Academic success of students with low socioeconomic status: Explanation and evaluation of a model with a mixed-methods approach

Iman Seyyedmoharrami, Hossein Kareshki[1], Seyed Ali Kimiaei, Maryam Bordbar[1]

Abstract:

BACKGROUND: In this research, a model of factors affecting students' academic success with low socioeconomic status (SES) was explained and evaluated.

MATERIALS AND METHODS: A mixed-methods research design was used to explain academic success and evaluate it. From this point of view, the research was divided into two parts: grounded theory (GT) and structural equation modeling (SEM). For the qualitative part, semi-structured interviews were held with 49 students, parents, and teachers from Roshtkhar City, one of the less privileged areas of the department of education in Razavi Khorasan Province in Iran. In the second part, this model was tested using the multistage cluster random sampling method on 314 students from Roshtkhar City with the SEM method. The instrument used in the quantitative section was a researcher-made questionnaire whose validity and reliability have been confirmed.

RESULT: It was found that the causal conditions had significant effects on the phenomenon of the academic positive perspective of students with low SES ($\beta = 0.77$), academic positive perspective on the implementation of academic success strategies in low SES areas ($\beta = 0.6$), context background on the implementation of strategies ($\beta = 0.28$), intervening conditions on the implementation of strategies ($\beta = 0.12$), and implementation of interactions and strategies of students with low SES on the consequences of academic success ($\beta = 0.86$). The phenomenon of academic positive perspective clarified the complexity of the academic success of students with low SES.

CONCLUSION: The examined paradigm model can be a suitable model for the academic success of students with low SES.

Keywords:

Academic success, mixed-methods study, socioeconomic status, students

Department of Education and Counseling Psychology, Faculty of Education Sciences and Psychology, Ferdowsi University of Mashhad, Mashhad, Iran, [1]Department of Educational and Counseling Psychology, Faculty of Education Sciences and Psychology, Ferdowsi University of Mashhad, Mashhad, Iran

Address for correspondence:
Dr. Hossein Kareshki, Department of Educational and Counseling Psychology, Faculty of Education Sciences and Psychology, Ferdowsi University of Mashhad, Mashhad - 9177948974, Iran.
E-mail: kareshki@um.ac.ir

Introduction

Academic success is a multidimensional construct influenced by many factors.[1] It is highly dependent on the cultural, social, and economic context,[2] and due to its complex nature, it is different according to the experiences, desires, and expectations of individuals and societies.[3] Therefore, the sophistication of effective factors on academic success and the various definition of this issue have led to the necessity of several studies in this field.[4] Research showed that few students achieve academic success according to its current interpretation, and this statistics is much lower than usual for students from families with low socioeconomic status (SES).[5] The SES of this group refers to the level of education, annual income, place of residence, and occupation of the parents.[6] Studies showed that negative emotional experiences and some psychological obstacles, including problems of identity, self-perception, and

motivation, are among the factors influencing the lack of academic success of students with low SES.[7]

One of the models that provides the closest explanation of the gap between SES and academic success is the sociocultural self-model.[8] This model is based on the fact that sociocultural experiences have a decisive role in the lives of people, and through new sociocultural experiences, students' self with low SES who have emerged in a certain context and situation can be changed and promising conditions in their lives can be created.

The good parent theory considers the role of parents important in explaining the gap between SES and educational achievement and shows that not because of low resources but because low income reduces their ability to be good parents, low SES families cannot have children with high academic achievement.[9] The parental stress model and the role model derived from the theory of good parents provide reasons to explain the inability of this group to be good parents. The parental stress model points out that poverty is stressful and psychological pressure reduces the ability of parents to support, stabilize, and participate in their children's education. The role model shows that low-income parents usually develop values, norms, and behaviors that are ineffective for the success of their children in the dominant culture.[10]

