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Does Money Change the “Why” of Study? Economic Disparity and the Spectrum of Extrinsic Academic Drive

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ABSTRACT

Economic disparity is frequently analyzed as an obstacle to participation and persistence in education; however, less attention has been directed toward understanding how economic conditions influence students' motivations for pursuing higher education. This study investigates whether financial factors alter the underlying reasons for study by examining the relationship between Standard of Living/Economy, academic motivation, and student retention. Drawing upon Self-Determination Theory, the research assesses whether economic conditions serve as predictors of academic motivation and whether motivation subsequently explains retention outcomes. Data from a sample of 1,059 students were scrutinized using Structural Equation Modeling. Five distinct models were evaluated, including a baseline motivation spectrum model, a career-purpose mediation model, models comparing motivation spectrums, and a robustness model based on scoring metrics. The final, accepted latent SEM was identified as the Economic Disparity-Career-Purpose Motivation-Academic Retention Mediation Model. This model demonstrated an excellent fit, with CFI = 0.990, TLI = 0.987, RMSEA = 0.051, and SRMR = 0.044. The Standard of Living/Economy significantly predicted Career-Purpose Motivation ($\beta = 0.284, p < .001$), which in turn strongly predicted Academic Retention ($\beta = 0.592, p < .001$). Additionally, the direct effect of Standard of Living/Economy on Academic Retention remained significant ($\beta = 0.254, p < .001$), thus indicating partial mediation. The robustness model based on scoring further corroborated the primary interpretation, with Identified Extrinsic Motivation exhibiting the most potent pathway to retention. These findings suggest that economic disparity not only influences the likelihood of students remaining in higher education but also impacts their underlying reasons for persistence. Students are more inclined to continue their studies when they perceive education as personally meaningful for career development, employability, professional competence, and future socio-economic mobility.

Keywords: Economic disparity; academic retention; career-purpose motivation; identified extrinsic motivation; higher education; student motivation; structural equation modelling.

INTRODUCTION

Economic and financial pressures not only limit access to higher education but also influence students' decisions to continue or discontinue their studies. In various contexts, economic conditions, socio-economic status, and expectations regarding the labor market interact with students' intrinsic interests and career aspirations, thereby affecting motivation, engagement, and persistence. The economic and social backgrounds of students significantly impact their motivation to pursue or continue higher education. The socio-economic status of parents and broader social circumstances exert a positive and sometimes markedly strong influence on students' motivation and interest in higher education, underscoring the importance of financial capacity and social environment in educational decision-making (Widodo et al., 2023; Paparang et al., 2025). In various contexts, students originating from lower socio-economic backgrounds often demonstrate heightened motivation to complete their studies, as obtaining a degree is substantially associated with aspirations for social mobility, improved employment opportunities, and increased salaries. (Espinoza et al., 2024). Other research similarly indicates that parents' economic resources and social circumstances bolster motivation to pursue higher education by providing both financial support and moral encouragement. (Pararang et al., 2025). The motivational “why of study” encompasses both intrinsic motivations—such as the enjoyment of learning and personal interest—and extrinsic or career-related economic reasons, including

employment prospects, income potential, and social status. Analyses of degree aspirations and transition processes reveal that academic and economic motives are frequently intertwined: students often aim for advanced degrees not only to acquire knowledge but also to improve their competitiveness in the labor market, thereby increasing earning potential and living standards. (Zeng, 2023). Economic motives are characterized as extrinsic, outcome-oriented motivations linked to anticipated rewards such as higher income, elevated social status, and a competitive edge in credential-driven labor markets. (Zeng, 2023). Concurrently, multiple studies emphasize the protective function of intrinsic or interest-based motives: intrinsic motivation to enroll in or pursue a master's degree predicts sustained intrinsic learning motivation, academic success, and reduced intentions to dropout. (Messerer et al., 2022; Bergann et al., 2025).

Structural equation modeling (SEM) and related path models are extensively utilized to elucidate the relationships among economic conditions, motivations, and persistence. Complex models of university dropout indicate that the intention to persist increases with higher levels of intrinsic motivation and exhibits a weak (negative) correlation with extrinsic, pressure-based motivation, thereby supporting the notion that different qualities of motivation influence persistence (Mújica et al., 2019). Studies employing SEM in STEM disciplines and Massive Open Online Courses (MOOCs) similarly demonstrate that intrinsic and extrinsic motivations drive engagement, which subsequently predicts retention or persistence (Xiong et al., 2015; Simon et al., 2015). Additional SEM research confirms that motivation serves as a predictor of persistence, self-efficacy, and engagement within both subject-specific and general university contexts (Madrilejos, 2025; Wu et al., 2020). Several studies explicitly establish a link between economic conditions and motivation, as well as between motivation and continuation or retention, thereby supporting the mediation framework described herein. Parental socioeconomic status and economic resources positively influence students' motivation to pursue higher education and their interest in continuing their studies (Widodo et al., 2023; Paparang et al., 2025). In the context of Chile, students' academic motivation to complete their degrees is primarily driven by socioeconomic status and access to financial aid, with students from low socioeconomic backgrounds particularly motivated by the anticipated mobility and access to improved employment opportunities and salaries associated with obtaining a degree (Espinoza et al., 2024). Among undergraduate STEM students, career motivation—a construct closely related to “career purpose motivation”—emerges as the most significant predictor of academic persistence intentions, surpassing other environmental or achievement-related factors (Hwang, 2024). Economic and social supports, including financial aid, contextual assistance, and career expectations, contribute to the development of career motivation (Hwang, 2024). Research on students' perceptions of employability indicates that students actively evaluate the cost–benefit analysis of higher education within the context of evolving fee structures and competitive labor markets. Students generally anticipate a positive financial return on their investment in higher education; however, concerns regarding rising fees, debt, and increased job competition threaten to diminish the earnings premium, thereby refining the economic calculus underlying their decisions to persist (Donald et al., 2018).

In contexts characterized by economic crises or volatile labor markets, extrinsic motivation to secure employment and financial stability assumes particular significance, often overshadowing other motives for pursuing higher education. (Sfeir et al., 2026; Zeng, 2023). Integrating these perspectives, the pattern observed across studies aligns with the SEM findings: economic conditions influence the motivational meaning, which in turn affects retention or persistence, involving both direct and indirect pathways. Economic standing and perceptions of economic opportunities shape the strength and nature of motivation, especially career-purpose or career motivation, wherein education is regarded as an investment in employability, income, and social mobility. (Espinoza et al., 2024; Hwang, 2024). Consequently, both intrinsic and well-internalized extrinsic motives (such as valuing education for career preparation) are associated with increased intentions to remain enrolled, reduced dropout intentions, and enhanced academic engagement and performance. Conversely, more controlled, externally pressured motivations tend to be less advantageous or may even negatively correlate with persistence. (Mújica et al., 2019; Messerer et al., 2022; Quynh et al., 2021).

Student retention remains a fundamental concern within higher education, particularly in scenarios where students encounter economic pressures, financial stress, and unequal access to educational resources. Existing research on retention commonly emphasizes institutional support, academic engagement, student satisfaction, social integration, or socio-economic background. However, a significant motivational question remains insufficiently explored: do economic conditions influence students' decisions to persist in their studies? This investigation addresses this question through the inquiry: Does Money Change the “Why” of Study? The phrase “why of study” pertains to the motivational foundations for continuing one's education. Students may remain enrolled because they value learning, enjoy the academic experience, or seek personal development. Conversely, students may also persist due to the perception that education serves as a pathway to gainful employment, income, social status, an improved lifestyle, and future economic security. The present study examines this issue employing Structural Equation Modelling. Economic disparity is represented via the Standard of Living/Economy construct. Academic motivation is analyzed in terms of external regulation, career-purpose motivation, intrinsic motivation, and related motivational dimensions. Academic retention is regarded as the outcome variable. Five models were tested to identify the most theoretically coherent and statistically robust explanation of the relationship among economic factors, motivation, and retention. Although the title alludes to the broad spectrum of extrinsic academic motivation, the study initially explores general

motivational pathways and subsequently identifies the most potent and stable pathway within that spectrum.

The following research objectives have been established to systematically investigate the relationships among the study variables.

RO1: To examine whether Standard of Living/Economy significantly predicts students' motivational orientations.

RO2: To identify which forms of academic motivation significantly predict retention.

RO3: To test whether motivational pathways mediate the relationship between the economy and retention.

RO4: To compare alternative SEM models and identify the most suitable final model.

RO5: To validate the final interpretation using a score-based robustness model.

THEORETICAL BACKGROUND

This research is founded on Self-Determination Theory, which elucidates motivation along a spectrum from external regulation to intrinsic motivation. External regulation pertains to motivation driven by rewards, salary, employment, status, or improvements in lifestyle. Identified regulation indicates a more internalized motivation whereby students value education for its support of career preparation, employability, professional competence, and future objectives. Intrinsic motivation involves learning motivated by interest, enjoyment, achievement, and personal development. This theoretical framework proves valuable in understanding how economic conditions influence students' motivations for continuing higher education. For students experiencing financial constraints, education may be perceived as a pathway toward career advancement and future economic stability. Accordingly, economic disparities may impact retention directly and indirectly through Career-Purpose Motivation. The primary contention is that financial resources not only influence students' capacity to remain enrolled but also shape their reasons for continued engagement. Students are more inclined to persist when they perceive education as personally significant for career readiness, employability, and socio-economic mobility.

