



## Motives Influencing Subject of Students at Intermediate Level in Private Schools

**Rashida Noor**

MPhil Scholar

Qurtuba University of Science and Information  
Technology, Dera Ismail Khan, Khyber  
Pakhtunkhwa, Pakistan.

Email: [rashidahnoor07@gmail.com](mailto:rashidahnoor07@gmail.com)

**Dr. Asif Jamil**

Professor

Qurtuba University of Science and Information  
Technology, Dera Ismail Khan, Khyber  
Pakhtunkhwa, Pakistan Director (Rtd) Institute of  
Education and Research, Gomal University, Dera  
Ismail Khan, Khyber Pakhtunkhwa, Pakistan

Email: [asifjamil72@hotmail.com](mailto:asifjamil72@hotmail.com)

**Shahid Iqbal Khan**

PhD Scholar

Qurtuba University of Science and Information  
Technology, Dera Ismail Khan, Khyber  
Pakhtunkhwa, Pakistan

Email: [shahidkhaanniazi@gmail.com](mailto:shahidkhaanniazi@gmail.com)

### Citation

Noor, R., Jamil, A., & Khan, S.I. (2024). Motives influencing subject of students at intermediate level in private schools. *Open Access Education and Leadership Review*, 2(1): 39-47.

WEBSITE: [www.mdpi.com](http://www.mdpi.com)

PUBLISHER: MDPIP

ISSN (Print): 3006-8746

ISSN (Online): 3006-8754

### Abstract:

The present research aimed at establishing the internal antecedent affecting course choices by intermediate students, self-generated forces that included interest, ability, curiosity, and joy. The sample consists of first-year science and arts students male and female, both private and public sector university students in district Mianwali. The questionnaire was used to administer the data and later the data was analyzed using the statistical package for social sciences. Research indicated that extrinsic motivators, including subject interest, choice, learning capacity, and desire influenced subject selection. Most students were inclined by their abilities and interests as they selected their courses. However, there are other more basic aspects such as fun and interest, which were scarcely noticed; this is because students highly valued the match of their academic courses to their skills instead of fun or interest in the course content. This outlines an omission in students' utilization of intrinsic factors; therefore, there is a need to increase the focus on using curiosity and enjoyment within educational decision-making. The study is conducted with a small sample size due to several research constraints. In the future, studies could be conducted with larger sample sizes including adding more variables for wide demographic coverage to obtain a verifiable result to be generalized to capture a greater understanding of the issue.

**Key Words:** Motives Influencing, Subject Selection, Intrinsic Motives, Students, Secondary Level.



**Copyright:** © 2024 by the authors. Licensee MDPIP, Mardan, Pakistan. This open-access article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>). Reproduction, distribution, and use in other forums are permitted provided the copyright owner (s), the original authors are credited, and the original publication is cited.

## Introduction

The right decision-making at this stage is inevitable for the successful completion of the education process. The success of young people very much depends on Secondary level education the significant identity formation activities take place here that have a long-lasting impact on young people's lives, choices, and decision-making power. Different subjects determine the future career of the students, which they choose in upcoming life not only as a profession but also as a passion. In Asian countries especially in Pakistan students from their childhood to university level, are interrogated, "what would you like to be?" It is an interesting fact that the answer of the students is usually influenced by societal and cultural basis, especially their parents' perceptions and some external factors. It means some motives play a vital role in the selection of careers (Javed, 2018).

The options that can be involved in the subject selection can be grouped by Science Pre-Medical and Pre- Engineering or the other combination of Arts. Students are normally inclined to choose subjects under certain influences, social pressure includes family pressure from parents, siblings, teachers, and friends (Matysiak, 2021).

Motivation is considered as a basis that defines the behavior and productivity of a person (Kian *et al.*, 2014; Turan *et al.*, 2016). The concept of motivation increasingly deviated in the early 1950s. Psychologists and scientists stopped considering Freud's theory of the man who is driven by longing and desire. The last five decades contain extensive literature on the effects of reward on all stages of the school. Different educationists explained that motivation is a critical determinant for guaranteeing the continuous success of learners (Alkis & Taskaya, 2018; Alucdibi & Ekici, 2012). Motivation is an inherent condition that resides in individuals instantly during the learning process (Lin, 2012). Whereas Self-motivation of the concerned person that shows and directs the behavior is called motivation (Seiler *et al.*, 2012).