Despite the prevailing stereotypes and challenges that low SES students have, some of them have good academic progress in school and are successful people[11] and they resist against the stereotype that poverty hinders academic success.[12] Numerous studies showed that the impact of parents' SES on children's academic outcomes can be neutralized, strengthened, or moderated by a wide range of contextual, family, and individual characteristics.[13] Williams *et al*. considered creating a culture of hope, expanding the communication network with teachers and peers, and effective cooperation between parents of students and the school to achieve academic success for this group.[14] Some studies have investigated the behaviors and characteristics of parents who have been successful academically despite their children's low SES. The results of their research showed that parents who express the values of education for their children[15] have high expectations of their children to achieve academic success and adopt a warm, supportive, and positive interactive style with their children.[16] They create a religious atmosphere in the home environment[17] and have successful children. Other studies showed that parents' educational participation in primary and secondary education and providing positive feedback to students about their strengths and establishing positive attitudes toward academic success and its

consequences are among the most important factors affecting students' academic success with low SES.[18,19] This study is innovative in several ways. Academic success is a complex and multidimensional concept, and this study is one of the few studies that have examined individual and family factors affecting the academic success. Also, most of the current studies have described and explained the factors affecting the academic success, but how individual and family factors influence effective processes is an important issue that has been addressed in this study. However, this phenomenon depends on the context, and there is not much information about the lived academic experiences of students with low SES in Iran, which is discussed in this study. Finally, dealing with the explanation of academic success from the perspective of students with low SES in the form of a mixed-methods approach is a new issue that has not been addressed.

Therefore, the lack of a coherent study that explains and evaluates individual and family factors affecting the academic success of students with low SES is considered a fundamental gap in this field, and the best solution is to use a mixed-methods research design. The present research used a mixed-methods paradigm by studying students, parents, and teachers of disadvantaged areas, carefully examining the educational experiences of students of different educational levels using grounded theory (GT), and quantitatively evaluating the academic success model to solve the theoretical and empirical limitations from previous studies.

Materials and Methods

Study design and setting
It was basic research in terms of its purpose, and a mixed-methods research in terms of its nature of data collection and a sequential exploratory procedure was used. This procedure included the collection and analysis of qualitative data in the first stage, followed by the collection and analysis of quantitative data based on qualitative results, in the second stage. In the current research, the classification compilation model has been used as one of the types of sequential exploratory strategies. The method used in the qualitative stage was GT (data based), and the quantitative stage used a descriptive survey approach. Our priority in this research was the qualitative phase, and quantitative data were used to strengthen the qualitative data. All high school students studying in Roshtkhar City from eighth grade to twelfth grade, students' parents, and teachers formed the current research community.

First stage: Qualitative part
Study participants and sampling
The participants of the qualitative part were 49 people from three groups: The first group was students in the

2021–2022 academic year and the second and third groups included parents and teachers from low SES areas. In the qualitative part of the research, purposeful sampling was used to select the sample. Sampling continued until theoretical saturation.

Data collection tool and technique

A semi-structured interview based on experts' opinions and research literature was used to collect information. At the beginning of each interview, its purpose was mentioned to the interviewees and permission was obtained to record the interview. The participants were also assured about the confidentiality of the information and interviews. The main research question was "talk about the experience of academic success in low SES areas; what factors are involved in this experience?". Interviews were analyzed using the method of Strauss and Corbin in three stages of open, axial, and selective coding. In this study, there was a constant conflict with the topic and data of the research regarding the validity of the theoretical plan of the research, and the three conventional methods of control or validation by the members, analytical comparisons, and audit method were used.

Ethical consideration

To comply with ethical considerations, participation in the interview was voluntary. At the beginning of each interview, its purpose was mentioned to the interviewees and permission was obtained to record the interview. The participants were also assured about the confidentiality of the information and interviews.

Second stage: Quantitative part
Study participants and sampling

The participants of the quantitative part were 314 students studying in low SES areas in the academic year 2022–2023. They were selected using the multistage cluster random sampling method and based on the rules of sample size for structural equation modeling.

Data collection tool and technique

A researcher-made scale with 123 items was used to measure the categories of the data based on the model of the qualitative stage. To determine the content validity of the researcher-made scale, based on the qualitative findings, it was distributed among 30 experts, and they were asked to answer these questions: "whether the presence of this indicator in the questionnaire is necessary and related to the purpose of the research or not?" 11 experts completed it. The content validity index was confirmed using the Lawshe method. To ensure the reliability of the questionnaire and the internal homogeneity of the items, the researcher-made questionnaire was implemented in a pilot project among 36 students and the results were confirmed. Then, the obtained results were analyzed using partial least-squares structural equation modeling and Smart PLS software. To check the fit of the measurement model, three criteria of index reliability, convergent validity, and divergent validity were examined.