LITERATURE REVIEW

Student retention is most accurately comprehended as the outcome of the interplay among academic, social, economic, and psychological factors, rather than as a consequence of a singular cause. Economic disparity impacts retention not solely by determining students' financial capacity to pursue higher education but also by influencing their perceptions of the purpose, value, and future significance of their studies. In this context, economic conditions may affect both the practical feasibility of persistence and the motivational factors underlying it. Financial hardship consistently emerges as a significant factor influencing university attrition, accounting for approximately one-third of cases in a recent systematic review. Motivation and academic performance have been identified as primary predictors of student dropout (Valencia-Arias et al., 2026). Qualitative research further indicates that financial constraints and personal challenges constitute major "silent struggles" that can undermine student persistence, even in environments where teaching quality, peer support, and institutional support are present (Patubo, 2025). Broader models of student retention similarly highlight economic conditions, academic integration, and social integration as key explanatory factors for both dropout and retention (Hurtado et al., 2024). Socioeconomic status also significantly influences students' motivation. Evidence from Chile demonstrates that students from lower socioeconomic backgrounds reported higher motivation to complete their studies, which may reflect their perception that higher education offers pathways to social mobility, improved employment opportunities, and higher salaries (Espinoza et al., 2024). However, among low-SES students, persistence is partially contingent upon their belief in the genuine possibility of socioeconomic mobility through education. When mobility is perceived as attainable, education is viewed as a meaningful route to a better future; conversely, when mobility is perceived as unlikely, academic motivation may diminish (Browman et al., 2017).

Self-Determination Theory offers a valuable framework for comprehending this motivational pathway. It differentiates between motivation primarily driven by external rewards and more autonomous forms of motivation, such as identified regulation, wherein students personally value education because it aligns with significant future objectives (Urhahne & Wijnia, 2023). A comprehensive meta-analysis demonstrates that identified regulation is strongly correlated with persistence, whereas intrinsic motivation is associated with academic achievement and well-being (Howard et al., 2021). These findings suggest that identified regulation is frequently among the most significant motivational correlates of persistence-related outcomes and exhibits a negative correlation with dropout intentions (Howard et al., 2021). Consequently, it is appropriate to conceptualize identified regulation as Career-Purpose Motivation, as it reflects students' perceptions of study as preparation for employment, professional competence, future stability, and socio-economic mobility. This interpretation aligns with evidence indicating that autonomous academic motivation predicts academic performance and perceived employability (Maska, 2026).

The literature further indicates that economic background impacts retention through factors such as engagement, sense of belonging, and motivation. Socioeconomic background influences both academic and social engagement, which are crucial for retention and student achievement (Ahn & Davis, 2020; Tzafeia, 2021). Additionally, socioeconomic status and financial aid

serve as significant predictors of motivation, thereby supporting the pathway from economic conditions to motivation and subsequently to persistence (Espinoza et al., 2024). Concurrently, retention research consistently demonstrates that motivation, self-regulation, self-efficacy, satisfaction of basic psychological needs, and mental health play vital roles in students' persistence, extending beyond mere grades and stress (Valencia-Arias et al., 2026; Travis & Bunde, 2020; Zhai & Carney, 2024). These studies demonstrate that student retention cannot be solely attributed to either "money" or "motivation." Financial hardship and broader socioeconomic disparities continue to serve as significant risk factors for dropout rates; however, they may also enhance Career-Purpose Motivation when students perceive higher education as a viable pathway to employability, professional advancement, future stability, and upward mobility. Concurrently, the institutional context plays a vital role: students are more inclined to persevere when universities establish need-supportive environments that foster engagement, a sense of belonging, self-regulation, mental health, and targeted academic, financial, and psychosocial support.

Therefore, this study contends that economic disparity impacts academic retention both directly and indirectly via Career-Purpose Motivation. Students are more inclined to persist in higher education when they regard their studies as personally significant, relevant to their careers, and instrumental in enhancing their future prospects. Within this framework, Career-Purpose Motivation functions as a mediator, elucidating how economic circumstances influence students' perseverance in higher education.

The following hypotheses were formulated based on the conceptual framework and research objectives to empirically examine the proposed relationships among the study variables:

H1: Standard of Living/Economy significantly predicts External Academic Drive.

H2: Standard of Living/Economy significantly predicts Intrinsic Motivation.

H3: External Academic Drive significantly predicts Academic Retention.

H4: Intrinsic Motivation significantly predicts Academic Retention.

H5: Standard of Living/Economy significantly predicts Academic Retention.

H6: External Academic Drive has a stronger effect on Academic Retention than Intrinsic Motivation.

H7: Motivation partially mediates the relationship between Standard of Living/Economy and Academic Retention.

METHODOLOGY

Research Design

The study employed a quantitative cross-sectional research design. Structural Equation Modeling was utilized as it facilitates the simultaneous testing of direct, indirect, and comparative pathways among economic condition, motivation, and retention.

Sample

The analysis was conducted utilizing 1,059 valid student responses. The dataset encompassed measures of Standard of Living/Economy, academic motivation, and academic retention.

Measures

The study employed both latent constructs and score-based variables. The latent SEM models were utilized for the primary analysis, whereas the score-based model was implemented as a robustness check.

Construct, Item Code, and Questionnaire Item

This table delineates the retained constructs, item codes, and questionnaire items employed in the SEM analysis. Only items validated through CFA were incorporated into the final model testing.

Data Collection Instrument

A structured survey was used, involving a 1–5 scale (where 1 = Do not correspond at all and 5 = Corresponds exactly) to measure motivational alignment.

Demographic Distribution by Income Group

The sample demonstrated a pronounced concentration of respondents within the lower income brackets, thereby reflecting the broader demographic profile of the student population in these regions. A majority of respondents belonged to families with an annual income below ₹3 lakhs, constituting 42% of the sample. This was succeeded by 28% of respondents from the ₹3–5 lakhs income bracket. Collectively, these two lower-income categories accounted for 70% of the total sample, indicating that the study predominantly captures the experiences of students from economically constrained backgrounds. In comparison, 15% of respondents fell within the ₹6–10 lakhs category, 10% within the ₹10–20 lakhs category, and only 5% reported a family

income of ₹20 lakhs or higher. Overall, the income distribution suggests that economic disparity.

Table 1: Construct, Item Code, and Questionnaire Itemy constitutes a significant and relevant context for examining student motivation and academic retention in this study.

Sl. No.	Construct	Construct Code	Item Code	Questionnaire Item Meaning / Item Statement
1	Standard of Living / Economy	ECO	IV10.1	I experience financial stress or economic difficulty while pursuing my studies.
2	Standard of Living / Economy	ECO	IV10.3	I experience difficulty related to food or basic financial security.
3	Standard of Living / Economy	ECO	IV10.4	I am able to purchase the things I need or desire.
4	External Regulation / External Academic Drive	EMR	MV1.2	I attend college/university because it may help me obtain a prestigious job.
5	External Regulation / External Academic Drive	EMR	MV1.3	I attend college/university because it may help me earn a better salary.
6	External Regulation / External Academic Drive	EMR	MV1.4	I attend college/university because it may help me improve my future lifestyle.
7	Introjected Extrinsic Motivation	EMIINTRO	MV2.1	I study because academic success helps me prove myself.
8	Introjected Extrinsic Motivation	EMIINTRO	MV2.2	I study because doing well makes me feel important.
9	Introjected Extrinsic Motivation	EMIINTRO	MV2.3	I study because academic achievement demonstrates my ability.
10	Introjected Extrinsic Motivation	EMIINTRO	MV2.4	I study because I want to show others that I am capable.
11	Amotivation	AMOT	MV3.1	I sometimes feel uncertain about why I am studying.
12	Amotivation	AMOT	MV3.2	I sometimes feel that my studies have little meaning.
13	Amotivation	AMOT	MV3.3	I sometimes lack a clear purpose for attending college/university.
14	Amotivation	AMOT	MV3.4	I sometimes feel less motivated to continue my studies.
15	Intrinsic Motivation to Know	IMK	MV4.1	I study because I enjoy learning new things.
16	Intrinsic Motivation to Know	IMK	MV4.2	I study because I enjoy discovering new knowledge.
17	Intrinsic Motivation to Know	IMK	MV4.3	I study because I am curious about academic ideas.
18	Intrinsic Motivation to Know	IMK	MV4.4	I study because I want to broaden my understanding.
19	Intrinsic Motivation to Accomplish	IMA	MV5.1	I study because I feel a sense of satisfaction when I complete academic tasks.
20	Intrinsic Motivation to Accomplish	IMA	MV5.2	I study because I enjoy meeting academic challenges.
21	Intrinsic Motivation to Accomplish	IMA	MV5.3	I study because academic success gives me a sense of achievement.
22	Intrinsic Motivation to Accomplish	IMA	MV5.4	I study because I want to achieve excellence in my academic work.
23	Career-Purpose Motivation / Identified Extrinsic Motivation	EMIIDENT	MV6.1	I study because higher education helps me prepare for my future career.
24	Career-Purpose Motivation / Identified Extrinsic Motivation	EMIIDENT	MV6.2	I study because higher education helps me enter the job market.
25	Career-Purpose Motivation / Identified Extrinsic Motivation	EMIIDENT	MV6.3	I study because my program supports my career choice.
26	Career-Purpose Motivation / Identified Extrinsic Motivation	EMIIDENT	MV6.4	I study because higher education develops my professional competence.
27	Intrinsic Motivation to Experience	IME	MV7.1	I study because I enjoy the experience of learning.
28	Intrinsic Motivation to Experience	IME	MV7.2	I study because academic activities are exciting and engaging.

