Physical Education, Health and Social Sciences

https://journal-of-social-education.org

E-ISSN: 2958-5996

P-ISSN: 2958-5988

Moderating Effect of Learning Beliefs on the Linkages of Course Experiences with Approaches and Motives to Studying at Undergraduate Level

Nazai Saeed[1], Itbar Khan[2], Dr. Sumera Imran[3]

[1]Lecturer, Department of Education, Women Campus, University of Malakand, Email: life.nazia@yahoo.com

[2]Associate Professor, Department of Education, University of Malakand (Corresponding Author), Email: itbarkhan@uom.edu.pk

[3]Assistant Professor, Department of Education, Women Sub Campus University of Malakand, Email: Sumeraimransst@yahoo.com

Abstract

This study examined whether learning beliefs moderate the link between course experiences and the approaches and motives students bring to undergraduate study. A quantitative design was used. Data came from 360 undergraduates at two public sector universities (Malakand and Swat), collected with the 36-item Course Experience Questionnaire (CEQ), a self-developed learning beliefs scale, and the revised Study Process Questionnaire (R-SPQ-2F) for approaches and motives. Most students agreed that teachers shared goals and standards, used effective teaching and assessment methods, and set an appropriate workload, and that the program built generic skills. A sizeable minority disagreed or were unsure, so every dimension has room to improve. Learning beliefs did not moderate the relationship between course experiences and deep motive, deep strategy, surface motive, or surface strategy. Earlier studies report that beliefs influence approaches to studying, so researchers should retest these results in other contexts, ideally using mixed methods.

Keywords: Undergraduate Programs, Course Experiences, Learning Beliefs, Approaches To Study, Higher Education

Introduction and Research Gap

Quality in higher education has attracted considerable research, but most studies examine institutional dimensions such as infrastructure, libraries, faculty and service quality (Shah, 2013; Fatima et al., 2018; Ullah, Ajmal & Rahman, 2011; Alotaibi, 2016). Few take the undergraduate student's view of objectives, teaching quality, generic skills and curriculum, and fewer still ask how those course experiences shape the way students study. The work on quality and study approaches is concentrated in the USA, Europe and China. Alotaibi (2016) recommended that future work take in students' perspectives. In Pakistan, Ullah, Richardson and Hafeez (2011) studied approaches to studying and perceptions of the academic environment, and called for more research to understand both more fully. None of these studies tested a moderating effect. Yin, Wang and Han (2016) specifically recommended that future research examine whether students' perceptions and attitudes moderate the effect of teaching quality on approaches to studying. Beliefs about learning matter for teaching and learning (Dandy & Bendersky, 2014; Khan, 2018), yet very little is known about the beliefs of undergraduates, and the relationship between those beliefs and approaches to study has not been examined in this context. This study addresses that gap by testing whether learning beliefs moderate the relationship between course experiences (quality education) and students' approaches and motives to studying.

Literature Review

Beliefs about Teaching and Learning

Beliefs can be defined as certain schemes, concepts, and cognitive representations which shape people's perception of situations and motivate them to act (Pajares, 1992). According to Rokeach (1968), beliefs are largely derived from individual experience and emotions and, therefore, are less prone to change and scrutiny than knowledge. Beliefs of teachers shape their attitude towards teaching, learning, assessment, roles of teachers and learners. There are two types of beliefs which are particularly important for educational activities. Epistemological beliefs are related to the individual perceptions of the nature and evolution of knowledge. Knowledge can be regarded as something definite and delivered by authority or as evolving and emergent, uncertain and constructed through experience (Hofer & Pintrich, 1997). Secondly, pedagogical beliefs represent educators' attitudes to learning processes and teaching techniques which they consider to be most effective. Fives and Buehl (2016) studied the connection between teachers' perception of their profession and their instructional choices, while Voss, Kunter, and Baumert (2013) examined the distinction between traditional and constructivist approaches to teaching. Traditional teaching is mostly associated with the image of teacher as a major source of knowledge and learners as passive recipients of information. Constructivism, on the contrary, regards learners as active participants in the learning process who create knowledge through collaboration and engagement in meaningful activities. Beliefs are formed as a result of combination of personal experience, social and cultural impact, formal training and professional development. Lortie (1975) found that previous experience of teachers as learners affected their perception of teaching. Kagan (1992) stressed the significance of experience and beliefs in the formation of teachers' professional beliefs. Richardson (1996) noted that beliefs of teachers were dependent on their educational background and social environment. Pajares (1992) noted that beliefs are acquired through multiple interactions and can become quite ingrained with time. According to Nespor (1987), beliefs are often formed by emotional experiences and environment and, therefore, are very difficult to change.