Ethical consideration

The ethical principles of the research were also observed in the qualitative part. There was no need for first and last names to answer the questionnaires, and answering the questionnaire was voluntary.

Results

First stage: Qualitative part

There were 40 students, two parents, and seven teachers from low SES areas among the participants in the qualitative part of the research. The age range of participating students was between 14 and 18 years. The mean and standard deviation of the age of the students were 15.8 and 1.26. Of these, 15 people (37.5%) were in the tenth grade, 10 people (25%) were in the eighth grade, eight people (20%) were in the eleventh grade, four people (10%) were in the twelfth grade, and the rest were in the ninth grade. Table 1 shows the concepts and categories obtained from the participants' narratives about the academic success of students with low SES.

Finally, a paradigmatic model of individual and family indicators effective on academic success was compiled, which shows the relationships between concepts and main categories obtained from data coding [Figure 1].

Second stage: Quantitative part

To trust the results obtained from the model, quantitative approaches and structural equation modeling were used. Several studies have confirmed the use of quantitative structural equation modeling (SEM) methods to evaluate and fit the paradigm model obtained from the GT approach.[20] The goodness-of-fit indices of the model, including Cronbach's alpha and composite reliability, were investigated using the structural equation method. In Table 2, Cronbach's alpha index and composite reliability for all variables are higher than 0.7 and the average variance extracted (AVE) index is higher than 0.4, which is considered favorable, and the reliability and convergent validity of the model were confirmed. Divergent validity also measures the ability of a measurement model to differentiate the observability of the hidden variable of that model with other observed abilities in the questionnaire and is actually a complement to convergent validity, which is measured through the Fornell–Larcker matrix. Because that the numbers on the main diameter of the Fornell–Larcker matrix were higher than their lower numbers, the validity of the research model is confirmed. Moreover, the indicators Q^2 showed that the model has the necessary power to predict the dependent variables.

Table 1: Categories and dimensions of academic success of low SES students

Dimensions	Categories	Concepts
Central category phenomenon	Academic positive perspective	Foresight, perception of the value of academic success, certainty in the purpose of science (belief in the usefulness of knowledge), positive academic feeling (emotional contagion of the experience of others' success, emotional contagion of parents' positive feelings), academic positivity, goal orientation, career horizons
	Academic lesson learning	The prominence of failures related to people's education, understanding the suffering of illiteracy, predictability
	Academic pride	Jealousy (jealousy toward the hometown, jealousy toward parents), value preferences (parents' satisfaction, academic status, social status), compensatory response to the sadness of the parent's lack of literacy
Casual conditions	Effective academic experiences	Positive experience within the family, positive experience outside the family, positive academic feedback, positive scientific experience, positive cultural experience, positive artistic experience
	Family cultural function	Academic evaluation, educational attitude formation, creating academic beliefs, family cultural experiences, citizenship culture education
	Family educational function	Personal coaching (being a role model, psychological monitoring, clarifying life's traumas), shaping academic character, restrictive parenting style (seriousness based on compassion)
	Family academic function	Expecting academic progress, establishing a positive academic feeling, forming successful habits, academic care (children's academic accompaniment, family's academic attention)
Intervening conditions	Family structural function	Clear family boundaries, compliance with rules and regulations in the family, positive communication atmosphere, strengthening the sense of belonging
	Family affective function	Family attachment, emotional support, emotional exchange, uplifting, family intimacy
	Family communication function	Intra-family interactive pattern, extrafamilial interactive pattern, supportive communication, growth-based interactive pattern, security-based interactive pattern
	Family religious function	Religious education, framing, current religious behaviors (verbal religious behaviors, non-verbal religious behaviors)
	Academic spirituality	Spiritual insight, clerical purity (politeness, dignity, honesty), giving meaning to academic experiences, academic normality
Contextual conditions	Academic temperament	Academic perfectionism (scientific ambition, self-competition, academic ambition), concern (academic concern, human concern), success seeking, experience gathering, academic conscientiousness, risk aversion, academic self-reliance
	Feeling of satisfaction	Realistic view, hope, inner peace
	Family self-improvement function	The developing context of the family, parents' insight into the lack of education, identification with the values of successful families, overcoming the dominant narratives (education, lack of education)
	Academic sublimation	Beliefs that moderate emotions, turning vanity into scientific fruit, turning urgent criticism into long-term good
Action or interaction strategy	Academic agency	Academic thinking, academic opportunism, application of knowledge, selection of academic assistant, continuous self-evaluation (discovering interests and talents, academic introspection), internalization of success (externalization with successful models, externalization with successful students)
	Academic life skills	Academic planning skills, academic self-confidence, decision-making skills, time management skills, communication skills
	Academic persistence	Academic determination, diligent thinking, academic effort, academic tenacity, closing unfinished academic gestalts
	Overcoming dominant macronarratives	Academic identity crisis, limitation anxiety, student companion, academic misconduct (cheating), inversion of academic role (bullying behavior, familism)
Consequences	Academic lifestyle	Structured academic life (success-oriented planning), learning strategies (reviewing new materials, conceptual study, careful listening, studying before the teacher's teaching, note-taking, questioning), academic awareness, academic leisure (free study), extracurricular activities
	Progress context	Social progress (improving personality, acquiring social skills), academic progress, self-enhancement beliefs (progressive thinking, self-belief, academic self-efficacy)
	Attachment to success	Getting used to complacency, attachment to progress
	Role competence	Child role competence, student role competence, citizenship role competence
	Academic creativity	Academic compatibility, creative life management, creative learning methods

