al., 2019 [5]	Pakistan	167 university students	Descriptive statistics	Parents, guidance counselors, future income, and social status.	Factors such as social status, future income, and advice from fathers have a strong influence on students' career choices.
4	Andrew P. et al., 2007 [6]	USA	155 university students	Descriptive statistics	Future income, social status, and social inequality.	Compared to white students in the United States, future income and social status are more influential factors in career choices for African American students.
5	Pak A., John S. [7]	Australia, Hong-Kong, Taiwan	632 university students	Descriptive statistics	Parents, teachers, peers, social status, job availability, future income, years of study, and tuition fees.	The factors influencing the choice of a financial profession have been considered across culturally diverse groups.
6	P. M. Alexander et al., 2011 [8]	South Africa	1868 university students	Descriptive statistics	Influencers, personal interests, and outcome indicators (such as salary, job availability, and mobility, etc.).	The factors influencing career choice, including social and cognitive career decision-making factors, have a different impact on students pursuing information technology and other professions.
7	Godfred M.Y. et al., 2018 [9]	Ghana	354 university students	Descriptive statistics, Exploratory factor analysis	long-term income, job opportunities, starting salary, job security, job nature, work-life balance, work environment, job satisfaction, interpersonal relationships, working hours, social prestige, and others.	While factors such as prestige and working conditions have a lesser impact on career choice, indicators like job security, high salary, and job availability play a significant role.

II. RESEARCH HYPHOTHESIS

Based on Bandura's 'Social Cognitive Theory' (Stanford University), Lent's 'Social Cognitive Career Theory' (University of Michigan), and the studies summarized in Table I, the research hypothesis is presented in Figure 1.

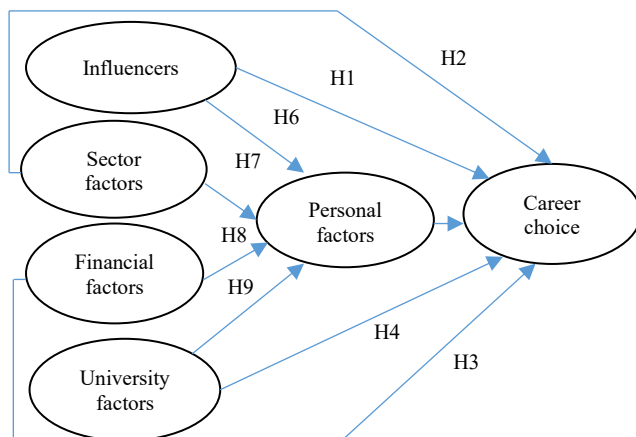


Fig. 1. Research hypothesis

Source: Author's own illustration

H1: Social groups have a direct influence on individual career choices.

Turkish researchers Duman and Erkan examined the factors influencing career choice through focus group interview with undergraduate students. In the study,

participants assessed 15 factors influencing career choice, with family influence alone accounting for 15.71% of the total importance [4]. Trong et al. (Vietnam) analyzed the influence of six factors—parental, peer, and counselor support; individual interests; financial resources; personal skills; career opportunities; and cultural aspects—on students' career choice using Cronbach's alpha, regression, and structural equation modeling. Findings from this study suggest that parents, friends, and older siblings exerted relatively little influence on individuals' career choices, whereas guidance from relatives and teachers had a significant impact [10]. Bui N.T. (2024) found that professional advice exerts a strong and positive influence on career choice, whereas family guidance has a comparatively weak effect, based on quantitative analysis [3]. Nimra Sharif et al. (Pakistan) found that students predominantly follow their fathers' guidance when making career choices [5]. Pak A. and John S. (Australia) found that family, teacher, and peer influences were stronger among Taiwanese and Hong Kong accounting students, whereas Australian students emphasized the major itself [7].

H2: Sector-related factors have a direct influence on career choice.