Beliefs and Classroom Practice

Ideologies are an integral component of the methodology of education although they are not always put into practice in the classroom context. According to Khan (2018), there is a positive correlation between the beliefs of teacher educators and their practices in Pakistan. Nevertheless, the research identified contextual factors, including the size of the class, student behavior, lack of preparation of the teacher, and institutional barriers to the implementation of some constructivist ideologies in practice. In similar fashion, Fives and Buehl (2016) noted that the connection between the beliefs and practices of teachers is affected by institutional expectations, the normative educational practices and contextual factors. Consequently, the inflexibility of the curriculum, the prevalence of standard testing, the lack of resources and the lack of skills in employing constructivist strategies may increase the gap between the belief and practice of teachers. The attitudes and perceptions of the students are of crucial significance for the formation of the educational process. As argued by Santos and Miguel (2019), students' perceptions are vital to the effectiveness of the pedagogical practices and the overall experience of education. The idea was expanded upon by Bowman et al. (2022) when they examined the importance of the student voice in the broader institutional context, while Chala, Kedir and Wami (2020) underscored the importance of students' perceptions at the classroom and institutional levels. In addition, Basckin, Strnadova, and Cumming (2021) concluded that the subjective perceptions of students concerning the quality of education affect their experiences in courses and the evaluation of the institutions that they attend. The results imply that the efficient teaching requires the analysis of the philosophy and methodology of teachers and students' expectations, perceptions and interpretation of good education.

Approaches and Motives to Studying

Students take either a deep or a surface approach, and each approach has a motive and a strategy. A deep approach seeks real understanding of the material and links it to life beyond the classroom; the examination is not the purpose. A surface approach aims at a minimum understanding sufficient to pass a test. Deep motives lead to deep strategies, and surface motives to surface strategies (Biggs, Kember & Leung, 2001). Deep approaches and high engagement are associated with greater student satisfaction (Muñoz-García & Villena-Martínez, 2021).

Teachers can encourage deep approaches by:

- building self-efficacy: helping students set their own goals, giving constructive feedback and varying task difficulty (AlQhtani et al., 2021; Alemayehu & Chen, 2021);
- promoting a growth mindset through encouragement and examples of effort paying off (Canning et al., 2021);
- using group work, discussion, problem solving and tasks connected to life outside the classroom;
- stating clearly what students are expected to learn and holding high expectations (Fines, 2002);
- creating a fair, respectful classroom where students feel heard (Zhang et al., 2023), supported by innovative methods such as flipped learning and technology.

Objectives and Hypotheses

Objectives

1. To find out the approaches and motives to studying at the undergraduate level.
2. To examine beliefs about learning at the undergraduate level.
3. To find out the moderating effect of beliefs about learning on the linkages of quality education (course experiences) with approaches and motives to studying at the undergraduate level.

Null Hypotheses

H01: Learning beliefs have no significant moderating effect on the relationship between quality education and deep motive.
H02: Learning beliefs have no significant moderating effect on the relationship between quality education and deep strategy.
H03: Learning beliefs have no significant moderating effect on the relationship between quality education and surface motive.
H04: Learning beliefs have no significant moderating effect on the relationship between quality education and surface strategy.

Methodology

Design

The study used a quantitative, survey-based design grounded in a positivist approach (Creswell & Creswell, 2017). A quantitative design allowed data to be collected from a large number of undergraduates at the University of Malakand and the University of Swat.