29	Intrinsic Motivation to Experience	IME	MV7.3	I study because I enjoy expressing and communicating ideas.
30	Intrinsic Motivation to Experience	IME	MV7.4	I study because reading, learning, and academic participation give me pleasure.
31	Academic Retention	RET	DV2.1	I have confidence in continuing my studies at this institution.
32	Academic Retention	RET	DV2.3	I rarely think about discontinuing my studies.
33	Academic Retention	RET	DV2.4	I feel connected to the campus and institutional environment.
34	Academic Retention	RET	DV2.5	I am likely to complete my degree successfully.
35	Academic Retention	RET	DV2.6	I feel loyal to the institution and intend to continue here.

Source: Author's Compilation

Model-Building Strategy

The model-building strategy commenced with wider motivation-spectrum models to investigate whether economic conditions correlated with various types of academic motivation. Nevertheless, the final model was chosen based on statistical fit, significance of paths, parsimony, and theoretical coherence.

Table 2: Model-Building Strategy.

Model	Model Name	Purpose
Model 1	Baseline Economic Disparity–Motivation Spectrum Model	To test whether economic conditions predict the broader spectrum of motivation.
Model 2	Economic Disparity–Career-Purpose Motivation–Academic Retention Mediation Model	To test the career-purpose pathway among ECO, EMIIDENT, and RET.
Model 3	Motivation-Spectrum Retention Model	To identify which motivational dimensions directly predict academic retention.
Model 4	Economic Disparity–Dual Academic Drive Model	To test whether economic condition predicts retention through external academic drive and intrinsic motivation.
Model 5	Score-Based Economic Disparity–Motivation Robustness Model	To validate the interpretation using observed score variables.

Source: Author's Compilation

RESULTS

Model 1: Economic Disparity–Motivation Spectrum Model

Model 1 was estimated as a preliminary mediation model to examine whether the Standard of Living/Economy predicted Academic Retention through Identified Extrinsic Motivation. In this model, Identified Extrinsic Motivation represents Career-Purpose Motivation, referring to students' perception that higher education is useful for career preparation, employability, professional competence, and future socio-economic mobility. The results demonstrated that the Standard of Living/Economy significantly predicted Identified Extrinsic Motivation ($\beta = 0.284$, $p < .001$). Furthermore, Identified Extrinsic Motivation robustly predicted Academic Retention ($\beta = 0.592$, $p < .001$). The direct pathway from the Standard of Living/Economy to Academic Retention remained statistically significant ($\beta = 0.254$, $p < .001$). These findings suggest a partial mediation effect, indicating that economic conditions influence retention both directly and indirectly via Career-Purpose Motivation. The measurement model also exhibited acceptable standardized factor loadings, with Standard of Living/Economy indicators loading with β values ranging from 0.580 to 0.693. Indicators of Identified Extrinsic Motivation loaded between $\beta = 0.657$ and $\beta = 0.799$. Indicators of Academic Retention loaded between $\beta = 0.584$ and $\beta = 0.817$. All factor loadings were statistically significant at $p < .001$. Consequently, Model 1 furnished preliminary evidence supporting the pathway linking economic disparity, career-purpose motivation, and retention.

Table 3: Estimates for Model 1.

Parameters estimates								
Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			

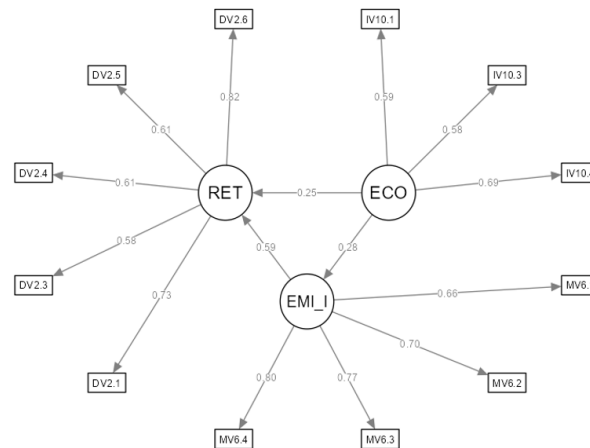
EMI_IDENT	ECO	0.296	0.043	0.212	0.38	0.284	6.89	<.001
RET	ECO	0.359	0.0525	0.256	0.462	0.254	6.83	<.001
RET	EMI_IDENT	0.802	0.054	0.697	0.908	0.592	14.86	<.001

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
ECO	IV10.1	0.589	0.0358	0.519	0.659	0.589	16.5	<.001
	IV10.3	0.58	0.0361	0.509	0.651	0.58	16	<.001
	IV10.4	0.693	0.0352	0.624	0.762	0.693	19.7	<.001
EMI_IDENT	MV6.1	0.63	0.0207	0.59	0.671	0.657	30.4	<.001
	MV6.2	0.672	0.0188	0.635	0.709	0.701	35.7	<.001
	MV6.3	0.738	0.0178	0.704	0.773	0.77	41.5	<.001
	MV6.4	0.766	0.017	0.733	0.8	0.799	44.9	<.001
RET	DV2.1	0.513	0.0186	0.477	0.55	0.726	27.6	<.001
	DV2.3	0.413	0.0185	0.377	0.449	0.584	22.3	<.001
	DV2.4	0.431	0.0185	0.395	0.467	0.609	23.2	<.001
	DV2.5	0.435	0.0195	0.397	0.473	0.615	22.3	<.001
	DV2.6	0.578	0.0197	0.539	0.616	0.817	29.3	<.001

Source: Author's Compilation

Figure 1: Refined mediation model showing the effect of Standard of Living/Economy on Academic Retention through Identified Extrinsic Motivation.



Source: Author's Compilation

Model 2: Economic Disparity–Career-Purpose Motivation–Academic Retention Mediation Model

Model 2 examined whether Career-Purpose Motivation mediates the relationship between Standard of Living/Economy and Academic Retention. In this model, Career-Purpose Motivation corresponds to Identified Extrinsic Motivation, wherein students personally value higher education for its role in career preparation, employability, professional competence, and future socio-economic mobility. The model demonstrated acceptable-to-good global fit: $\chi^2(51) = 189$, $p < .001$, CFI = 0.990, TLI = 0.987, NFI = 0.986, IFI = 0.990, RMSEA = 0.051, 95% CI [0.043, 0.058], and SRMR = 0.044. Although the chi-square statistic was significant, this is expected in large samples; therefore, interpretation was based mainly on approximate fit indices.

The structural analysis revealed that the Standard of Living/Economy significantly forecasted Career-Purpose Motivation, with a standardized coefficient of $\beta = 0.284$ and a p-value less than .001. Additionally, Career-Purpose Motivation was a strong predictor of Academic Retention, evidenced by a standardized coefficient of $\beta = 0.592$ and a p-value less than .001. The direct influence of Standard of Living/Economy on Academic Retention also persisted as significant, with a standardized coefficient

of $\beta = 0.254$ and $p < .001$. These results suggest a partial mediation effect. The approximate standardized indirect effect was $\beta = 0.168$, calculated as 0.284×0.592 . The approximate total effect was $\beta = 0.422$, determined by summing the direct effect, $\beta = 0.254$, and the indirect effect, $\beta = 0.168$. Consequently, Model 2 indicates that economic condition impacts retention both directly and indirectly through Career-Purpose Motivation.

The measurement model confirmed the adequacy of the retained indicators. Indicators for Standard of Living and Economy exhibited loading values ranging from $\beta = 0.580$ to $\beta = 0.693$. Indicators for Career-Purpose Motivation exhibited loadings between $\beta = 0.657$ and $\beta = 0.799$. Academic Retention indicators demonstrated loadings within the range of $\beta = 0.584$ to $\beta = 0.817$. All retained indicators were statistically significant at $p < .001$.

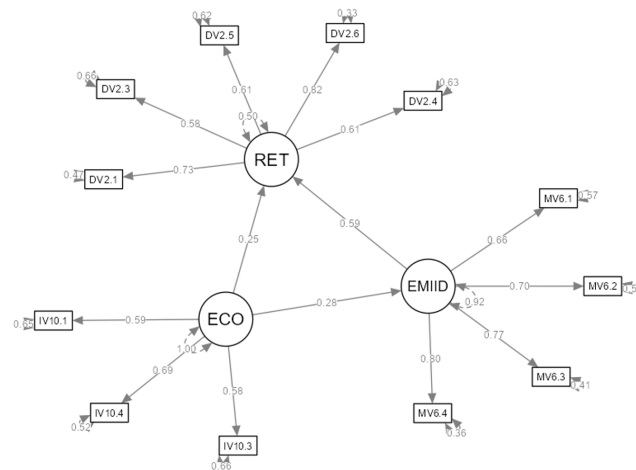
Table 4: Model 2 Parameter Estimates.