The index f^2 also shows that the intensity of the effect size of the independent variables is high.

Based on the confirmation of the goodness of fit of the model, the model fitted to the qualitative data can be presented [Figure 2].

Examining the direct paths: Based on the contents of Table 3, it can be seen that the path coefficient related to the path of the causal conditions to the central phenomenon was statistically significant ($\beta = 0.778$, $P < 0.05$), and as a result, the causal conditions had a significant effect on the central phenomenon. In

Table 2: Goodness-of-fit indices of the conceptual model

Category	Subcategory	Q	Mean	SD	Factor loading	Cronbach's alpha	CR	AVE
Causal factors	Academic lesson learning	8-11	3.996	0.730	0.765	0.765	0.849	0.585
	Academic pride	12-16	4.106	0.651	0.842	0.798	0.861	0.554
	Effective academic experiences	17-20	4.171	0.685	0.808	0.801	0.870	0.626
	Family cultural function	21-26	4.008	0.699	0.892	0.846	0.886	0.565
	Family educational function	27-31	4.064	0.675	0.866	0.823	0.876	0.586
	Family academic function	32-35	4.136	0.639	0.818	0.770	0.853	0.592
Contextual conditions	Family self-improvement function	68-72	4.040	0.693	0.885	0.825	0.878	0.590
	Feeling of satisfaction	65-67	3.958	0.741	0.837	0.739	0.852	0.657
	Academic temperament	58-64	4.126	0.610	0.910	0.823	0.869	0.486
	Academic spirituality	54-57	4.170	0.680	0.851	0.816	0.879	0.645
Intervening conditions	Family religious function	50-53	4.013	0.764	0.841	0.718	0.826	0.543
	Family communication function	45-49	4.020	0.678	0.918	0.828	0.879	0.592
	Family affective function	41-44	4.014	0.703	0.815	0.721	0.810	0.517
	Family structural function	36-40	4.011	0.665	0.877	0.811	0.869	0.571
Strategies	Academic sublimation	73-77	4.045	0.669	0.850	0.792	0.858	0.549
	Academic agency	78-83	4.129	0.583	0.916	0.813	0.865	0.518
	Academic life skills	84-89	4.129	0.572	0.908	0.795	0.854	0.495
	Academic persistence	90-95	4.083	0.615	0.907	0.813	0.865	0.517
Consequence	Overcoming dominant macronarratives	96-101	3.807	0.789	0.808	0.833	0.878	0.545
	Academic lifestyle	102-106	4.119	0.602	0.867	0.798	0.861	0.555
	Progress context	107-111	4.081	0.622	0.897	0.806	0.866	0.563
	Attachment to success	112-115	4.009	0.639	0.868	0.718	0.825	0.543
	Role competence	116-119	4.001	0.731	0.844	0.793	0.866	0.617
	Academic creativity	120-123	4.077	0.645	0.842	0.779	0.858	0.602
Academic positive perspective	-	1-7	4.022	0.477	-	0.824	0.870	0.489