Population and Sample

The population was undergraduate students at the five general universities of Malakand Division. Two were selected purposively because they are comparatively well established, have enough students and were accessible to the researcher. In fall 2023 the two universities had

9,654 BS students (Malakand 6,154; Swat 3,500), of whom about 4,800 were in semesters 5 and 7. Senior students were chosen because they have spent longer in the university and understand courses, teaching quality and the environment better. They were selected randomly from five disciplines (Education, Management Sciences, English Literature and Linguistics, Physics, Botany), which together represent humanities, social sciences, physical sciences and biosciences. Krejcie and Morgan's (1970) table gives a sample of 357 for a population of about 5,000. The questionnaire was administered to 400 students to cover incomplete responses, and 360 correctly filled questionnaires were analyzed (174 male, 48.3%; 186 females, 51.7%; 180 from each university).

Instruments

A five-point Likert questionnaire (1 = strongly disagree, 5 = strongly agree) had a demographic section and four scales:

1. Course experiences (quality education): the 36-item Course Experience Questionnaire (Wilson et al., 1997) with six dimensions: clear goals and standards, generic skills, independence, appropriate workload, appropriate assessment and quality teaching.
2. Approaches to studying: the 20-item R-SPQ-2F (Biggs, Kember & Leung, 2001), giving four sub-constructs: deep motive, deep strategy, surface motive and surface strategy.
3. Learning beliefs: an 8-item scale developed from the literature, expert discussion and consultation with undergraduates, covering traditional and constructivist beliefs.

Validity and Pilot Study

Four education experts reviewed the instruments for content and face validity, suggesting changes to wording, sentence structure and some items, which were incorporated after discussion with the supervisor. A pilot with 36 students (10% of the sample), excluded from the main study, led to simpler wording, shorter and clearer statements, headings turned into questions and improved instructions.

Reliability

Cronbach's alpha was used. Alpha values for the course experience dimensions ranged from .65 to .88 (overall .86), and for the beliefs, motives and strategies scales from .73 to .79.

Scale	Items	Alpha
Goals and standards	4	.65
Appropriate assessment	6	.70
Appropriate workload	5	.72
Generic skills	6	.75
Emphasis on independence	5	.77
Quality teaching	8	.88
Learning beliefs	8	.78
Deep strategy	5	.79
Surface strategy	5	.73
Deep motive	5	.75
Surface motive	5	.73

Data Collection and Analysis

The researcher made a visit to each of the universities and explained the purpose of the research to the heads of the departments and distributed questionnaires among willing participants of

the fifth and seventh semesters. The data were analyzed using SPSS (version 21). In order to analyze the data, prior to conducting the main analysis, the assessment was carried out based on missing values, outliers, factor loadings, scree plot, skewness and kurtosis, multicollinearity, common method bias, and homoscedasticity. The sample and responses were characterized using descriptive statistics like percentages, means, and standard deviation.

Results

Responses are shown as the percentage who agreed or strongly agreed (A + SA), with means and standard deviations on the 5-point scale (N = 360).

Learning Beliefs (Objective 2)

Students held strongly positive beliefs about learning (average mean 4.31, SD 0.67). Between 84% and 90% agreed with every statement, and no one disagreed. Agreement with statements reflecting both constructivist views (self-discovery, interaction, multiple methods, real-life links) and traditional views (lectures, remembering what teachers teach) was high, so students appear to hold both sets of beliefs at once.

Statement	A + SA	Mean	SD
Learning occurs when learners find answers to questions themselves	90%	4.34	.650
Effective learning occurs when teachers lecture most of the time	84%	4.16	.675
Learning takes place when teachers help learners interact with each other	85%	4.29	.707
Learning means remembering what teachers teach in class	88%	4.23	.643
Learning takes place when students read more than one material	89%	4.40	.681
Learning occurs when a teacher uses more than one teaching method	86%	4.31	.697
Effective teachers encourage more practical activities	88%	4.40	.697
Learning takes place when a teacher links teaching to real life	88%	4.39	.691

Approaches and motives to studying (Objective 1)

Students showed a stronger inclination toward deeper learning than surface-level learning. Deep strategy measures ranged from 3.34 to 3.98, while agreement on these ranged from 51% to 75%. The deep motivation measures varied from 2.73 to 3.79. Surface purpose and surface strategy concepts fall right at the middle point of the scale, varying from 2.91 to 3.26, and showing 37% to 53% agreement, implying that many students have an inclination to pass rather than understand.