Intrinsic motives originate from within an individual while extrinsic motives influence the activity of the individual by factors outside of him or her. The major components of intrinsic motivation are desires, curiosity, and interest originating from the learners; thus, no extrinsic motivation is necessary (Sen *et al.*, 2014). Volunteerism, readiness for agreeable behavior, or response is expected in this case. Deci and Ryan (2012). In this manner, these actions enhance proscribed consequences that have meaning for the individual (Ozel *et al.*, 2013).

Research emphasizing the importance of intrinsic motives suggest that learning will be promoted if the learner is willing to learn (Anderman & Dawson, 2011) Intrinsically motivated kids show different emotions that allow them to behave in accordance with educational abilities. For instance, self-generated learners show great engagement towards the set tasks willingly without compulsion. Students' assignment values, especially students' curiosity and efficacy are more predictive of students' subject or career choice (Anderman, 2020; Guo *et al.*, 2015). While intrinsic motivation makes the kids involved in an educational task for their inner needs and desires, extrinsic motivation makes the kids to be involved in an education task for outward reasons. For instance, hope and beliefs parents, other ideals etc. through which they get strength to join a passage to achieve goals (Cook & Artino Jr, 2016).

The benefits of intrinsic motivation are not a mystery in the sphere of education. For instance, Taylor *et al.*'s (2014) meta-analysis showed that intrinsic motivation was the important factor to the achievement of school. They supported that analysis with studies carried out in increased schools and colleges in Canada and Sweden; it was observed that intrinsic motivation is progressively associated with increased performance (Taylor *et al.*, 2014). Antecedent self-regulation predicted learner's participation in activities that extend high grades, according to the intrinsic motivation forecast by Froiland and Worrell (2016). Additionally, it has the mission of combing gender biases, curiosity, ambition, and association. The author has pointed out that female performs as well as males in education explored motivational strategies to boost motivation (Thomson, 2016).

## Problem Statement

Intermediate education has important functions of students' academic and further employment, thus being a link between basic and higher education. The motivational factors that are determinative at this stage of the subjects' selection include intrinsic, extrinsic, as well as interpersonal motives. Motivating factors, inclinations, attitudes including aptitudes, interest, enjoyment, curiosity and inspiration are intrinsic in determining student's choice of subject as well as their ways of perceiving academic activities. Nevertheless, while internal drivers are essential for subject choice, one will find very few studies that look at the impact of the intrinsic factors on the choice of subjects

by the intermediate students. Therefore, it is important for educators, policymakers or career counselors to comprehend the effects of these self-generated motives to enable students to make right decisions on their future endeavors. Hence, the purpose of this study is to establish the internal factors which influence subject choices among the intermediate students and thus address the gap of the internal motivations to education choices at this significant level. The aim of the study was to explore the influence of intrinsic motives in the subject choice of the student's getting admission in intermediate after matriculation.

### Research Question

What are the intrinsic motives which influence the subject choice more?

### Hypotheses

**H<sub>0</sub>-1:** There is no significant difference in perception among male and female students about the influence of intrinsic motives on the selection of subjects.

### Method

The study population included all the 5,126 first year students who enrolled themselves during 2020-2021 academic session in public HSSC, degree colleges and private intermediate colleges in District Mianwali. In total, District Mianwali had 33 institutions: 13 HSSCs (8 for boys, 5 for girls), 6-degree colleges for girls, 4-degree colleges for boys and 10 self-financing institutions. A random sampling technique was employed in the selection of the sample and the number of samples was proportionally divided among the subject areas. With a total population of 5,126 first-year students, 400 respondents were selected using the LR Gay sampling formula.

Questionnaire information was gathered on a five-point Likert scale as suggested by the study objectives. Face validity of the questionnaire was established through the assistance of ten highly educated and experienced teachers, who went through the instrument to determine any major disparity. Thus, reliability of the instrument was calculated by using Cronbach's Alpha coefficient through SPSS, which was found to be 0.82, which confirmed high reliability.

A preliminary survey was carried out on forty students to evaluate the efficiency of the above said questionnaire and to check whether the questions were comprehensible to the target group. Descriptive and inferential methods of analysis were employed to analyze the data that was collected. Descriptive analysis included data description and presentation while inferential analysis was used to analyze the research hypotheses. The researcher adopted SPSS for data analysis, and two statistical tools; T-test analysis and Spearman rho correlation test were used on the hypotheses with the view of making conclusions from the results obtained.