Table 3: Direct paths

Direct paths	Path coefficient	T	P	Result
Causal factor → phenomenon	0.778	19.894	0.000	Confirmation
Phenomenon → strategies	0.603	11.327	0.000	Confirmation
Contextual conditions → strategies	0.288	5.665	0.000	Confirmation
Intervening conditions → strategies	0.12	2.506	0.012	Confirmation
Strategies → outcomes	0.863	55.712	0.000	Confirmation

fact, assuming that other variables are constant, if the causal conditions increase by one unit, the central phenomenon increases by 0.778 standard deviation. The coefficient of the path related to the path of the central phenomenon to the interactions was statistically significant ($\beta = 0.603$, $P < 0.05$), and as a result, the central phenomenon had a significant effect on the interactions. In fact, assuming that other variables are constant, if the central phenomenon increases by one unit, the interactions will increase by 0.603 standard deviation. The path coefficient related to the path of context conditions to interactions was also significant ($\beta = 0.288$, $P < 0.05$). The path coefficient related to the path of intervening conditions to interactions was also statistically significant ($\beta = 0.120$, $P < 0.05$). Finally, the coefficient of the path related to the path of the interactions to the outcomes was also statistically significant ($\beta = 0.863$, $P < 0.05$). The desired results are given in Table 3.

Investigation of indirect paths: Regarding the indirect path of causal conditions to outcomes through mediating variables of the central phenomenon and interactions, it can be seen that the coefficient of the corresponding path has become statistically significant ($\beta = 0.405$, $P < 0.05$); in fact, it can be said that the variables of the central phenomenon and interactions can play a mediating role in the relationship between causal conditions and consequences. The coefficient of the path of context conditions to outcomes through the mediating variable of interaction has become statistically significant ($\beta = 0.248$, $P < 0.05$), and interactions are able to play a mediating role in the relationship between context conditions and outcomes. The path of intervening conditions to outcomes has also been statistically significant through the mediating variable of interactions ($\beta = 0.104$, $P < 0.05$), and interactions can play a mediating role in the relationship between intervening conditions and outcomes. The results of indirect paths are presented in Table 4.

Table 4: Indirect paths

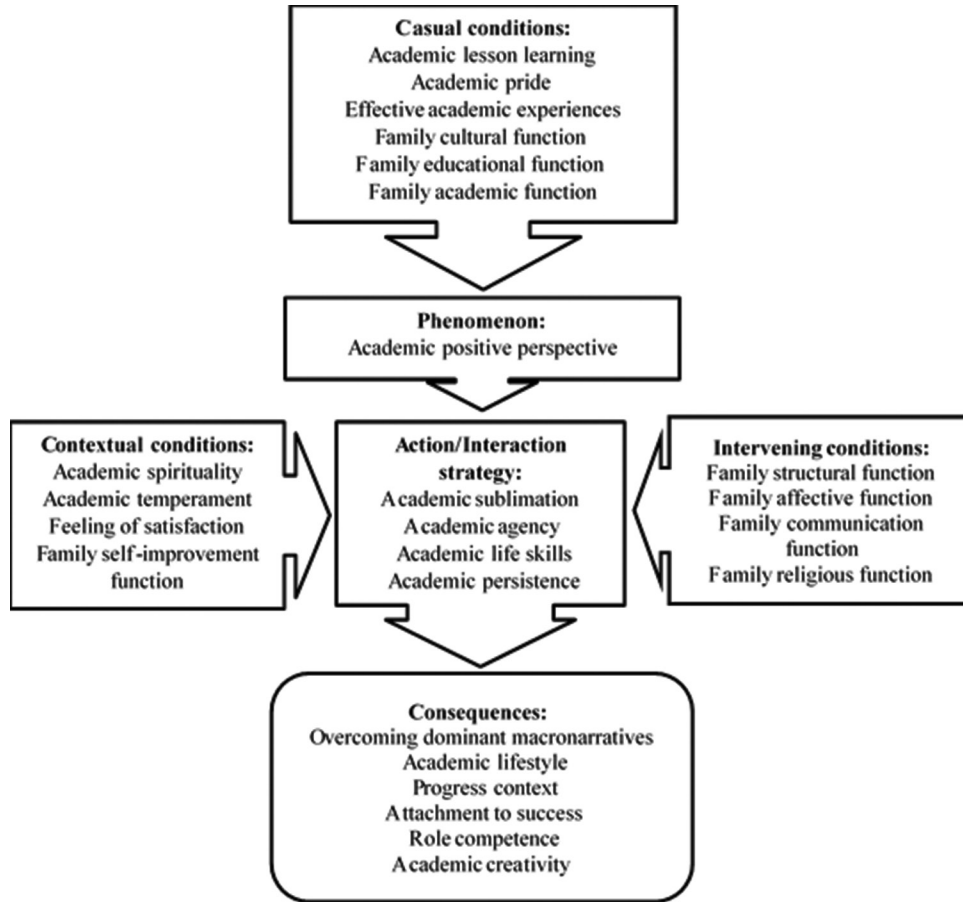| Indirect paths	Path coefficient	Sobel statistics	*P*	Result
Causal factor → phenomenon → strategies → outcomes	0.405	14.799	0.000	Confirmation
Contextual conditions → strategies → outcomes	0.248	5.947	0.000	Confirmation
Intervening conditions → strategies → outcomes	0.104	2.479	0.014	Confirmation