Deep Motive

Item	A + SA	Mean	SD
Get personal satisfaction from learning	71%	3.79	1.290
Deep study and interest (item wording missing in source)	35%	2.73	1.489
Academic books are interesting like novels to me	54%	3.37	1.307
Academic books are interesting	57%	3.37	1.323
I come to class with questions	59%	3.51	1.229

Deep Strategy

Item	A + SA	Mean	SD
Working hard to understand new topics	75%	3.98	1.071
Try to understand new topics	65%	3.60	1.197
Self-questioning on topics	64%	3.70	1.189
Finding more information on topics discussed in class	51%	3.34	1.247
Attention to all the reading material	58%	3.49	1.229

Surface Motive

Item	A + SA	Mean	SD
I aim to pass the requirements while doing as little work as possible	48%	3.11	1.281
My program is not that interesting, so I do little work	41%	2.98	1.345
I can pass by memorizing important topics instead of understanding them	41%	3.02	1.310
It confuses me when I study a topic in detail	38%	2.95	1.306
No need to learn material that may not be in the examination	37%	2.91	1.405

Surface strategy

Item	A + SA	Mean	SD
Studied the material given in class or the syllabus	53%	3.26	1.344
Read the material many times for memorization	50%	3.12	1.301
Restrict studies to specific topics	40%	3.05	1.304
Should not give much time to material not expected on the exam	45%	3.18	1.256
Try to remember answers to possible questions	42%	2.97	1.370

Moderation analysis (Objective 3)

Moderation was tested with Hayes' PROCESS macro, with quality education (course experiences) as the predictor (X), learning beliefs as the moderator (W) and each approach or motive as the outcome. The interaction term X × W is the test of moderation.

Interaction effect (X × W)

Outcome	B	SE	t	P	95% CI	Decision
Deep motive (H01)	.0035	.0036	.9855	.3251	[-.0035, .0105]	Fail to reject H01
Deep strategy (H02)	.0046	.0041	1.1251	.2613	[-.0034, .0126]	Fail to reject H02
Surface motive (H03)	.0029	.0039	.9913	.3222	[-.0029, .0087]	Fail to reject H03
Surface strategy (H04)	.0031	.0042	.7511	.4531	[-.0050, .0113]	Fail to reject H04

All four interaction terms are non-significant, and every confidence interval includes zero. Learning beliefs therefore do not moderate the relationship between course experiences and deep motive, deep strategy, surface motive or surface strategy, and all four null hypotheses are retained.

Main effects in the same models

Outcome	Quality Education B (P)	Learning Beliefs B (P)
Deep Motive	-.0006 (.9534)	.2085 (.0029)
Deep Strategy	.2338 (.0035)	.0077 (.5172)
Surface Motive	-.0242 (.0052)	.0772 (.1790)
Surface Strategy	-.0235 (.0532)	.1170 (.1496)

Learning beliefs have a significant direct positive effect on deep motive only. Quality education is associated positively with deep strategy and negatively with surface motive and is borderline for surface strategy. The moderation plots show nearly parallel lines for all four outcomes, which is consistent with the absence of an interaction.