Parameters estimates								
Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
EMIIDENT	ECO	0.296	0.043	0.212	0.38	0.284	6.89	<.001
RET	ECO	0.359	0.0525	0.256	0.462	0.254	6.83	<.001
RET	EMIIDENT	0.802	0.054	0.697	0.908	0.592	14.86	<.001

Measurement model								
Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
ECO	IV10.1	0.589	0.0358	0.519	0.659	0.589	16.5	<.001
	IV10.3	0.58	0.0361	0.509	0.651	0.58	16	<.001
	IV10.4	0.693	0.0352	0.624	0.762	0.693	19.7	<.001
	MV6.1	0.63	0.0207	0.59	0.671	0.657	30.4	<.001
EMIIDENT	MV6.2	0.672	0.0188	0.635	0.709	0.701	35.7	<.001
	MV6.3	0.738	0.0178	0.704	0.773	0.77	41.5	<.001
	MV6.4	0.766	0.017	0.733	0.8	0.799	44.9	<.001
	DV2.1	0.513	0.0186	0.477	0.55	0.726	27.6	<.001
RET	DV2.3	0.413	0.0185	0.377	0.449	0.584	22.3	<.001
	DV2.4	0.431	0.0185	0.395	0.467	0.609	23.2	<.001
	DV2.5	0.435	0.0195	0.397	0.473	0.615	22.3	<.001
	DV2.6	0.578	0.0197	0.539	0.616	0.817	29.3	<.001

Source: Author's Compilation

Figure 2: Refined mediation model showing the effect of Standard of Living/Economy on Academic Retention through Career-Purpose Motivation.



Source: Author's Compilation

Model 3: Motivation-Spectrum Retention Model

Model 3 investigated the specific motivational dimensions that directly predicted Academic Retention when multiple motivational dimensions were analyzed concurrently. The objective of this model was not to establish the final accepted Structural Equation Model (SEM), but rather to compare the relative predictive strengths of various motivational orientations and to assess whether broader motivational constructs yielded consistent retention effects. The structural results indicated that External Regulation significantly predicted Academic Retention, with $\beta = 0.591$ and $p = .002$. Intrinsic Motivation also emerged as a significant predictor of Academic Retention, with $\beta = 0.528$ and $p = .001$. Additionally, Amotivation demonstrated a significant negative impact on Academic Retention ($\beta = -0.288$, $p = .044$), suggesting that lower levels of academic purpose are associated with diminished retention. Conversely, Identified Extrinsic Motivation was not statistically significant within this comprehensive simultaneous model ($\beta = -0.130$, $p = .565$).

This non-significant effect should not be construed as evidence that Identified Extrinsic Motivation lacks importance. Instead, it indicates that when multiple highly correlated motivational constructs are simultaneously included, the shared variance among these motivational dimensions may diminish or obscure the estimates of individual paths. Consequently, Model 3 was employed as a comparative support model rather than the definitive model. The measurement model demonstrated robust loadings for External Regulation, with values ranging from $\beta = 0.763$ to $\beta = 0.812$, and for Identified Extrinsic Motivation, with values ranging from $\beta = 0.612$ to $\beta = 0.797$. Indicators of Amotivation also exhibited acceptable loadings, spanning from $\beta = 0.628$ to $\beta = 0.795$. Conversely, certain indicators of Intrinsic Motivation to Experience displayed weak standardized loadings, notably MV7.1, $\beta = 0.128$; MV7.2, $\beta = 0.346$; MV7.3, $\beta = 0.275$; and MV7.4, $\beta = 0.204$. This suggests that the overall intrinsic motivation construct was not uniformly robust across all retained indicators.

The Model 3 offered valuable supporting evidence by demonstrating that motivation is significantly associated with Academic Retention. However, due to the broader motivation-spectrum model generating overlapping motivational effects and exhibiting inferior measurement performance in certain indicators, it was not maintained as the final model. The results underscored the necessity for a more parsimonious and theoretically coherent mediation model, which was subsequently addressed in Model 2.

Table 5 Model 3 Parameter Estimates.

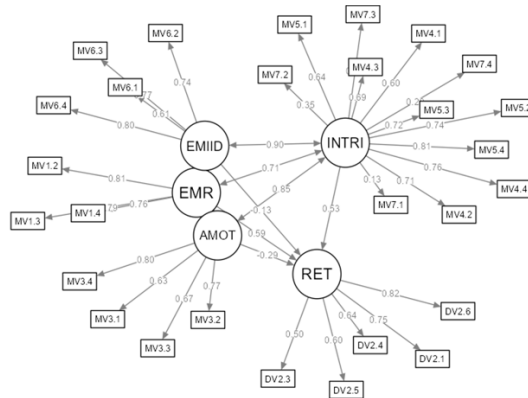
Parameters estimates									
Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p	
				Lower	Upper				
RET	EMR	0.765	0.243	0.288	1.2418	0.591	3.143	0.002	
RET	EMIIDENT	-0.169	0.293	-0.742	0.4052	-0.13	-0.576	0.565	
RET	INTRINSIC	0.683	0.211	0.269	1.0956	0.528	3.239	0.001	
RET	AMOT	-0.372	0.184	-0.734	-0.0106	-0.288	-2.017	0.044	

Measurement model

Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
EMR	MV1.2	0.812	0.0122	0.7885	0.836	0.812	66.55	<.001
	MV1.3	0.787	0.0134	0.7607	0.813	0.787	58.73	<.001
	MV1.4	0.763	0.0143	0.7347	0.791	0.763	53.28	<.001
	MV6.1	0.612	0.0193	0.5744	0.65	0.612	31.78	<.001
EMIIDENT	MV6.2	0.742	0.0141	0.7144	0.77	0.742	52.64	<.001
	MV6.3	0.769	0.0128	0.7437	0.794	0.769	59.93	<.001
	MV6.4	0.797	0.0115	0.7747	0.82	0.797	69.47	<.001
	MV4.1	0.6	0.0192	0.5621	0.637	0.6	31.28	<.001
INTRINSIC	MV4.2	0.706	0.0156	0.6755	0.737	0.706	45.22	<.001
	MV4.3	0.688	0.0168	0.655	0.721	0.688	41.05	<.001
	MV4.4	0.758	0.0138	0.7309	0.785	0.758	54.88	<.001
	MV5.1	0.645	0.0187	0.6083	0.682	0.645	34.52	<.001
	MV5.2	0.742	0.0139	0.7148	0.769	0.742	53.57	<.001
	MV5.3	0.717	0.0145	0.6883	0.745	0.717	49.58	<.001
	MV5.4	0.812	0.0112	0.7896	0.834	0.812	72.37	<.001
	MV7.1	0.128	0.029	0.0709	0.185	0.128	4.4	<.001
AMOT	MV7.2	0.346	0.0255	0.2957	0.396	0.346	13.55	<.001
	MV7.3	0.275	0.0267	0.2222	0.327	0.275	10.29	<.001
	MV7.4	0.204	0.0265	0.1523	0.256	0.204	7.7	<.001
	MV3.1	0.628	0.018	0.593	0.664	0.628	34.9	<.001
	MV3.2	0.769	0.0145	0.7402	0.797	0.769	53.03	<.001
	MV3.3	0.669	0.0168	0.6363	0.702	0.669	39.78	<.001
	MV3.4	0.795	0.0129	0.77	0.82	0.795	61.76	<.001
	DV2.1	0.58	0.0229	0.5346	0.624	0.75	25.3	<.001
RET	DV2.3	0.389	0.0216	0.3469	0.432	0.504	18.01	<.001
	DV2.4	0.493	0.0233	0.4473	0.539	0.638	21.13	<.001
	DV2.5	0.466	0.0222	0.4228	0.51	0.603	21.03	<.001
	DV2.6	0.635	0.0233	0.5898	0.681	0.822	27.28	<.001

Source: Author's Compilation

Figure 3: Economic Disparity–Dual Academic Drive Model.



Source: Author's Compilation

Model 4: Economic Disparity–Dual Academic Drive Model

Model 4 evaluated an expanded dual-pathway framework wherein the Standard of Living/Economy forecasts Academic Retention via two motivational channels: External Academic Drive and Intrinsic Motivation. The model maintained the direct pathway from the Standard of Living/Economy to Academic Retention to assess whether motivation partly mediates the relationship between the economy and retention. The structural analysis revealed that the Standard of Living/Economy significantly forecasted External Academic Drive, $\beta = 0.200$, $p < .001$, and Intrinsic Motivation, $\beta = 0.288$, $p < .001$. Furthermore, the Standard of Living/Economy directly predicted Academic Retention, $\beta = 0.275$, $p < .001$. Both motivational pathways were significant predictors of Academic Retention, with External Academic Drive exerting a stronger influence, $\beta = 0.378$, $p < .001$, and Intrinsic Motivation demonstrating a noteworthy positive effect, $\beta = 0.219$, $p < .001$.