### Results and Findings

**Table 1**

*Showing Perceptions of Male and Female Respondents Concerning 'Intrinsic Motives'*

No	Statement	Responses									
		SA		A		UD		DA		SDA	
		M	F	M	F	M	F	M	F	M	F
1.	By own choice	20.8	25.4	63.3	60.6	5.8	5.2	6.8	8.8	3.4	0
2.	Based on learning abilities.	16.9	14	34.3	33.7	33.3	36.8	14	14	1.4	1.6
3.	Due to the attentiveness of the subjects.	18.8	14	30.9	34.2	43	43	7.2	8.3	0	0.5
4	Because of previous knowledge of concerned subjects.	71.5	58	20.3	25.4	3.9	7.3	2.4	8.8	1.9	0.5

5.	Based on the easiness of the subjects.	65.7	63.7	23.2	25.9	4.8	4.7	5.3	5.2	1	0.5
6.	Due to inspiration of any ideal personality.	12.1	9.8	12.1	16.1	11.6	14	59.8	56.5	4.3	3.6
7	Because of interest.	18.4	19.7	73.4	67.9	4.3	8.3	3.9	4.1		
8	Due to desire	19.3	25.9	73.4	68.9	3.4	1	3.9	4.1		
9	Due to fondness of subject.	18.4	18.7	74.4	75.6	4.8	2.6	1	2.1	1.4	1
10	Due to the enjoyment factor.	1.9	1	11.6	10.9	7.7	8.3	78.7	79.3	0	0.5
11	As per experiment	1.4	1	3.9	3.1	8.2	6.7	69.6	71.5	16.9	17.6
12	To satisfy curiosity.	2.4	1	11.6	10.9	9.7	9.8	72.9	71	3.4	7.3
13	To get inner satisfaction	8.2	10.4	75.8	70.5	8.2	10.9	6.8	7.8	1	0.5
14	As per external reward	11.6	9.8	64.3	55.4	9.7	18.7	10.6	11.4	3.9	4.7
15	To fulfill a dream	23.7	27.5	64.3	59.1	5.8	8.3	3.9	5.2	2.4	0
16	Due to a wish to follow a career that requires these subjects	26.6	30.1	69.6	68.4	2.9	0.5	0.5	1	0.5	0
17	Due to believe of success	14	20.7	48.8	41.5	33.8	35.2	2.4	2.6	1	0
18	Based on free decision making	30	23.8	55.1	62.7	11.6	9.3	3.4	3.1	0	1

Regarding intrinsic motives responses of respondents were analyzed through SPSS, 84 to 86 % of male and female students agreed that they selected the subjects by their choice. 48 to 51% of males and females agreed on subject selection based on learning abilities. 48 to 50 % male and female students agreed that they selected the subject due to attentiveness of the subjects.

83 to 92% male and female students agreed strongly agreed that they selected the subjects because of previous knowledge of concerned subjects. 89 to 90% male and female students agreed that they selected the subjects on the basis of easiness of the subjects. 60 to 64 % students disagreed by selection of subject due to inspiration of any ideal personality. 88 to 92% male and female students agreed that they selected the subjects due to interest. 93 to 95% male and female students agreed that they selected the subjects due to desire. 93 to 94 % male and female students agreed that they selected the subjects due to fondness of the subject. 79 to 80 % male and female students disagreed that they selected the subject due to enjoyment factor.

87 to 89% male and female students disagreed that they selected the subject as per experiment. 76 to 78% male and female students disagreed that they selected the subjects to satisfy curiosity. 81 to 84% male and female students agreed that they selected the subjects to get inner satisfaction. 65 to 76 % male and female students agreed that they selected the subjects as per external reward.

87 to 88% male and female students agreed that they selected the subject to fulfill a dream. 96 to 99% male and female students agreed that they selected the subjects due to a wish to follow a career that requires these subjects. 62% of male and female students agreed that they selected the subject due to belief in success. 85 to 86% of male and female students agreed that they selected the subject on free decision making

**Table 2**

*Showing Perceptions of Science and Arts Respondents Concerning 'Intrinsic Motives'*