Figure 1: Paradigm model of academic success of students with low socioeconomic status

Discussion

The present study was one of the first studies that examined the academic success of low SES students using mixed-methods research. In this study, this approach has successfully filled the gap between qualitative and quantitative research studies and synchronized the merits of both research methods. Based on the findings of the present study, it can be said that the main core of the academic success of students with low SES is the concept of academic positive perspective, which was obtained from the lived experiences of the participants of the present study. The participants believed that, in an environment with few facilities, an academic positive perspective was the most important part of academic success and their driving force to continue the path despite all the difficulties. Although an academic positive perspective is a new category in the field of science and knowledge, previous studies proved the role of future orientation on academic performance.[21] Other studies show that thinking style can predict a part of academic success.[22] In explaining this finding, it can be said that positive thinking is a factor that allows a person to use all their mental abilities and capacities and makes them continue their efforts in the face of problems.[23] The emergence of academic positive perspective takes place under the influence of certain conditions, which were classified into six categories based on the findings of this research. To create a positive outlook toward education, the experience of academic lesson learning must happen. Successful students with low SES had learned from the unfortunate events that happened in the lives of illiterate people around them. Studies showed that the insight that a person gets in the course of learning makes him not repeat the mistakes of others.[24] The results showed that achieving the academic success despite having few facilities and being busy requires a spirit of pride and zeal toward family and hometown, a motivational state that
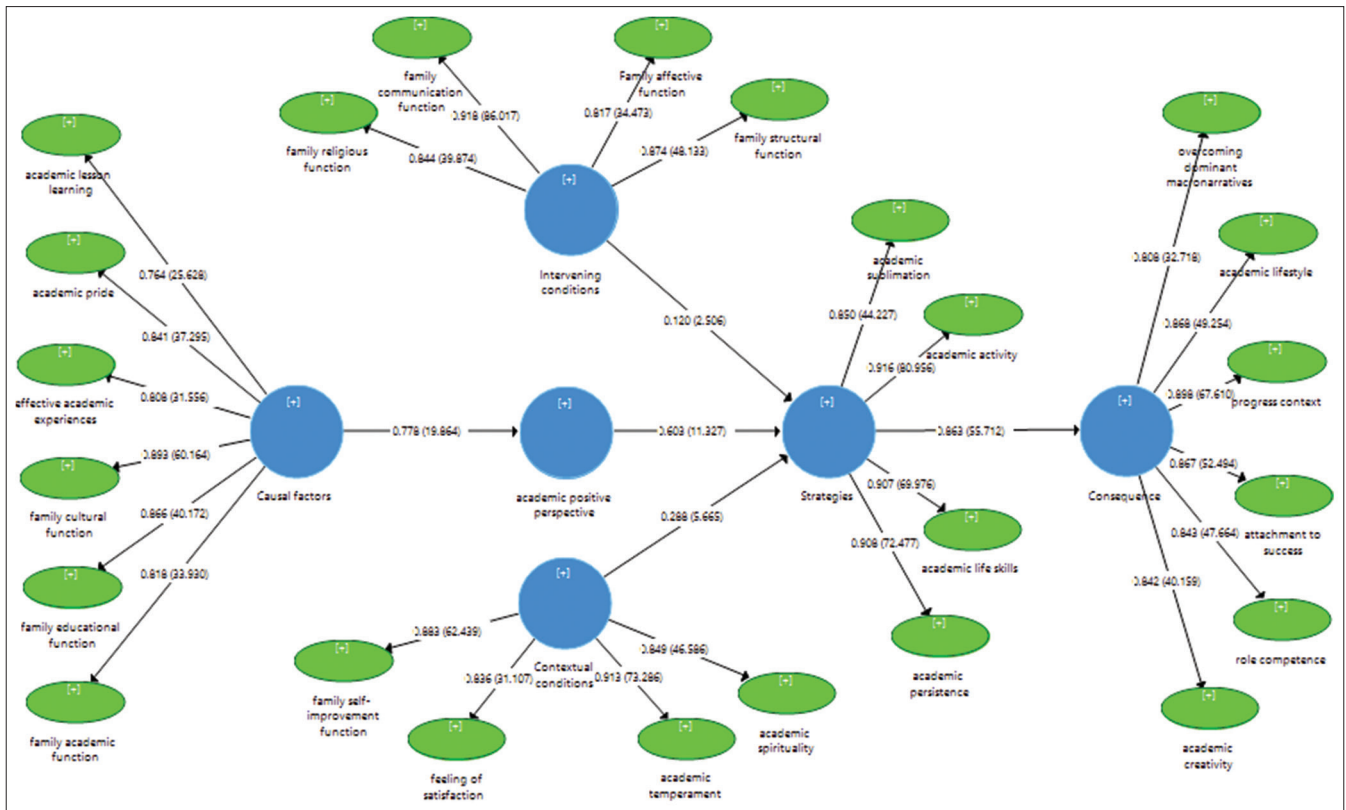
Figure 2: PLS results of the structural model