These findings indicate that economic conditions are correlated with both instrumental and intrinsic motivations for studying. Students are more inclined to continue their higher education when they perceive their studies as connected to employment prospects, salary, social status, lifestyle enhancement, and future security. Concurrently, interest in learning, academic development, and meaningful participation also play a significant role in student retention. However, Model 4 was not retained as the final accepted latent SEM due to its poor overall fit indices. The model demonstrated SRMR = 0.120, RMSEA = 0.173, CFI = 0.855, and TLI = 0.836, underscoring that it did not satisfy the established criteria for acceptable SEM fit. Consequently, Model 4 was maintained solely as a supplementary theoretical comparison model and not as the definitive model.

The measurement model demonstrated robust loadings for External Academic Drive, with values ranging from $\beta = 0.757$ to $\beta = 0.831$. Indicators of Academic Retention also exhibited acceptable to strong loadings, spanning from $\beta = 0.511$ to $\beta = 0.812$. Nonetheless, some indicators of Intrinsic Motivation to Experience displayed weaker standardized loadings, notably MV7.1 ($\beta = 0.258$), MV7.2 ($\beta = 0.434$), MV7.3 ($\beta = 0.407$), and MV7.4 ($\beta = 0.343$). This diminished measurement performance may partially account for the suboptimal overall model fit. Model 4 provided valuable theoretical evidence indicating that both external academic drive and intrinsic motivation are pertinent factors influencing retention. However, due to its inadequate overall fit, it was not chosen as the final SEM. Instead, the final model selection favored Model 2, the Economic Disparity–Career-Purpose Motivation–Academic Retention Mediation Model, owing to its superior fit, increased parsimony, and more transparent theoretical interpretation.

Table 6: Model 4 Parameter Estimates.

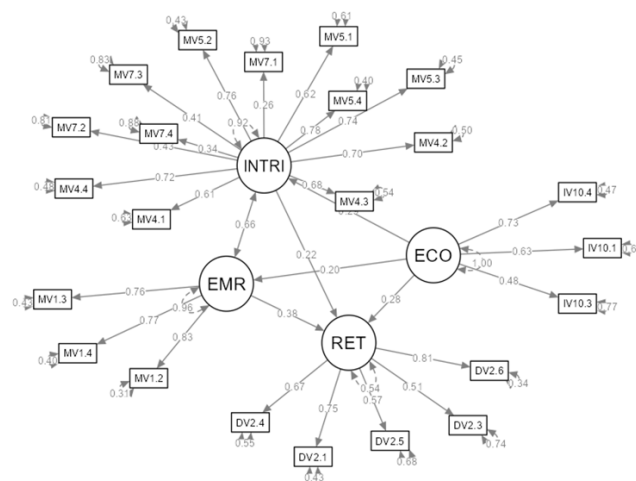
Parameters estimates									
Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p	
				Lower	Upper				
EMR	ECO	0.205	0.0404	0.125	0.284	0.2	5.07	<.001	
INTRINSIC	ECO	0.3	0.0399	0.222	0.379	0.288	7.53	<.001	
RET	ECO	0.373	0.0521	0.271	0.475	0.275	7.17	<.001	
RET	EMR	0.503	0.0587	0.388	0.618	0.378	8.56	<.001	
RET	INTRINSIC	0.285	0.0529	0.181	0.388	0.219	5.38	<.001	

Measurement model									
Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p	
				Lower	Upper				
ECO	IV10.1	0.631	0.0403	0.552	0.71	0.631	15.67	<.001	
	IV10.3	0.478	0.039	0.401	0.555	0.478	12.24	<.001	
	IV10.4	0.727	0.041	0.646	0.807	0.727	17.72	<.001	
	MV1.2	0.814	0.0148	0.785	0.843	0.831	54.85	<.001	
EMR	MV1.3	0.741	0.0166	0.709	0.774	0.757	44.68	<.001	
	MV1.4	0.759	0.0171	0.725	0.792	0.775	44.29	<.001	
	MV4.1	0.585	0.0186	0.548	0.621	0.61	31.36	<.001	
	MV4.2	0.675	0.0162	0.643	0.707	0.705	41.66	<.001	
INTRINSIC	MV4.3	0.648	0.0173	0.614	0.682	0.677	37.56	<.001	

	MV4.4	0.694	0.016	0.662	0.725	0.724	43.41	<.001
	MV5.1	0.595	0.0194	0.557	0.633	0.622	30.69	<.001
	MV5.2	0.724	0.0144	0.695	0.752	0.755	50.1	<.001
	MV5.3	0.708	0.0148	0.679	0.737	0.739	47.89	<.001
	MV5.4	0.744	0.014	0.716	0.771	0.776	53.12	<.001
	MV7.1	0.247	0.0257	0.197	0.298	0.258	9.64	<.001
	MV7.2	0.416	0.0223	0.372	0.46	0.434	18.64	<.001
	MV7.3	0.389	0.0227	0.345	0.434	0.407	17.12	<.001
	MV7.4	0.329	0.0229	0.284	0.374	0.343	14.39	<.001
	DV2.1	0.555	0.0204	0.515	0.595	0.752	27.22	<.001
	DV2.3	0.377	0.0191	0.339	0.414	0.511	19.67	<.001
RET	DV2.4	0.492	0.0209	0.451	0.533	0.668	23.53	<.001
	DV2.5	0.419	0.0195	0.38	0.457	0.568	21.46	<.001
	DV2.6	0.599	0.0201	0.559	0.638	0.812	29.74	<.001

Source: Author's Compilation

Figure 4: Final Economic Disparity-Dual Academic Drive Model.



Source: Author's Compilation

Fit index

Table 7: Comparative Global Fit of Tested SEM Models.

Model	χ^2	df	p	SRMR	RMSEA	RMSEA 95% CI	CFI	TLI	NFI	IFI	Decision
Model 1	189	51	< .001	0.044	0.051	0.043–0.058	0.99	0.99	0.99	0.99	Preliminary / duplicate evidence
Model 2	189	51	< .001	0.044	0.051	0.043–0.058	0.99	0.99	0.99	0.99	Final accepted model
Model 3	8691	340	< .001	0.102	0.152	0.150–0.155	0.93	0.92	0.92	0.93	Supporting comparison only
Model 4	7338	224	< .001	0.12	0.173	0.170–0.177	0.86	0.84	0.85	0.86	Reject as final; exploratory only

Source: Author's Compilation

Table 8: Robust and Scaled Fit Comparison.

<i>Model</i>	<i>Robu st RMS EA</i>	<i>Robust RMSEA 95% CI</i>	<i>Robu st CFI</i>	<i>Robu st TLI</i>	<i>Scaled SRMR</i>	<i>Scale d RMS EA</i>	<i>Scaled RMSEA 95% CI</i>	<i>Scale d CFI</i>	<i>Scaled TLI</i>	<i>Interpretation</i>
Model 1	0.07	0.062–0.077	0.936	0.917	0.034	0.067	0.060–0.075	0.966	0.955	Acceptable robust/scaled fit, but duplicate of Model 2
Model 2	0.07	0.062–0.077	0.936	0.917	0.034	0.067	0.060–0.075	0.966	0.955	Best retained model
Model 3	0.109	0.107–0.112	0.746	0.718	0.09	0.164	0.161–0.167	0.622	0.58	Poor robust/scaled fit
Model 4	0.12	0.116–0.123	—	—	0.104	0.174	0.171–0.177	—	—	Poor robust/scaled fit

Source: Author's Compilation

The comparative results indicate that Model 2, the Economic Disparity–Career-Purpose Motivation–Academic Retention Mediation Model, demonstrated the strongest and most acceptable global fit. The model showed excellent classical fit, with CFI = 0.990, TLI = 0.987, NFI = 0.986, IFI = 0.990, RMSEA = 0.051, and SRMR = 0.044. The robust and scaled fit indices also supported acceptable model performance, with scaled CFI = 0.966, scaled TLI = 0.955, scaled RMSEA = 0.067, and scaled SRMR = 0.034. Model 1 yielded identical fit indices to Model 2. Consequently, it should not be regarded as an independent and competing final model. Instead, Model 1 is maintained solely as preliminary evidence indicating that the economic condition is significantly correlated with the motivational structure examined in this study. Model 3 demonstrated inadequate absolute fit, with SRMR = 0.102 and RMSEA = 0.152. Furthermore, the model generated a warning indicating that the latent covariance matrix was not positive definite, signifying a substantial estimation problem. Consequently, Model 3 was not retained as the final model and was utilized solely as supporting evidence for comparative purposes. Model 4 exhibited an inadequate fit, with SRMR = 0.120, RMSEA = 0.173, CFI = 0.855, and TLI = 0.836. These metrics exceed the acceptable thresholds for SEM fit. Although Model 4 holds theoretical significance for investigating a more comprehensive dual-drive explanation, it lacks sufficient statistical robustness to be considered the definitive latent SEM. Among the tested latent SEM models, Model 2 was retained as the final accepted model. This decision was based on four reasons. First, Model 2 demonstrated excellent global fit. Second, it showed an acceptable, robust, and scaled fit. Third, all structural paths in the model were statistically significant. Fourth, the model provided the clearest theoretically meaningful mediation pathway linking Standard of Living/Economy with Academic Retention through Career-Purpose Motivation. Therefore, the final accepted model for the study is: Model 2: Economic Disparity–Career-Purpose Motivation–Academic Retention Mediation Model. This model indicates that economic condition influences academic retention both directly and indirectly through Career-Purpose Motivation. The indirect pathway indicates that students are more likely to remain in higher education when they perceive their studies as personally valuable for career preparation, employability, professional competence, and future socio-economic mobility. Model 2 was retained as the final accepted latent SEM because it demonstrated the best combination of statistical fit, theoretical clarity, parsimony, and interpretability. Model 1 was retained as preliminary screening evidence; Model 3 was retained only as a supporting comparison model; and Model 4 was rejected as the final model due to poor global fit. The score-based robustness model may be reported separately as additional evidence, but it should not replace the final latent SEM.