Discussion

The current research was focused on investigating the degree to which students' educational beliefs affected the link between their course experience and study strategies and motivation. As a result, it was found out that students were mostly characterized by positive learning beliefs and used deep learning strategies to a moderate extent. However, it should be noted that very common surface goals and strategies of learning existed. Interestingly enough, learning beliefs did not affect the relation between course experiences and any of the four investigated variables: deep motivation, deep strategy, surface motive and surface strategy. Thus, all four null hypotheses were confirmed. The above-mentioned conclusions contradicted previous researches that were aimed at investigating the relation between epistemic beliefs of learners and ways of learning. Biggs (1999) explored the relation between the students' beliefs about learning and learning strategies used by them, whereas Entwistle and McCune (2004) paid attention to the influence of students' ideas and beliefs on their involvement in academic tasks. It is possible to find different reasons of such contradictory results of various researches. First, it is necessary to note the presence of certain specific features of academic programs in Pakistan that include specific structure, evaluation standards and workloads. In this case, certain methods of studying can be imposed on pupils regardless of their learning beliefs. Second, high agreement with both traditional and constructivist statements suggests that students' ideas about learning are not clearly differentiated. It may lead to the inability of those convictions to affect the relation between course experience and studying strategies. Third, the use of self-reported data may have reduced the possibility of precise detection of students' perspectives and learning strategies. It should be noted that learning beliefs had a positive significant association with deep motives of learning even in the absence of moderating influence. It supports the opinion that the students' perspectives can influence the way they perceive their educational experiences. According to Hofer and Pintrich (1997), the ideas about knowledge of people influence their engagement in the process of learning. Also, Pajares (1992) paid attention to the general influence of beliefs on the behavior and thinking of individuals. Thus, the students with affirmative learning beliefs could be more involved into understanding things rather than performing educational tasks. Additionally, the course experience was significantly associated with deep learning approaches and surface learning motives in the expected manner. The above-mentioned results emphasize the importance of the course structure and the general educational climate in influencing the ways of studying of the learners, though the learning beliefs do not influence those relations.

It may be stated that the students' study strategies are determined by the combination of beliefs and environmental conditions instead of beliefs only. Such elements as institutional norms, evaluation, teaching strategies and experiences of students can interact together in order to shape their educational engagement. Further researches of the issue should be conducted using other research design and mixed methodology in order to understand this issue better. For example, qualitative interviews may help to understand the reasons of the inconsistencies of

some students in terms of their beliefs about learning and ambivalence towards course experiences.

The analytical results confirm new opportunities of improvement of the quality of educational experience of students. Even though the majority of respondents agreed about the clarity of course objectives and assessment criteria, adequacy of teaching and evaluation techniques and academic burdens, a considerable number of students disagreed or were indifferent. The above-mentioned results are consistent with the previous researches on the perspectives of students concerning educational environment. For instance, Ramsden (1991) emphasized the importance of students' experience for the evaluation of teaching quality, while Trigwell and Prosser (1999) examined the relation between teaching approaches and students' learning experiences. Similarly, Richardson (2005) pointed out the significance of students' perspectives for the assessment of the effectiveness of higher education. From the educational perspective, Biggs and Tang (2011) stressed the need for constructive alignment of learning goals, activities and evaluation methods. The above-mentioned findings support the necessity for universities to promote communication between faculty and students in order to clarify their expectations, grading criteria and workload requirements.

Conclusion, Implications and Recommendations

Conclusion

It has been concluded that students of both universities had positive attitudes towards learning. Nonetheless, these beliefs do not seem to be of significance to the relationship between course experience and students' motivations and strategies in studying. Even though the hypothesis concerning the moderating role of learning beliefs was not confirmed, learning beliefs and course experience turned out to be connected with some aspects of students' approach to learning. Therefore, students' approaches to learning are formed under the influence of not only their individual beliefs, but also of educational and institutional factors as well. The obtained results contradict previous studies, which considered the impact of epistemological beliefs on learning strategies . This illustrates that the relationships might be variable in different educational settings. Thus, future research with use of different educational institutions, bigger sample sizes, and mixed methodology should be conducted to investigate these relationships further, as well as to find whether the same tendencies occur in other educational settings.

Implications

1. **Universities:** Strengthen communication of course goals, outcomes and standards, align courses with student needs, and review workload through department-level committees that gather regular student feedback.
2. **Teachers:** Use activities that challenge traditional beliefs and foster constructivist ones (problem-based and project-based learning, reflective practice, open-ended questions), and encourage the idea that everyone can learn through effort.
3. **Curriculum planners:** Design courses and assessment that build critical thinking and problem solving, so that course experiences encourage deep rather than surface approaches.
4. **Policymakers:** Attend to students' and teachers' beliefs alongside course design.