Social Cognitive Career Theory identifies outcome expectations as the primary factor influencing an individual's interests. These expectations encompass future income, employment opportunities, social status, and prospects for career advancement [1]. As shown in Table I, the most researchers identified social demand indicators as a key factor. For example, Pakistani researchers investigated how future job opportunities, expected income, and sectoral growth influence career choice [5]. Ghanaian scholars, using factor

analysis, found that students prioritized job opportunities and financial prospects over prestige or job conditions when choosing a career [9]. Vietnamese researchers, using factor analysis, confirmed that labor market factors—such as salary, job availability, and work environment—strongly influence students' career choices [10] [3]. Limited of family financial resources negatively affect career choice [4].

H3: Financial factors have a direct influence on career choice.

Several studies have shown that students choose their field of study and university based on their family's financial situation. Mongolia has established regulations to provide scholarships for students in priority economic sectors and key educational disciplines. For example, students in accredited programs in high-demand fields (e.g., teaching, nursing, social work) at domestic universities are eligible for 50–100% tuition discounts. [11]

H4: University-related factors have a direct influence on career choice.

Duman and Erkan (Turkey) found that university engagement activities and career videos on social media together accounted for 35.7% of the influence on students' career choices, compared with 15 factors identified in interviews [4]. Vietnamese researcher Bui N.T. confirmed through quantitative analysis that university-related factors have a positive influence on career choice [3]. Most scholars have considered university-related factors to include indicators such as institutional reputation, experience, campus environment, faculty competence, material resources, and university marketing [3] [10].

H5: Individual factors have a direct influence on career choice.

Lent et al. (1994), in Social Cognitive Career Theory, identified personal autonomy and self-efficacy as fundamental factors influencing career choice. Self-efficacy stimulates individual interests, which in turn shape future goals. When goals are clearly defined, career choice becomes easier [2]. Hobbies are an important factor in career choice. If a person is engaged in something they enjoy, they will have the desire and motivation to pursue education in that field. Moreover, when individuals choose a career based on their knowledge and skills, they find it easier to grow and develop in their profession, while also feeling confident and comfortable in their work [10].

Building on Lent et al., individual factors are conceptualized as mediating variables, and four primary hypotheses are proposed to examine how independent variables indirectly influence career choice through these mediators [2].

H6: Social groups have an indirect influence on career choice through individual factors.

H7: Industry conditions have an indirect influence on career choice through individual factors.

H8: Financial factors have an indirect influence on career choice through individual factors.

H9: University-related factors have an indirect influence on career choice through individual factors.

III. RESEARCH METHODS

Survey Questionary: Based on the studies summarized in Table I, 35 items representing the variables specified in the theoretical research model were developed. Responses were measured on a five-point Likert scale.

Sampling: During the 2023–2024 academic year, Mongolian University of Science and Technology (MUST) enrolled 14,368 students, including 13,089 undergraduates. Theoretically, the sample size was calculated to be 374 at a 95% confidence level (5% margin of error); therefore, 410 students from 10 schools at MUST were included in the study.

Descriptive statistics: Mean, mode, median, and standard deviation were calculated to describe key characteristics of factors influencing career choice.

Reliability analysis: Cronbach's alpha was used to assess the internal consistency of the questionnaire items. Reliability indicates the internal consistency of measurement variables across subscales. Internal consistency is considered acceptable if Cronbach's alpha is 0.7 or higher.

Regression analysis: Independent and mediating variables were analyzed using two-step linear regression, with t-tests and significance levels used to assess the model's hypotheses.

IV. RESEARCH RESULTS

During the 2024–2025 academic year, the Mongolian University of Science and Technology (MUST) operates with 11 schools, 2 affiliated higher education institutions, and 3 colleges. This study included 410 students from 10 schools at MUST, with factors influencing career choice assessed through 35 items across 6 sections.

As shown in Table II, sectoral growth, job demand, and expected income were the most influential factors on career choice (3.75), followed by individual interest, skills, and goals (3.58). University activities and reputation had moderate influence (3.14), while family and friends' advice (2.15) and financial situation (2.17) had minimal impact on career choice.