Model 5: Score-Based Robustness Model

Model 5 was estimated utilizing observed score variables to assess whether the interpretation derived from the final latent SEM remained consistent when employing an alternative score-based specification. In this model, SLE_score served as the economic predictor, motivation scores functioned as mediators, and RET_score was designated as the outcome variable. The model was not intended to supplant the final latent SEM; rather, it was employed as evidence of robustness to determine whether the broader economy–motivation–retention relationship persisted when construct scores were utilized. The final score-based model maintained four motivational pathways: External Regulation, Identified Extrinsic Motivation, Intrinsic Motivation to Accomplish, and Intrinsic Motivation to Experience. Pathways that were non-significant and lacked theoretical support were removed to enhance parsimony and interpretability. The score-based model demonstrated that the SLE_score significantly predicted all four retained motivation scores. The Standard of Living/Economy significantly predicted External Regulation, $\beta = 0.1238$, $p < .001$; Identified Extrinsic Motivation, $\beta = 0.1735$, $p < .001$; Intrinsic Motivation to Accomplish, $\beta = 0.1888$, $p < .001$; and Intrinsic Motivation to Experience, $\beta = 0.1946$, $p < .001$. The SLE_score also directly predicted RET_score, $\beta = 0.2243$, $p < .001$. All retained motivational pathways significantly predicted RET_score. External Regulation exerted a modest yet significant positive effect, $\beta = 0.1060$, $p = .004$. Identified Extrinsic Motivation demonstrated the most substantial effect

on Retention, $\beta = 0.2207$, $p < .001$. Intrinsic Motivation to Accomplish also significantly forecasted Retention, $\beta = 0.0915$, $p = .013$, while Intrinsic Motivation to Experience exhibited a more pronounced positive effect, $\beta = 0.1670$, $p < .001$. The covariance analyses indicated that the motivation scores were positively and significantly interrelated. The most considerable covariance was observed between External Regulation and Identified Extrinsic Motivation ($\beta = 0.728$, $p < .001$), followed by Intrinsic Motivation to Accomplish and Intrinsic Motivation to Experience ($\beta = 0.679$, $p < .001$). These relationships suggest that students' motivational orientations are interconnected rather than entirely independent. Model 5 corroborated the primary interpretation of the study. Economic conditions influenced numerous motivational pathways, which subsequently significantly predicted retention. Notably, the most influential score-based retention pathway was via Identified Extrinsic Motivation, thereby supporting the final latent SEM inference that Career-Purpose Motivation constitutes a pivotal mechanism connecting economic conditions with academic retention.

Table 9: Model 5 Score-Based Estimates.

Parameters estimates								
Dep	Pred	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
EMR_score	SLE_score	0.1278	0.0315	0.0661	0.189	0.1238	4.06	<.001
EMI_score	SLE_score	0.1754	0.0306	0.1155	0.235	0.1735	5.73	<.001
IMA_score	SLE_score	0.1777	0.0284	0.122	0.233	0.1888	6.25	<.001
IME_score	SLE_score	0.1985	0.0308	0.1383	0.259	0.1946	6.45	<.001
RET_score	SLE_score	0.1444	0.0163	0.1124	0.176	0.2243	8.86	<.001
RET_score	EMR_score	0.0661	0.023	0.021	0.111	0.106	2.87	0.004
RET_score	EMI_score	0.1405	0.027	0.0876	0.193	0.2207	5.21	<.001
RET_score	IMA_score	0.0626	0.0252	0.0132	0.112	0.0915	2.49	0.013
RET_score	IME_score	0.1054	0.0236	0.0591	0.152	0.167	4.46	<.001

Variances and Covariances								
Variable 1	Variable 2	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
EMR_score	EMI_score	0.46	0.02404	0.413	0.508	0.728	19.2	<.001
EMR_score	IMA_score	0.321	0.02057	0.281	0.362	0.547	15.6	<.001
EMR_score	IME_score	0.329	0.022	0.286	0.372	0.518	15	<.001
EMI_score	IMA_score	0.36	0.02075	0.319	0.401	0.63	17.3	<.001
EMI_score	IME_score	0.405	0.02271	0.36	0.449	0.655	17.8	<.001
IMA_score	IME_score	0.39	0.02133	0.348	0.432	0.679	18.3	<.001
EMR_score	EMR_score	0.65	0.02826	0.595	0.706	0.985	23	<.001
EMI_score	EMI_score	0.615	0.02673	0.563	0.668	0.97	23	<.001
IMA_score	IMA_score	0.53	0.02305	0.485	0.576	0.964	23	<.001
IME_score	IME_score	0.622	0.02701	0.569	0.674	0.962	23	<.001
RET_score	RET_score	0.167	0.00724	0.152	0.181	0.648	23	<.001
SLE_score	SLE_score	0.62	0	0.62	0.62	1		

Source: Author's Compilation

Table 10: Model 5 Indirect Effects.

Indirect Path	Calculation	Approx. beta
SLE -> EMR -> RET	0.1238 x 0.1060	0.013
SLE -> EMI -> RET	0.1735 x 0.2207	0.038
SLE -> IMA -> RET	0.1888 x 0.0915	0.017
SLE -> IME -> RET	0.1946 x 0.1670	0.033

Source: Author's Compilation

The approximate standardized indirect effects further corroborated the robustness of the interpretation. The indirect effect

via External Regulation was $\beta = 0.013$, computed as 0.1238×0.1060 . The indirect effect via Identified Extrinsic Motivation was $\beta = 0.038$, calculated as 0.1735×0.2207 . The indirect effect via Intrinsic Motivation to Accomplish was $\beta = 0.017$, derived as 0.1888×0.0915 . The indirect effect via Intrinsic Motivation to Experience was $\beta = 0.033$, determined as 0.1946×0.1670 . Among these pathway scores, Identified Extrinsic Motivation generated the strongest indirect effect. These findings reinforce the primary conclusion that students are more likely to persist in higher education when they perceive their studies as personally meaningful in terms of career development, employability, professional competence, and future socio-economic mobility. The score-based model was saturated, possessing zero degrees of freedom. Consequently, perfect fit indices such as CFI = 1.000, TLI = 1.000, RMSEA = 0.000, and SRMR = 0.000 should not be regarded as evidence of an exemplary model fit. In this context, interpretation should emphasize the theoretical significance alongside the statistical significance of the path estimates.

DISCUSSION

This study examined whether economic disparity influences the underlying reasons for engagement in academic pursuits by investigating the relationship among Standard of Living/Economy, academic motivation, and student retention. Across various modeled analyses, the findings consistently demonstrate that economic circumstances are correlated not only with students' capacity to pursue higher education but also with the motivational significance attributed to academic persistence. The results indicate that student retention is affected by a combination of economic pressures, career-oriented motivation, external academic incentives, and inherent academic engagement. Model 1 provided preliminary evidence that the Standard of Living/Economy is meaningfully associated with students' motivational orientation. Although Model 1 was retained solely as baseline evidence, it established the fundamental assumption that economic conditions are linked to academic motivation. This finding holds significance because it shifts the discourse on economic disparity beyond mere access and financial constraints. Economic conditions seem to influence students' perceptions of the value of higher education and their motivations for continuing their studies. Model 2 emerged as the most robust and ultimately accepted latent Structural Equation Model (SEM). The model demonstrated excellent overall fit indices, with Comparative Fit Index (CFI) = 0.990, Tucker-Lewis Index (TLI) = 0.987, Root Mean Square Error of Approximation (RMSEA) = 0.051, and Standardized Root Mean Square Residual (SRMR) = 0.044. The structural paths were also statistically significant. Standard of Living/Economy notably predicted Career-Purpose Motivation, $\beta = 0.284$, $p < .001$, and Career-Purpose Motivation, in turn, strongly predicted Academic Retention, $\beta = 0.592$, $p < .001$. The direct effect of Standard of Living/Economy on Academic Retention remained significant ($\beta = 0.254$, $p < .001$), indicating partial mediation. The estimated standardized indirect effect was $\beta = 0.168$, and the estimated total effect was $\beta = 0.422$. Accordingly, the final model illustrates those economic conditions impact retention both directly and indirectly through Career-Purpose Motivation.