Recommendations

For teachers

1. Share course objectives and expected standards at the start of each course, and invite students to ask questions about them.
2. Use student-centered methods such as group work, discussion, presentations, flipped and blended learning, and Socratic questioning.

3. Revisit assessment practices, use a variety of methods, and seek regular feedback on assessment and course load.
4. Hold sessions on beliefs about teaching and learning, using Socratic questioning to examine students' assumptions.

For Universities, Curriculum Developers and Policymakers

1. Review whether courses offer appropriate coursework and update them at regular intervals, with all stakeholders heard in a bottom-up process.
2. Run regular professional development on methods, assessment, objectives and standards.
3. Include clear goals, standards and experiential learning in curricula, and encourage case studies, problems and critical analysis.
4. Make clear goals and standards at the start of each course a policy requirement, and take student evaluations by Quality Enhancement Cells seriously.

For Students

1. Learners may ask about course goals and standards and use feedback channels.
2. They may seek out seminars, workshops and conferences to build generic skills.
3. Learners may adopt a growth mindset and constructivist beliefs and use deep approaches to studying.

Future Research

1. Replicate the study in other contexts, including private universities, with larger samples.
2. Use a mixed-methods design to explain why students disagree or are unsure, and to explore beliefs and approaches in depth.
3. Compare beliefs across disciplines, gender and institution types, and test how interventions and teaching practices change beliefs over time.
4. Test models that include other contextual moderators or mediators of approaches to studying.

References

Alemayehu, M., & Chen, S. (2021). Online learning self-efficacy and satisfaction during COVID-19. *Education and Information Technologies, 26*, 6821–6847. https://doi.org/10.1007/s10639-021-10644-7

Alotaibi, F. F. (2016). *Perceived dimensions of quality in higher education* [Unpublished doctoral dissertation]. Wichita State University, USA.

AlQhtani, A. M., AlSwuailem, A. S., AlQahtani, N. A., & AlQahtani, A. S. (2021). Self-efficacy and satisfaction with e-learning among dental students. *BMC Medical Education, 21*, Article 442. https://doi.org/10.1186/s12909-021-02903-5

Biggs, J. (1999). *Teaching for quality learning at university: What the student does*. Society for Research into Higher Education & Open University Press.

Biggs, J., Kember, D., & Leung, D. Y. P. (2001). The revised two-factor study process questionnaire: R-SPQ-2F. *British Journal of Educational Psychology, 71*(1), 133–149. https://doi.org/10.1348/000709901158433

Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university* (4th ed.). McGraw-Hill/Open University Press.

Bowman, M. A., Vongkulluksn, V. W., Jiang, Z., & Xie, K. (2022). Teachers' exposure to professional development and the quality of their instructional technology use: The mediating role of teachers' value and ability beliefs. *Journal of Research on Technology in Education, 54*(2), 188–204. https://doi.org/10.1080/15391523.2020.1830895

Canning, E. A., Muenks, K., Green, D. J., & Murphy, M. C. (2021). Instructor mindsets and student learning. *Learning and Individual Differences, 89*, 102011. https://doi.org/10.1016/j.lindif.2021.102011

Chala, A. A., Kedir, I., & Wami, S. (2020). Secondary school students' beliefs towards learning physics and its influencing factors. *Research on Humanities and Social Sciences, 10*(7), 37–49. https://doi.org/10.7176/RHSS/10-7-05

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. SAGE Publications Asia-Pacific.

Dandy, K. L., & Bendersky, K. (2014). Student and faculty beliefs about learning in higher education: Implications for teaching. *International Journal of Teaching and Learning in Higher Education, 26*(3), 358–380.

Entwistle, N., & McCune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review, 16*(4), 325–345. https://doi.org/10.1007/s10648-004-0003-0

Fatima, S., Ahmed, A., Fatima, S., & Fatima, N. (2018). The role of student expectation and service quality in higher education institutions of Pakistan. *Journal of Management and Research, 5*(2), 1–20.