was created in them due to the hardships caused by the illiteracy of their parents. Some researchers have come up with a similar concept called pride of progress and have proved its connection with motivation for progress and academic performance.[25] However, to reach the ideal perspective and achieve academic success, it is necessary for the student to have successful experiences. Research shows that the quality of experiences during education plays a significant role in the academic progress of students.[26]

From the point of view of the researchers of the present study, along with individual factors, the family also plays a direct role in the formation of academic positive perspective and achieving the academic success. These were named under the title of cultural, educational, and academic functions of the family in the present study. The narratives that were coded as family functions referred to the actions and reactions that the students' parents did despite not have enough literacy. Numerous research studies have proven the role of cultural, educational, and academic functions of the family in academic success.[13,27,28]

In the current study, four categories of academic spirituality, academic temperament, feeling of satisfaction, and family self-improvement function were obtained as the context conditions of the academic

success model of students with low SES. Academic spirituality, as a factor behind academic success, was the result of academic experiences intertwined with the spiritual beliefs of this group, which had helped them during their studies. It is believed that there is an extraordinary power in faith in God that creates spiritual strength and makes hardships bearable for humans and removes anxiety and worry.[29] Researchers have shown that spirituality and religious orientation have an effect on academic success.[30] Also, successful students with low SES had a common temperament that was the basis of their success. This finding is consistent with the results of other researchers.[31] Research shows that successful people usually have similar personality traits and characteristics.[32] According to the participants, another basic condition for achieving the academic success was the feeling of satisfaction, which is in line with the results of other studies.[33] Besides individual factors, the function of self-improvement of the family was a new structure that was obtained from the narratives of the participants and was the basis for the students' academic success. Various researchers have shown in numerous studies that various trainings for parents with low SES with the aim of increasing their awareness can affect the academic status of their student.[34]