S/No	Statement	Responses									
		SA		A		UD		DA		SDA	
		SC	AR	SC	AR	SC	AR	SC	AR	SC	AR
1	by own choice	26.1	19.9	56.8	67.2	3.5	7.5	12.6	3.0	1.0	2.5
2	Based on learning abilities.	18.1	12.9	35.7	32.3	34.2	35.8	11.6	16.4	0.5	2.5
3	Due to the attentiveness of the subjects.	19.6	13.4	36.2	28.9	35.2	50.7	8.5	7.0	0.5	0.0
4	Previous knowledge of concerned subjects.	61.8	68.2	25.1	20.4	6.5	4.5	5.5	5.5	1.0	1.5
5	Because of the easiness of the subjects.	66.3	63.2	23.1	25.9	3.0	6.5	6.0	4.5	1.5	0.0
6	Due to the inspiration of any ideal personality.	8.5	13.4	13.6	14.4	12.6	12.9	60.3	56.2	5.0	3.0
7	Because of the interest.	22.6	15.4	66.3	75.1	7.0	5.5	4.0	4.0		
8	Due to desire	19.1	25.9	74.9	67.7	2.5	2.0	3.5	4.5		
9	Due to fondness of the subject.	21.1	15.9	73.4	76.6	3.0	4.5	1.5	1.5	1.0	1.5
10	Due to the enjoyment factor.	1.5	1.5	7.5	14.9	7.5	8.5	83.4	74.6	0.0	0.5
11	as per experiment	1.5	1.0	3.0	4.0	8.5	6.5	70.9	70.1	16.1	18.4
12	To satisfy curiosity.	1.5	2.0	10.6	11.9	7.0	12.4	75.9	68.2	5.0	5.5
13	to get inner satisfaction	11.1	7.5	70.4	76.1	8.5	10.4	9.0	5.5	1.0	0.5
14	as per external reward	10.1	11.4	60.3	59.7	15.6	12.4	9.5	12.4	4.5	4.0
15	To fulfill a dream	29.1	21.9	58.3	65.2	7.0	7.0	4.5	4.5	1.0	1.5
16	due to a wish to follow a career that requires these subjects	32.7	23.9	65.3	72.6	1.0	2.5	1.0	0.5	0.0	0.5
17	due to belief in success	19.1	15.4	37.7	52.7	40.2	28.9	2.0	3.0	1.0	0.0
18	Based on free decision making	29.6	24.4	59.3	58.2	8.0	12.9	3.0	3.5	0.0	1.0

Concerning intrinsic motives responses of respondents were analyzed through SPSS, 83 to 84 % of science and art students agreed that they selected the subjects by their choice. 45 to 54 % of science and art students agreed on subject selection based on learning abilities. 42 to 56% science and art students agreed that they selected the subject due to attentiveness of the subjects. 87 to 88 % science and art students strongly agreed that they selected the subjects because of previous knowledge of concerned subjects. 89% science and art students agreed that they selected the based on the easiness of the subjects. 59 to 65 % science and art students disagreed by the selection of subject due to inspiration of any ideal personality. 89 to 91% science and art students agreed that they selected the subjects due to interest. 93 to 94 % science art students agree that they selected the subjects due to desire. 94 % of science and art students agreed that they selected the subjects due to fondness of the subject. 79 to 83% of science and art students disagreed that they selected the subject due to enjoyment factor. 87 to 88% of science and art students disagreed that they selected the subject as per experiment. 73 to 81% science and art students disagreed that they selected the subjects to satisfy curiosity. 81 to 84% science and art students agreed that they selected the subjects to get inner satisfaction. 70 to 71 % science and art students agreed that they selected the subjects as per external reward. 87% of male and female students agreed that they selected the subject to fulfill a dream. 96 to 98% of science and art students agreed that they selected the subjects due to a wish to follow a career that requires these subjects. 57 to 67% science and art students agreed that they selected the subject due to believing of success. 83 to 89 % science and art students agreed that they selected the subject on free decision making.

**Hypothesis (Ho):** There is no significant difference in perception among male and female students about the influence of intrinsic motives on the selection of subjects.

**Table 3**

*T-Statistics*

Statistics	Male	Female	Calculated t- value	tabulated t-value	A
<i>n</i>	207	193			
$\bar{x}$	2.37	2.39	-.867	1.960	0.5
<i>S</i>	.246	.252			

T-test was employed to evaluate the difference of perception among male and female students regarding the intrinsic motives that influence the subject selection of students. An ignorable fractional difference among mean scores of male students' i.e. 2.37 and female students i.e. 2.39 along with standard deviations of .246 and .252 respectively for male and female students was observed. Whereas the calculated t value -.867 was found as smaller than the tabulated t value i.e. 1.960; hence despite a very meager difference of mean scores, the statistical analysis revealed that both the male and female students alike perceive that the intrinsic motives have influences on the subject selection of intermediate students. Hence, in view of results of statistical treatment, the hypothesis was accepted, and it was concluded that both male and female students perceive a significant influence of intrinsic motives upon selection of subjects for further studies.