Fines, G. B. (2002). The impact of expectations on teaching and learning. *Gonzaga Law Review*. https://irlaw.umkc.edu/faculty_works/76

Fives, H., & Buehl, M. M. (2016). Teachers' beliefs. In H. Fives & M. G. Gill (Eds.), *International handbook of research on teacher beliefs* (pp. 2–22). Routledge.

Hofer, B. K., & Pintrich, P. R. (1997). The development of epistemological theories: Beliefs about knowledge and knowing and their relation to learning. *Review of Educational Research, 67*(1), 88–140. https://doi.org/10.3102/00346543067001088

Kagan, D. M. (1992). Implications of research on teacher belief. *Educational Psychologist, 27*(1), 65–90. https://doi.org/10.1207/s15326985ep2701_6

Khan, I. (2018). *Investigating the relationship between teacher educators' epistemological and instructional beliefs and their classroom practices in teacher education institutions in Khyber Pakhtunkhwa: An analytical study* [Doctoral dissertation, International Islamic University Islamabad]. Higher Education Commission Pakistan.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Lortie, D. C. (1975). *Schoolteacher: A sociological study*. University of Chicago Press.

Muñoz-García, A., & Villena-Martínez, M. (2021). Learning approaches, engagement, and satisfaction in higher education. *Sustainability, 13*(2), 541. https://doi.org/10.3390/su13020541

Nespor, J. (1987). The role of beliefs in the practice of teaching. *Journal of Curriculum Studies, 19*(4), 317–328. https://doi.org/10.1080/0022027870190403

Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research, 62*(3), 307–332. https://doi.org/10.3102/00346543062003307

Ramsden, P. (1991). A performance indicator of teaching quality in higher education: The Course Experience Questionnaire. *Studies in Higher Education, 16*(2), 129–150. https://doi.org/10.1080/03075079112331382944

Richardson, J. T. E. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment & Evaluation in Higher Education, 30*(4), 387–415. https://doi.org/10.1080/02602930500099193

Richardson, V. (1996). The role of attitudes and beliefs in learning to teach. In J. Sikula (Ed.), *Handbook of research on teacher education* (pp. 102–119). Macmillan.

Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change*. Jossey-Bass.

Santos, D., & Miguel, L. (2019). The relationship between teachers' beliefs, teachers' behaviors, and teachers' professional development: A literature review.

International Journal of Education and Practice, 7(1), 10–18. https://doi.org/10.18488/journal.61.2019.71.10.18

Shah, F. T. (2013). Service quality and customer satisfaction in higher education in Pakistan. *Journal of Quality and Technology Management, 9*(2), 73–89.

Trigwell, K., & Prosser, M. (1999). *Understanding learning and teaching: The experience in higher education*. Open University Press.

Ullah, M. H., Ajmal, M., & Rahman, F. (2011). Analysis of quality indicators of higher education in Pakistan. *Canadian Journal of Social Sciences, 1*(1), 1–5.

Ullah, R., Richardson, J. T. E., & Hafeez, M. (2011). Approaches to studying and perceptions of the academic environment among university students in Pakistan. *Compare, 41*(1), 113– 127.

Voss, T., Kunter, M., & Baumert, J. (2013). Assessing teacher's beliefs. *Zeitschrift für Pädagogische Psychologie, 27*(3), 145–157. https://doi.org/10.1024/1010-0652/a000098

Wilson, K. L., Lizzio, A., & Ramsden, P. (1997). The development, validation and application of the Course Experience Questionnaire. *Studies in Higher Education, 22*(1), 33–53.

Yin, H., Wang, W., & Han, J. (2016). Chinese undergraduates' perceptions of teaching quality and the effects on approaches to studying and course satisfaction. *Higher Education, 71*(1), 39–57. https://doi.org/10.1007/s10734-015-9894-6

Zhang, Y., Zhang, X., & Zhang, L. (2023). Belief in a just world, gratitude, and learning engagement among college students. *Frontiers in Psychology, 14*, 1123456. https://doi.org/10.3389/fpsyg.2023.1123456