TABLE II. MEAN RATINGS OF FACTORS INFLUENCING CAREER CHOICE

		PER	INF	SEC	FIN	UNI	RESULT
N	Valid	410	410	410	410	410	410
	Missing	0	0	0	0	0	0
Mean		3.58	2.15	3.75	2.17	3.14	3.53

Source: Author's SPSS output (2025)

Results of reliability analysis

As shown in Table III, Cronbach's alpha values exceeded 0.7 for all factors, with significance levels below 0.05, indicating good internal consistency and reliability for further research use.

TABLE III. CRONBACH'S ALPHA VALUES FOR EACH FACTOR

Factors	Questions number	Cronbach's alpha	F	Sig.
Personal	4	0.799	43.591	0.000
Influencers	6	0.811	127.141	0.000
Sector	8	0.913	16.647	0.000
Finance	3	0.861	7.456	0.001

University	7	0.911	43.558	0.000
Results	7	0.874	49.033	0.000

Source: Author's SPSS output (2025)

Results of Regression Analysis

Two-step linear regression of independent and mediating variables produced the following results. Model 1 evaluated the direct effects of influencers, sectoral factors, financial resources, and university activities on career choice. Model 2 examined the indirect effects of influencers, sectoral factors, financial resources, and university activities on career choice, mediated by individual factors. The regression results in Tables IV and V show that the adjusted R^2 was 0.49 for Model 1 and 0.55 for Model 2, with the ANOVA F-test yielding a significance level of 0.000 for both models. Thus, the regression models are appropriate, explaining 49.2% and 55.2% of the variance in the dependent variable for Models 1 and 2, respectively.

TABLE IV. MODEL SUMMARY

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.701a	.492	.487	.62359
2	.743b	.552	.546	.58612
a. Predictors: (Constant), UNIMean, INFMean, SCMean, FINMean				
b. Predictors: (Constant), UNIMean, INFMean, SCMean, FINMean, PERMean				

Source: Author's SPSS output (2025)

TABLE V. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152.324	4	38.081	97.929
	Residual	157.490	405	.389	.000b
	Total	309.814	409		
2	Regression	171.024	5	34.205	99.566
	Residual	138.790	404	.344	.000c
	Total	309.814	409		
a. Dependent Variable: RSLMean					
b. Predictors: (Constant), UNIMean, INFMean, SCMean, FINMean					
c. Predictors: (Constant), UNIMean, INFMean, SCMean, FINMean, PERMean					

Source: Author's SPSS output (2025)

Table VI summarizes the regression coefficients and hypothesis results.

TABLE VI. RESULTS OF REGRESSION ANALYSIS

Model	Variables	Beta	t	Sig.	Results
1	Intercept		1.674	.095	
	Influencers	.084	2.040	.042	H1: rejected
	Sector factors	.477	12.317	.000	H2: confirmed
	Financial factors	.127	3.106	.002	H3: confirmed
	University factors	.285	7.096	.000	H4: confirmed
2	Intercept		.260	.795	
	Influencers	.046	1.177	.240	H6: rejected
	Sector factors	.324	7.732	.000	H7: confirmed

Financial factors	.128	3.333	.000	H8: confirmed
University factors	.243	6.355	.000	H9: confirmed
Personal factors	.306	7.378	.000	H5: confirmed
a. Dependent Variable: Career choice				

Source: Author's SPSS output (2025)

As shown in Table VI, Model 1 confirmed that sectoral factors ($P < 0.000$, $t = 12.317$) and university activities ($P < 0.000$, $t = 7.096$) have a direct effect on career choice. Financial supports such as tuition scholarships and loans had direct impact on their choice of career ($P < 0.01$, $t = 3.106$). Likewise, students' career choices were relatively less influenced by parents, friends, and others ($P > 0.01$, $t = 2.040$).

In Model 2, sectoral factors ($P < 0.001$, $t = 7.732$), financial factors ($P < 0.001$, $t = 3.333$) and university activities ($P < 0.001$, $t = 6.355$) influenced career choice indirectly through personal factors.