The strength of Model 2 resides in its theoretical clarity and simplicity. Career-Purpose Motivation, exemplified by Identified Extrinsic Motivation, reflects the degree to which students personally regard higher education as a pathway to career development, employability, professional competence, and eventual socio-economic mobility. This observation indicates that economic disparity does not merely deter students from pursuing higher education. Rather, for numerous students, financial pressures may enhance the perceived instrumental value of education. Students are more inclined to persist when they perceive their studies as meaningful for enhancing future opportunities. Model 3 provided supporting comparison evidence by examining how different motivational dimensions directly predicted retention. External Regulation and Intrinsic Motivation positively predicted Academic Retention, while Amotivation negatively predicted retention. However, Identified Extrinsic Motivation became non-significant in the broader simultaneous model. This result should not be interpreted as a contradiction of Model 2. Rather, it suggests that when several highly related motivational constructs are entered together, shared variance and motivational overlap may weaken individual path estimates. Therefore, Model 3 helped demonstrate the complexity of the motivation spectrum, but it was not retained as the final model due to its weaker absolute fit and estimation concerns. Model 4 examined a broader dual-academic-drive explanation, whereby the Standard of Living/Economy forecasted retention through both External Academic Drive and Intrinsic Motivation. The structural paths achieved statistical significance, demonstrating that economic conditions predicted both external and intrinsic motivational pathways, and that both pathways, in turn, predicted retention. Nevertheless, the model exhibited poor overall fit, with SRMR = 0.120, RMSEA = 0.173, CFI = 0.855, and TLI = 0.836. Consequently, Model 4 was not adopted as the final accepted Structural Equation Model (SEM). Its significance is primarily theoretical rather than confirmatory. It suggests that both economic-instrumental and intrinsic academic motivations may be influential, but the overall model framework lacked sufficient statistical robustness for definitive acceptance. Model 5, the score-based robustness model, further substantiated the primary interpretation. The model demonstrated that the Standard of Living/Economy significantly predicted External Regulation, Identified Extrinsic Motivation, Intrinsic Motivation to Accomplish, and Intrinsic Motivation to Experience. All four motivational pathways continued to significantly predict Retention. Notably, Identified Extrinsic Motivation exhibited the strongest score-based pathway to retention ($\beta = 0.2207$, $p < .001$) and the most substantial indirect effect ($\beta = 0.038$). This reinforces the main conclusion of Model 2, which posits that Career-Purpose Motivation serves as a vital mechanism linking economic conditions to retention. Nonetheless, given that the score-based model was saturated (degrees of freedom = 0), its perfect-fit indices were not interpreted as indicative of superior

model fit. The model was employed solely to demonstrate robustness.

The findings show that money does change the “why” of study, but not in a simple or one-dimensional manner. Economic conditions shape students’ motivational logic by strengthening the perceived career and future-value meaning of education. The strongest and most stable explanation is not merely that economically pressured students study for external rewards, but that they remain when education becomes personally meaningful as a pathway to career advancement, employability, professional identity, and socio-economic mobility. This is why Career-Purpose Motivation became the most important final mechanism in the study. The findings further enhance Self-Determination Theory by demonstrating that extrinsic motivation ought not to be regarded as a subordinate or less valuable form of academic motivation within economically strained environments. Identified Extrinsic Motivation, also known as Career-Purpose Motivation, embodies a more internalized manifestation of extrinsic motivation. Students may not engage in their studies purely due to external pressures; rather, they may personally endorse and appreciate education because it is linked to significant future objectives. This distinction is vital for comprehending student retention in higher education, particularly among those experiencing financial uncertainty. From a practical perspective, the results indicate that higher education institutions ought to augment the career relevance of academic programmes. Retention strategies should not solely emphasize financial support or academic counselling. Instead, institutions should assist students in comprehending how their studies relate to employability, skill development, professional competence, internships, industry exposure, and long-term socio-economic mobility. Concurrently, institutions should persist in fostering intrinsic academic engagement through effective teaching, meaningful assessment, active learning, mentoring, and positive interactions between students and faculty. Model 2 was retained as the final accepted SEM because it provided the optimal combination of statistical fit, parsimony, theoretical clarity, and interpretability. Models 1, 3, and 4 contributed to model development and theoretical comparison, whereas Model 5 offered score-based evidence supporting robustness. The primary conclusion is that economic disparity influences academic retention, partially through Career-Purpose Motivation. Students are more inclined to continue in higher education when they perceive their studies as a personally meaningful investment in career development, employability, professional competence, and future socio-economic mobility.

THEORETICAL CONTRIBUTION

This study makes three theoretical contributions. Firstly, it transitions the discourse on economic disparity from focusing solely on access and continuation to exploring motivational significance. Instead of merely examining whether economic conditions influence retention, the research investigates how these conditions influence students’ motivations for remaining. Secondly, the research broadens the application of Self-Determination Theory within higher education retention studies by illustrating that extrinsic and intrinsic motivation can coexist. External motivation is not merely a subordinate or unfavorable form of motivation; rather, in economically challenging environments, it can serve as a significant catalyst for academic perseverance. Thirdly, the research indicates that academic retention is most accurately comprehended as a dual motivational process. Students persist because education holds both economic utility and academic significance. This dual framework is essential for elucidating student perseverance within contexts characterized by economic disparity.

Table 11: Hypothesis Testing Summary.

<i>Hypothesis Code</i>	<i>Hypothesis</i>	<i>Evidence / Result</i>	<i>Decision</i>
H1	Standard of Living/Economy significantly predicts Career-Purpose Motivation.	Supported in Model 2. Standard of Living/Economy significantly predicted Career-Purpose Motivation, $\beta = 0.284$, $p < .001$.	Accepted
H2	Career-Purpose Motivation significantly predicts Academic Retention.	Supported in Model 2. Career-Purpose Motivation strongly predicted Academic Retention ($\beta = 0.592$, $p < .001$).	Accepted
H3	Standard of Living/Economy significantly predicts Academic Retention.	Supported in Model 2. Standard of Living/Economy directly predicted Academic Retention, $\beta = 0.254$, $p < .001$.	Accepted
H4	Career-Purpose Motivation mediates the relationship between Standard of Living/Economy and Academic Retention.	Supported in Model 2. The approximate standardized indirect effect was $\beta = 0.168$. The direct effect also remained significant, indicating partial mediation.	Accepted
H5	Standard of Living/Economy significantly predicts the broader spectrum of motivation.	Supported by the model-building results and the score-based robustness model. SLE_score significantly predicted EMR_score, $\beta = 0.1238$, $p < .001$; EMI_score, $\beta = 0.1735$, $p < .001$; IMA_score, $\beta = 0.1888$, $p < .001$; and IME_score, $\beta = 0.1946$, $p < .001$.	Accepted

H6	Motivational dimensions differ in their ability to predict Academic Retention.	Supported in Model 3 and Model 5. In Model 3, EMR and INTRINSIC positively predicted retention, AMOT negatively predicted retention, while EMIIDENT was non-significant in the simultaneous model. In Model 5, EMI_score showed the strongest score-based retention effect, $\beta = 0.2207$, $p < .001$.	Accepted
H7	Career-Purpose Motivation provides the most theoretically stable mediation pathway between Standard of Living/Economy and Academic Retention.	Supported by the model comparison. Model 2 showed the best global fit, significant structural paths, parsimony, and clear theoretical interpretation.	Accepted

Source: Author's Compilation

PRACTICAL IMPLICATIONS

The findings present significant implications for institutions of higher education, particularly in circumstances where students face economic hardships. Firstly, it is essential for institutions to acknowledge that students under financial strain may continue to demonstrate academic dedication when they perceive a direct relationship between higher education and career development, employability, professional skills, and future socio-economic advancement. Consequently, retention strategies should explicitly highlight the career benefits associated with academic programmes. Secondly, employability-focused support should be integrated into the academic experience rather than regarded as a separate entity. Initiatives such as career mentoring, internship opportunities, industry engagement, skills-based training, placement preparation, and professional development activities can enhance Career-Purpose Motivation and facilitate student persistence. Thirdly, institutions should integrate career-oriented support with substantive academic engagement. Although Career-Purpose Motivation was identified as the most significant pathway in the final model, students similarly gain advantage from engaging teaching methods, meaningful assessments, academic challenges, mentoring, and constructive learning experiences. These strategies facilitate students in linking academic learning with their personal development and future professional aspirations. Fourth, student support systems should incorporate financial counseling, academic advising, career guidance, and motivational support. Such integrated interventions may help students turn economic pressures into purposeful academic perseverance. Overall, the findings indicate that retention policies should concentrate not only on alleviating financial barriers but also on promoting students' understanding of how higher education can function as a meaningful pathway to future opportunities.

LIMITATIONS AND FUTURE RESEARCH

This study acknowledges certain limitations. Firstly, the data were collected through a cross-sectional methodology. Consequently, the results should be interpreted as theoretically specified associations rather than establishing definitive causal relationships. Future longitudinal research is necessary to investigate whether alterations in students' economic conditions impact motivation and academic retention over time. Secondly, the research depended on self-reported survey responses. Although self-report measures are suitable for evaluating motivation and perception, future investigations could enhance the robustness of evidence by integrating survey data with institutional records, including scholarship status, fee-payment difficulty, attendance, academic progression, academic performance, and actual retention outcomes. Third, the score-based robustness model was saturated, with zero degrees of freedom. Consequently, its perfect fit indices should not be overly interpreted as evidence of superior model fit. The score-based model was employed solely as a demonstration of robustness, while the primary interpretation was derived from the latent SEM model. Fourthly, future research could broaden the scope of analysis by utilizing multi-group Structural Equation Modeling (SEM) across low-, middle-, and high-income groups. This methodology would facilitate the investigation of whether the career-purpose motivation pathway is more prominent among economically vulnerable students and whether economic background affects the strength of the relationship between motivation and retention.