## Discussion

Keeping in view the significance of the motives influencing the subject selection of the students at the intermediate level, it is highly important to have a deep look at the effects of certain motives on subject selection. In this study, the basic focus was to study the influence of certain motives on the subject selection of students of public and private HSSC and Degree colleges of district Mianwali.

Respondents agreed that they selected the subjects due to interest, desire, and fondness of the subject. Mean the respondents were intrinsically motivated to select the subjects. The key factors of intrinsic motivation are the needs, curiosity, and interest that arise within the students. As it drives action by will, no other additional incentives are required. As per intrinsic motives concerned it was observed by the analysis that 96 to 99 % of respondents selected the subjects due to wish to follow a career that requires these subjects but only 62% of respondents selected the subjects due to believing in success. It means the students selected the subjects only for the sake of a specific career without bothering their abilities and interest, that is why they did not have a strong belief in success.

On the other hand, a study was in support of the results "It is maybe therefore not simple to change the usual norms of education whether it is on societal conditions or the perception towards the subject (Martin *et al.*, 2005). The first decision that a student makes in his / her life occurs at the secondary level when a student chooses the future by taking subjects either Science or Arts. Results differ in different discipline; those people who want they secure good marks they can get admission on professional degrees like medical, engineering etc. while the low performers are provided nonprofessional degrees, without considering the aptitude and interest of the learners. Thus, availability of a well-planned career choice procedure is called for to support a relevant, challenging, and sustainable career. It may also afford the best options than an unchartered process (Kisilu *et al.*, 2012). As in any study, the respondents disagreed to the extent that they had chosen the subject with the view of enjoying it. Meaning they did not enjoy the things they were supposed to be learning. To support this the following arguments can be made: The study done by (Barry *et al.*, 2000) states that intrinsic motivation is internal, and a person performs a task for the satisfaction and interest, satisfaction of an innate curiosity, or challenge for the fun of it (Barry *et al.*, 2000). Motivation comes from within and engages a person in an activity for the enjoyment, interest, natural fulfilment of curiosity or challenge for its own sake (Barry *et al.*, 2000). Therefore, it can be said that the enjoyment factor is the key to motivation. It was also observed that respondents disagreed that they selected the subjects to satisfy curiosity. It means that the significance of curiosity was neglected in subject selection though it is an integral part of learning and motivation. Different motives like curiosity, attitude, morals, needs enhance motivation. In this study it was found that

respondents selected the subjects to get inner satisfaction. Inner satisfaction is the base for intrinsic motivation therefore it has the utmost importance. To support this study, intrinsic motives come toward someone's inner life while extrinsic motives affect the individuals' activity by the outside factors. Research underscoring the significance of intrinsic motives described that learning will be enhanced if the learner is ready to learn. In this study, results showed that respondents strongly disagreed that they selected the subjects as school played a vital role. It proved that respondents did not find the positive role of school in subject selection. It is if like this that the school environment for motivating and educating plays a significant role if it can be made safe, optimistically tailored and encouraging (Williams & Williams, 2010). School has triangular stakeholders hence they offer considerably the learners' performance. Here, the respondents reported to have chosen the subjects because of the need in the current society and the numerous available jobs and prospects of further studies and prospects.

## Conclusions

After the data had been collected, analyzed, and interpreted about results which was achieved at the end of the study, it was deduced that intrinsic motive played a big role in determining the subject choices of students at an intermediate level. As intrinsic motives are, concerned respondents selected the subjects based on their own choice and learning capacity. The respondents also bore in mind the self-interest, desire, and affection of the subjects. Participants were chosen because they have maintained a practice that demands such subjects. This is because the subjects were selected to get inner satisfaction. But they denied this claim that the subjects were chosen because of enjoyment aspects and curiosity.

## Limitations and Future Directions

Many motives influence the subject selection of the student, but this study was delimited to the influence of intrinsic motives on the subject selection of the Intermediate students after matriculation in the Mianwali district only. This study was delimited to the first-year students of intermediate only. Likewise, the study is conducted with a small sample size due to several research constraints. In the future, studies could be conducted with larger sample sizes including adding more variables for wide demographic coverage to obtain a verifiable result to be generalized to capture a greater understanding of the issue.

## Acknowledgments

The authors are thankful to their research advisor, teachers, class fellows, and the respondents.

## Declaration of Interest

The authors declare that there is no clash of interest.

