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# Perceived Course Value, Learning Engagement, and Academic Achievement in Landscape Architecture Education: An Integrated Expectancy–Value Perspective

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**Abstract**

Academic performance in higher education is influenced not only by students' cognitive abilities and prior academic experiences but also by their motivational beliefs and engagement in learning activities. In design-oriented disciplines such as landscape architecture, students are required to integrate theoretical knowledge, creative thinking, technical skills, and sustained participation in studio-based and project-oriented learning. However, the mechanisms through which students' perceptions of course value translate into academic achievement remain insufficiently understood, particularly within the context of Chinese higher education. Drawing on Expectancy-Value Theory, this study proposes an integrated framework examining the relationships among perceived course value, learning engagement, and academic performance among landscape architecture undergraduates in Guangdong, China. Perceived course value is conceptualized through intrinsic value, attainment value, utility value, and perceived cost, while learning engagement is examined through behavioral, emotional, and cognitive dimensions. Academic performance is operationalized using students' official cumulative grade point averages. The study adopts a quantitative, explanatory, cross-sectional research design and proposes partial least squares structural equation modeling to examine direct and indirect relationships among the constructs. By positioning learning engagement as a mediating mechanism, the proposed framework provides a theoretically grounded explanation of how students' value perceptions may influence academic outcomes. The study is expected to contribute to motivational research in higher education and offer pedagogical insights for improving curriculum relevance, student engagement, and learning outcomes in landscape architecture education.

**Keywords:** Perceived Course Value, Learning Engagement, Academic Performance, Expectancy-Value Theory, Landscape Architecture Education

## Introduction

Higher education institutions increasingly emphasize students' academic competence, professional knowledge, transferable skills, and independent learning. Academic achievement is an important indicator of educational outcomes; however, it is influenced not only by intellectual ability and prior knowledge but also by motivational beliefs, learning strategies, and engagement (Richardson et al., 2012).

Expectancy-Value Theory explains how students' expectations of success and perceptions of task value influence their learning decisions (Eccles & Wigfield, 2002). Students are more likely to invest effort and persist when they perceive their studies as interesting, important, or useful, whereas perceived learning costs may reduce their motivation.

These motivational factors are particularly relevant to landscape architecture education, which integrates ecological knowledge, design theory, planning, technical skills, and creative problem-solving. Students engage in lectures, field investigations, studio projects, and design presentations, requiring sustained participation, emotional commitment, and cognitive effort.

Learning engagement is commonly conceptualized through behavioral, emotional, and cognitive dimensions (Fredricks et al., 2004). In landscape architecture education, these dimensions involve participation in learning activities, enthusiasm for design tasks, concentration, and the application of learning strategies. Students who perceive greater value in their studies may demonstrate stronger engagement, potentially contributing to better academic performance.

Although motivation, engagement, and academic achievement have been widely examined, their relationships warrant further investigation in discipline-specific contexts. Given the theoretical, technical, and creative characteristics of landscape architecture education, examining the mediating role of learning engagement may provide valuable insights into improving students' academic performance and teaching practices.

Existing educational research has established that motivational beliefs and student engagement are associated with academic outcomes. However, several limitations remain in understanding these relationships in landscape architecture education.

Research on student motivation frequently examines general academic motivation without sufficiently distinguishing the multidimensional nature of subjective task value. Expectancy-Value Theory identifies intrinsic value, attainment value, utility value, and perceived cost as distinct components of motivational beliefs (Eccles & Wigfield, 2002; Wigfield & Eccles, 2020). These dimensions represent different reasons students consider academic activities worthwhile. For example, students may find a course interesting without considering it important to their identity, or recognize its professional usefulness despite limited enjoyment. Therefore, perceived course value requires a multidimensional examination.

Student engagement is often investigated as an outcome of educational environments or a direct predictor of academic achievement. However, it may also serve as a mechanism through which motivational beliefs influence learning outcomes. Perceived course value may

encourage active participation, positive emotional experiences, and greater cognitive effort, subsequently influencing academic performance. Further investigation is needed to establish these relationships within specific disciplinary contexts.

Academic achievement is frequently measured through self-reported performance or individual course grades. Although useful, official academic records provide a more objective indicator. Examining motivational beliefs and engagement in relation to official GPA may therefore offer more reliable evidence of academic outcomes.