V. DISCUSSION

The findings of this study provide valuable insights into the determinants of career choice among undergraduate students at the Mongolian University of Science and Technology (MUST). Consistent with Social Cognitive Theory [1] and Social Cognitive Career Theory [2], the results confirm that both personal and environmental factors jointly shape students' career decisions.

The results revealed that **sectoral factors**—including job market demand, expected salary, and industry growth—are the most influential determinants of career choice. This finding aligns with earlier studies from Vietnam [3] [10] and Ghana [9], emphasizing that students are largely motivated by pragmatic considerations such as employment stability and financial security. In a developing economy like Mongolia's, where labor market conditions fluctuate with industrial expansion, students appear to prioritize fields that promise economic return and job availability.

University-related factors were the second strongest determinant of career choice. Institutional reputation, academic environment, faculty quality, and promotional activities were shown to significantly shape students' preferences. This supports Duman and Erkan's (2022) findings that university marketing and engagement activities can meaningfully influence student decisions [12]. In the Mongolian context, this suggests that strategic university branding, transparent communication of program outcomes, and enhanced career guidance services can attract students to specific disciplines.

Financial factors, including tuition fees, scholarships, and family income, also had a significant direct and indirect influence on students' career choice. This reflects the importance of financial accessibility in higher education. Given that the Mongolian government provides tuition discounts and scholarships for students in priority sectors, such incentives appear to shape student behavior by lowering barriers to entry for certain programs.

The study further demonstrated that **personal factors**—such as interests, abilities, and self-efficacy—serve as a

mediating variable through which environmental and institutional influences operate. This finding reinforces the central premise of Social Cognitive Career Theory: that self-efficacy and outcome expectations are key mechanisms linking contextual factors to career behavior. Students who perceive themselves as competent and motivated in a particular field are more likely to pursue careers aligned with those interests, even when external factors are controlled.

Interestingly, **the influence of family and peers** was found to be weak. This contrasts with findings from countries such as Pakistan [5] and Turkey [4], where familial and social expectations play a stronger role. The relatively limited impact of family influence in the Mongolian context may reflect an emerging trend toward greater personal autonomy among young adults and the growing availability of independent information sources such as social media and university outreach campaigns.

Overall, the study contributes empirical evidence that supports the applicability of Social Cognitive Career Theory to a Mongolian higher education setting. It also demonstrates that while cultural and economic conditions shape the weight of specific determinants, the underlying theoretical relationships remain robust across different contexts.

VI. CONCLUSION

This study examined the key determinants influencing career choice among 410 undergraduate students at the Mongolian University of Science and Technology. Using factor analysis and regression models, six major factors were identified: personal, social, sectoral, financial, university-related, and outcome-related.

The analysis confirmed that sectoral factors, university-related factors, and financial resources exert both direct and indirect influences on students' career choices, while personal interests and self-efficacy act as mediators that strengthen these relationships. Conversely, social influences such as family and peer opinions showed minimal impact, suggesting that Mongolian students are increasingly guided by individual motivations and market realities rather than external pressure.

The study's results have several practical implications.

For universities, the findings highlight the importance of strengthening career guidance, employer engagement, and promotional activities that clearly communicate employment outcomes.

For policymakers, the results suggest that targeted scholarships and labor market forecasting can effectively align educational programs with national economic priorities.

For students, the study underscores the importance of self-awareness and informed decision-making when selecting academic and career paths.

Future research should expand the sample to include students from multiple universities and explore longitudinal data to examine how career intentions evolve over time. Additionally, qualitative studies could provide deeper insight into how students weigh different factors in real-life decision contexts.

In conclusion, this study reaffirms that while economic and institutional conditions remain critical determinants of career choice, personal interest and self-efficacy remain at the

core of students' decisions. Understanding these dynamics will help universities and policymakers develop strategies that align educational offerings with both individual aspirations and labor market needs.

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