## References

- Alkis, N., & Taskaya Temizel, T. (2018). the impact of motivation and personality on academic performance in online and blended learning environments. *Educational Technology & Society*, 21 (3), 35-47.
- Alucdibi, F., & Ekici, G. (2012). Ortaogretim ogrencilerinin biyoloji dersi motivasyon düzeylerinin farklı değişkenlere göre incelenmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 12(1), 197-227.
- Anderman, E. M. (2020). Achievement motivation theory: Balancing precision and utility. *Contemporary Educational Psychology*, 61, 101864.
- Anderman, E. M., & Dawson, H. (2011). *Learning with motivation*. Handbook of Research on Learning and Instruction, 219214.
- Barry, K., King, L., & Burke, M. (2000). *Students talk in a whole class and cooperation learning setting in a philosophy for children program*. Australian Association for Research in Education (AARE) Conference.
- Cook, D. A., & Artino Jr, A. R. (2016). Motivation to learn: an overview of contemporary theories. *Medical Education*, 50(10), 997-1014.

- Deci, E. L., & Ryan, R. M. (2012). *Self-determination theory*. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 416-437, Vol. 1). Thousand Oaks, CA: Sage.
- Froiland, J. M., & Worrell, F. C. (2016). intrinsic motivation, learning goals, engagement, and achievement in a diverse high school. *Psychology in the Schools*, 53(3), 321-336.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (1976). *Educational research: Competencies for analysis and application*. Merrill Columbus, OH.
- Guo, J., Parker, P. D., Marsh, H. W., & Morin, A. J. S. (2015). Achievement, motivation, and educational choices: A longitudinal study of expectancy and value using a multiplicative perspective. *Developmental Psychology*, 51(8), 1163.
- Javed, M. (2018). Investigating factors affecting students' subject selection at secondary school level. *International Journal of Information and Education Technology*, 8(11).
- Kian, T. S., Yusoff, W. F. W., & Rajah, S. (2014). Job satisfaction and motivation: What is the difference among these two? *European Journal of Business and Social Sciences*, 3(2), 94-102.
- Kisilu, J., Kimani, E., & Kombo, D. (2012). Factors influencing occupational aspirations among girls in secondary schools in Nairobi region–Kenya. *Journal of Prime Research on Education*, 2(4), 244-253.
- Lin, T.-J. (2012). *Student engagement and motivation in the foreign language classroom*. Washington State University.
- Martin, T. S., McCrone, S. M. S., Bower, M. L. W., & Dindyal, J. (2005). The interplay of teacher and student actions in the teaching and learning of geometric proof. *Educational Studies in Mathematics*, 60(1), 95-124.
- Ozel, M., Caglak, S., & Erdogan, M. (2013). Are affective factors a good predictor of science achievement? Examining the role of affective factors based on PISA 2006. *Learning and Individual Differences*, 24, 73-82.
- Seiler, M. J., Seiler, V. L., Lane, M. A., & Harrison, D. M. (2012). Fear, shame and guilt: Economic and behavioral motivations for strategic default. *Real Estate Economics*, 40, S199-S233.
- Sen, S., Yilmaz, A., & Yurdagul, H. (2014). An Evaluation of the Pattern between Students' Motivation, Learning Strategies and Their Epistemological Beliefs: The Mediator Role of Motivation. *Science Education International*, 25(3), 312-331.
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: the unique role of intrinsic motivation. *Contemporary Educational Psychology*, 39(4), 342-358.
- Thomson, M. M. (2016). Metaphorical images of schooling: Beliefs about teaching and learning among prospective teachers from the United States displaying different motivational profiles. *Educational Psychology*, 36(3), 502-525.
- Turan, Z., Avinc, Z., Kara, K., & Goktas, Y. (2016). Gamification and education: Achievements, cognitive loads, and views of students. *International Journal of Emerging Technologies in Learning*, 11(7).
- Williams, T., & Williams, K. (2010). Self-efficacy and performance in mathematics: Reciprocal determinism in 33 nations. *Journal of Educational Psychology*, 102(2), 453.

**Submit your manuscript to MDPI Open Access journal and benefit from:**



- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

---

Submit your next manuscript at ➡ [mdpi.com](https://www.mdpi.com)

---

**Note:** **Open Access Education and Leadership Review** is under the process of recognition by the Higher Education Commission Pakistan in the Y category.

**Disclaimer/ Publisher's Note:** The statements, opinions, and data contained in all publications in this journal are solely those of the individual author(s) and not of the MDPI and/ or the editor(s). MDPI and editor(s) disclaim responsibility for any injury to the people or property resulting from any ideas, methods, instructions, or products referred to in the content.