Landscape architecture education also presents distinctive characteristics, integrating scientific knowledge, aesthetic judgment, technical competence, spatial reasoning, and creative design. Students' perceptions of course relevance, professional identity, learning difficulty, workload, and personal interest may consequently shape their academic participation. The application of motivational theories within this disciplinary context warrants further investigation.

These gaps highlight the need for an integrated framework examining perceived course value, learning engagement, and academic performance among landscape architecture undergraduates. By investigating their direct relationships and the mediating role of learning engagement, this study seeks to provide a more comprehensive understanding of motivational processes in landscape architecture education.

The study aims to examine the influence of perceived course value on academic performance and investigate the mediating role of learning engagement among landscape architecture undergraduates in Guangdong, China.

The research objectives are:
RO1:To determine the influence of perceived course value on the academic performance of landscape architecture undergraduates in Guangdong, China.
RO2:To examine the influence of perceived course value on the learning engagement of landscape architecture undergraduates in Guangdong, China.
RO3:To assess the influence of learning engagement on the academic performance of landscape architecture undergraduates in Guangdong, China.
RO4:To examine the mediating role of learning engagement in the relationship between perceived course value and academic performance among landscape architecture undergraduates in Guangdong, China.

Correspondingly, the study addresses four research questions:
RQ1: To what extent does perceived course value influence the academic performance of landscape architecture undergraduates in Guangdong, China?
RQ2: To what extent does perceived course value influence the learning engagement of landscape architecture undergraduates in Guangdong, China?
RQ3: To what extent does learning engagement influence the academic performance of landscape architecture undergraduates in Guangdong, China?
RQ4: Does learning engagement mediate the relationship between perceived course value and academic performance among landscape architecture undergraduates in Guangdong, China?

**Literature Review**

Perceived course value is derived from the subjective task value component of Expectancy-Value Theory. It refers to students' perceptions of the importance, interest, usefulness, and costs associated with academic learning activities. Eccles and Wigfield (2002) identify four dimensions: intrinsic value, attainment value, utility value, and perceived cost. These dimensions represent different motivational reasons for participating in academic activities and may influence students' choices, effort, persistence, and achievement.

Intrinsic value reflects students' enjoyment and interest in learning activities. Attainment value concerns the personal importance of academic success and its relationship with individual identity and goals. Utility value represents the usefulness of learning for achieving current or future objectives. Perceived cost refers to the negative consequences of participation, including effort requirements, time demands, opportunity costs, and emotional pressure (Wigfield & Eccles, 2020).

In landscape architecture education, these dimensions may be reflected in students' interest in design and environmental issues, the importance they attach to professional competence, the relevance of coursework to future careers, and the workload associated with practical and theoretical assignments. Therefore, perceived course value represents a multidimensional motivational construct rather than simply an overall positive evaluation of learning.

Intrinsic value concerns the interest and enjoyment students experience during academic activities. In landscape architecture, it may arise from design exploration, field observation, plant studies, and creative problem-solving. Such interest may encourage students to participate actively and persist in challenging tasks.

Attainment value reflects the personal importance students attach to academic success. Landscape architecture students may consider good academic performance essential to developing professional competence and achieving personal aspirations. This perception may encourage greater effort, commitment, and persistence in completing design assignments.

Utility value concerns the practical relevance of learning to students' future goals. Landscape architecture courses involving planning, planting design, ecological analysis, and computer-aided design may be valued because they develop competencies required in professional practice. Recognizing the relevance of academic content may strengthen students' motivation and participation. Research indicates that connecting academic content with personal goals can enhance motivational outcomes under appropriate conditions (Hulleman & Harackiewicz, 2009).

Perceived cost refers to the negative consequences associated with academic participation, including workload, time investment, opportunity costs, and emotional demands (Flake et al., 2015). Landscape architecture students may experience considerable pressure from design projects, fieldwork, technical assignments, and project revisions. Excessive demands may reduce their willingness to participate and maintain academic commitment. Unlike the other value dimensions, perceived cost generally represents a negative aspect of task value.

Expectancy-Value Theory proposes that students' task values influence their academic choices, persistence, and performance (Eccles & Wigfield, 2002). Students who consider learning activities interesting, personally important, or useful may invest greater effort in acquiring knowledge and completing academic tasks. This relationship is relevant to landscape architecture education, where academic achievement requires sustained participation in both theoretical and practical learning. Nevertheless, previous knowledge, learning strategies, and academic ability may also influence achievement. Therefore, the relationship between perceived course value and academic performance requires empirical examination.