CONCLUSION

The study concludes that the Standard of Living/Economy exerts a significant influence on Academic Retention. The findings demonstrate that students' economic circumstances impact retention both directly and indirectly through Career-Purpose Motivation. Notably, Career-Purpose Motivation emerged as the most robust and consistent pathway, suggesting that students are more inclined to pursue higher education when they perceive their studies as beneficial for career development, employability, professional competence, and future socio-economic mobility. Among the various models tested, Model 2 was retained as the final Structural Equation Model (SEM) owing to its superior fit indices, statistically significant pathways, and coherent theoretical framework. Supporting models further confirm that motivation is a critical factor in retention; however,

the most substantively reliable explanation pertains to the career-purpose pathway. Consequently, the study posits that financial considerations influence the underlying motivation for study: economic conditions shape students' motivation to persist in higher education by rendering education personally meaningful for future careers and societal advancement. This study is valuable as it demonstrates that economic disparity influences student retention not solely as a financial obstacle but also as a motivational factor. The findings reveal that students' living standards and economic conditions affect their decision to persist in higher education both directly and indirectly through Career-Purpose Motivation. The significant contribution of this research lies in identifying Career-Purpose Motivation as the most robust and stable pathway connecting economic conditions with academic retention. This suggests that students are more inclined to remain in higher education when they perceive their studies as beneficial for career preparation, employability, professional competence, and future socio-economic mobility. For higher education institutions, the study offers practical guidance for enhancing retention rates. It recommends that institutions should extend their focus beyond financial aid or academic advising to include increasing the visibility of the career benefits associated with education through internships, placement training, skill-based learning, mentoring, and industry exposure. Furthermore, the study is pertinent for policy development and academic planning, as it illustrates that students facing economic pressures may sustain high levels of motivation when education is linked to future opportunities. Consequently, retention strategies should integrate financial assistance, career counseling, academic support, and motivational development. Ultimately, the study elucidates that financial considerations influence the underlying motivations for studying; students persist not only because they desire a degree but also because they believe that higher education can enhance their careers, income, social status, and future life prospects.

ETHICAL DECLARATION

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REFERENCES

- Ahn, M.-Y., & Davis, H. (2020). Students' sense of belonging and their socio-economic status in higher education: a quantitative approach. *Teaching in Higher Education*, 28, 136 - 149. <https://doi.org/10.1080/13562517.2020.1778664>
- Bergann, S., Blüthmann, I., Neugebauer, M., & Watermann, R. (2025). Intrinsic and extrinsic motives of undergraduate students for pursuing a master's degree: Applying the Eccles et al. expectancy-value model. *PLOS One*, 20. <https://doi.org/10.1371/journal.pone.0317204>
- Browman, A., Destin, M., Carswell, K. L., & Svoboda, R. (2017). Perceptions of Socioeconomic Mobility Influence Academic Persistence among Low Socioeconomic Status Students. *Journal of Experimental Social Psychology*, 72, 45-52. <https://doi.org/10.1016/j.jesp.2017.03.006>
- Donald, W., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability. *Career Development International*. <https://doi.org/10.1108/cdi-09-2017-0171>
- Espinoza, Ó., Miranda, C., Sandoval, L., Corradi, B., González, L., & McGinn, N. (2024). Determinants of study motivation of undergraduate university students in Chile. *Studies in Higher Education*, 50, 1123 - 1137. <https://doi.org/10.1080/03075079.2024.2363512>
- Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student Motivation and Associated Outcomes: A Meta-Analysis From Self-Determination Theory. *Perspectives on Psychological Science*, 16, 1300 - 1323. <https://doi.org/10.1177/1745691620966789>
- Hurtado, E., Rosado, E., Aoiz, M., Quero, S., & Luis, E. O. (2024). Factors associated with the permanence of doctoral students. A scoping review. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1390784>
- Hwang, S. (2024). Differences in Academic Persistence Intentions among STEM Undergraduates in South Korea: Analysis of Related and Influencing Factors. *Education Sciences*. <https://doi.org/10.3390/educsci14060577>
- Madrilejos, K. (2025). Structural Equation Model of Students' Interest, Motivation, Self-Efficacy, Persistence, and Perceived Teaching Quality in Mathematics. *Journal of Interdisciplinary Perspectives*. <https://doi.org/10.69569/jip.2024.0698>
- Maska, L. (2026). Academic motivation, perceived employability, academic outcomes, and well-being in Greek higher education. *Discover Psychology*. <https://doi.org/10.1007/s44202-026-00627-5>
- Messerer, L., Karst, K., & Janke, S. (2022). Choose wisely: intrinsic motivation for enrollment is associated with ongoing intrinsic learning motivation, study success and dropout. *Studies in Higher Education*, 48, 137 - 150. <https://doi.org/10.1080/03075079.2022.2121814>
- Mújica, A. D., Villalobos, M. P. V., Gutiérrez, A. B. B., Fernández-Castañón, A. C., & Gonzalez-Pienda, J. (2019). Affective and cognitive variables involved in structural prediction of university dropout.. *Psicothema*, 31 4, 429-436. <https://doi.org/10.7334/psicothema2019.124>
- Paparang, M., Hafid, R., Toralawe, Y., Mahmud, M., & Ardiansyah, A. (2025). The Influence of Social and Parental Economic Conditions on Students' Motivation to Pursue Higher Education. *International Journal of Educational Development*. <https://doi.org/10.61132/ijed.v2i3.324>
- Patubo, M. V. E. (2025). Uncovering the Factors that Influence Student Decisions Behind Retention and Attrition within their Academic Program. *APCORE Online Journal*. <https://doi.org/10.65232/b79h5879>
- Quynh, N., Hoai, N. T., & Thu, N. (2021). The roles of student engagement motivations in learning and managing.. *International Journal for Innovation Education and Research*. <https://doi.org/10.31686/ijer.vol9.iss4.3043>
- Sfeir, R., Elhage, J. C., Khoury-Malhame, M. E., Eid, P., & Fakhoury, M. (2026). Motivational factors influencing students' academic choices in higher education. *Journal of Further and Higher Education*, 50, 737 - 753. <https://doi.org/10.1080/0309877x.2026.2626460>
- Simon, R. A., Aulls, M. W., Dedic, H., Hubbard, K., & Hall, N. C. (2015). Exploring Student Persistence in STEM Programs: A Motivational Model. *Canadian Journal of Education*, 38, 1-27.
- Travis, J., & Bunde, J. (2020). Self-regulation in college: The influence of self-efficacy, need satisfaction, and stress on GPA, persistence, and satisfaction. *Current Psychology*, 41, 6185 - 6195. <https://doi.org/10.1007/s12144-020-01091-7>
- Tzafea, O. (2021). Examining the relationship between students' engagement and socioeconomic background in higher education.
- Urhahne, D., & Wijnia, L. (2023). Theories of Motivation in Education: an Integrative Framework. *Educational Psychology Review*, 35, 1-35. <https://doi.org/10.1007/s10648-023-09767-9>

Valencia-Arias, A., Aredo, J. C. V., Valencia, J., Cardona-Acevedo, S., Patiño-Vanegas, J., & Bedoya, H. U. (2026). Key determinants of university dropout: academic, economic, and psychosocial factors in student retention. *Frontiers in Education*. <https://doi.org/10.3389/educ.2025.1701644>

Valencia-Arias, A., Aredo, J. C. V., Valencia, J., Cardona-Acevedo, S., Patiño-Vanegas, J., & Bedoya, H. U. (2026). Key determinants of university dropout: academic, economic, and psychosocial factors in student retention. *Frontiers in Education*. <https://doi.org/10.3389/educ.2025.1701644>

Widodo, W., Tohir, T., & Mulasiwi, C. M. (2023). The Influence of Motivation, Self-Potential, and Socio-Economic Conditions on The Interest in Continuing to Higher Education. *Economic Education Analysis Journal*. <https://doi.org/10.15294/eeaj.v12i2.66031>

Wu, H., Li, S., Zheng, J., & Guo, J. (2020). Medical students' motivation and academic performance: the mediating roles of self-efficacy and learning engagement. *Medical Education Online*, 25. <https://doi.org/10.1080/10872981.2020.1742964>

Xiong, Y., Li, H., Kornhaber, M., Suen, H., Pursel, B., & Goins, D. D. (2015). Examining the Relations among Student Motivation, Engagement, and Retention in a MOOC: A Structural Equation Modeling Approach.. *Global education review*, 2, 23-33.

Zeng, H. (2023). Academic Aspirations or Societal Realities: Motivation for Continuing Pursuing Higher Education among Chinese Undergraduates. *Lecture Notes in Education Psychology and Public Media*. <https://doi.org/10.54254/2753-7048/30/20231737>

Zhai, Y., & Carney, J. V. (2024). The role of mental health and protective factors in student academic persistence and retention during a global crisis. *Cambridge Prisms: Global Mental Health*, 11. <https://doi.org/10.1017/gmh.2024.12>