The results obtained from the interviews showed that four family factors named as family structural function,

family affective function, family communication function, and family religious function were involved in academic success. Numerous studies have shown the role of family structure,[35] emotional atmosphere, including emotional exchange between family members,[36] and clear relationships between parents and children of low SES families regarding academic achievements[37] on the academic future of these students. Family religious function was named as the last intervening factor affecting the success of students with low SES. This result is consistent with Mayger's findings.[38] Researchers have shown that families can control the effects of adverse living conditions on their children by creating a religious atmosphere in their home environment.[17]

With the emergence of academic positive perspective, students with low SES interact with it through the strategies of academic sublimation, academic agency, academic life skills, and academic persistence. These students use academic sublimation as a directed and deliberate action to achieve academic success. They had beliefs that helped them control their destructive emotions and desires. This finding is consistent with other studies.[39] Another important and effective strategy to achieve the goal in low SES areas was academic agency. This strategy makes the students get a unified and sufficient image of themselves and their role during their studies and develop it, thus being effective in determining their educational destiny.[40] Academic life skills were another strategy to achieve academic success for students with low SES. Studies have proven that the categories of life skills may change depending on the target audience and their needs.[41] The effectiveness of life skills on grade point average (GPA) and academic performance has been proven in several studies.[42] Moreover, students from low SES areas needed academic persistence to achieve academic success. Research studies show that one of the most obvious characteristics of successful students to reach their goals is the persistence and follow-up of this group of people.[43]

As a result of the family members' strategies in response to the desired phenomenon and under the influence of those conditions, overcoming destructive macronarratives, academic lifestyle, progress context, attachment to success, role competence, and academic creativity are created as consequences. The category of overcoming dominant macronarratives was a decisive decision on the part of students with low SES to overcome academic disasters. This result is in line with the findings of Kota.[44] Academic lifestyle was also the result of academic success of this group. In explaining this category, it can be said that people have different orientations when facing different aspects of the environment. One of these orientations is the autonomy orientation in which people lean

toward something based on their interest and value.[45] Progress context was also the distinguishing feature of successful students from other students in this group. Attachment to success was another consequence that was achieved for successful students. Studies confirm this finding that some academic emotions are the result of academic results and are tied to academic results.[46] Role competence was another consequence of academic success. The evidence showed that successful students from low SES areas were popular with parents, teachers, and other students. Among the concepts related to the category of role competence, we can mention the concept of academic civic behavior,[47] which is influenced by the love of learning, enthusiasm, and academic flourishing.[48] The last consequence of academic success is academic creativity. Researchers' findings confirm that students' academic involvement affects the learning environment and school atmosphere and, in this way, can lead to academic creativity.[49] Researchers' findings confirm that students' academic involvement affects the learning environment and school atmosphere and, in this way, can lead to academic creativity.[49]

Limitation and recommendation

The research data are limited to the schools of Roshtkhar City, which indicates the potential cultural or regional bias. Therefore, future research is suggested to obtain research data from other low SES cities of Razavi Khorasan Province or other provinces. By testing the proposed model in other geographical areas, the findings here can be more valid.

Conclusion

The findings of this research showed that an academic positive perspective is the main phenomenon and the core of the concept of academic success of students with low SES. It is achieved by providing specific personal and family causal conditions including academic lesson learning, academic pride, effective academic experiences, family cultural function, family educational function, and family academic function, and the impact of its effects leads to the emergence of strategies, including academic sublimation, academic agency, academic life skills, and academic persistence, which of course are influenced by a number of context conditions, including academic spirituality, academic temperament, feeling of satisfaction, family self-improvement function, and intervening conditions, including family structural function, family affective function, family communication function, and family religious function. Finally, these strategies are the consequences of overcoming dominant macronarratives, academic lifestyle, progress context, attachment to success, role competence, and academic agency. The assumed relationships of this paradigm model were examined quantitatively and it had the

necessary fit, and hence, it can be a suitable model for the academic success of students with low SES.

Acknowledgment

Compliance with ethical standard statement

The studies involving human participants were reviewed and approved (with ethics code IR.UM.REC.1399.131) by the ethics committee at the Ferdowsi University of Mashhad. This study followed the American Psychological Association (APA) ethical principles of psychologists and code of conduct.

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Conflicts of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as potential conflicts of interest.

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