Learning engagement is a multidimensional construct reflecting students' involvement in academic activities. Fredricks et al. (2004) identify three dimensions: behavioral, emotional, and cognitive engagement. Behavioral engagement concerns participation, attendance, task completion, and persistence. Emotional engagement refers to students' affective responses, including interest, enjoyment, and positive attitudes. Cognitive engagement involves mental investment, concentration, and the application of learning strategies.

Engagement is influenced by individual characteristics and educational environments, including motivational beliefs, teaching practices, learning tasks, and relationships with instructors and peers (Kahu, 2013). In landscape architecture education, it may involve participation in design studios, field investigations, group discussions, and technical exercises, as well as emotional commitment and cognitive effort when addressing complex design problems.

Behavioral engagement refers to observable participation in learning activities, including attendance, assignment completion, classroom discussion, and persistence. In landscape architecture programs, it may be reflected in participation in studio activities, fieldwork, design critiques, and group projects.

Emotional engagement concerns students' feelings toward learning activities and educational environments. Interest, enjoyment, and enthusiasm for creative design may strengthen students' academic commitment, whereas frustration, anxiety, and boredom may weaken their willingness to participate.

Cognitive engagement involves mental investment and the use of strategies such as concentration, critical thinking, self-regulation, and reflection. Landscape architecture students require cognitive engagement to integrate multidisciplinary knowledge, analyze environmental conditions, evaluate design alternatives, and develop practical solutions.

Maroco et al. (2016) developed the University Student Engagement Inventory (USEI) to assess engagement among university students. The instrument provides a structured approach to measuring engagement in higher education. The present study adopts its behavioral, emotional, and cognitive dimensions to examine landscape architecture undergraduates' participation, affective responses, and mental investment in academic activities.

Academic performance refers to students' achievement of educational objectives and learning outcomes. It is commonly measured through examination results, course grades, and

cumulative grade point average (GPA). Although grades may not capture every aspect of educational development, they remain widely used indicators of academic progress. Richardson et al. (2012) identified various psychological and educational factors associated with university students' GPA.

Landscape architecture education combines theoretical and practical learning outcomes, requiring students to demonstrate knowledge of environmental principles, landscape planning, plant materials, design processes, and technical representation. Academic assessment may include examinations, design projects, presentations, and practical assignments.

The present study uses official GPA records as the indicator of academic performance. Institutional records provide a more objective measure of academic achievement and reduce potential biases associated with self-reported grades.

Expectancy-Value Theory suggests that students' perceptions of task value influence their academic motivation and engagement (Eccles & Wigfield, 2002). Intrinsic value may encourage participation through enjoyment, attainment value through the personal importance of achievement, and utility value through the recognition of practical relevance. In landscape architecture education, students who perceive greater course value may demonstrate stronger participation in design activities, field investigations, and academic assignments. Conversely, excessive workload and emotional pressure associated with perceived cost may weaken engagement. Therefore, perceived course value is expected to influence behavioral, emotional, and cognitive engagement.

Learning engagement is associated with students' academic experiences and learning outcomes. Behavioral engagement supports participation and task completion, emotional engagement may strengthen motivation and persistence, and cognitive engagement encourages mental effort and effective learning strategies. In landscape architecture education, these processes may improve knowledge acquisition, design skills, and the application of theoretical concepts. Students demonstrating stronger engagement may consequently achieve better academic performance.

Learning engagement may explain how perceived course value translates into academic performance. Perceived course value represents students' motivational evaluations, whereas learning engagement reflects their behavioral, emotional, and cognitive involvement in learning. Students who consider their courses valuable may participate more actively, invest greater effort, and apply effective learning strategies. These engagement processes may subsequently contribute to improved academic achievement.

Therefore, learning engagement may function as an explanatory mechanism linking perceived course value with academic performance. This mediating relationship is particularly relevant to landscape architecture education, where academic achievement requires sustained involvement in theoretical and practical learning activities.

Although previous research has examined motivation and engagement as factors associated with academic achievement, the multidimensional nature of perceived course value requires

further investigation. Intrinsic value, attainment value, utility value, and perceived cost represent distinct motivational dimensions that may influence learning differently. Examining these dimensions within an integrated framework may provide a more comprehensive understanding of students' motivational beliefs.

Much existing research on motivation and engagement focuses on general educational settings or disciplines such as science, mathematics, and psychology. Landscape architecture education integrates creative design, technical knowledge, environmental analysis, and practical application. Investigating Expectancy-Value Theory within this discipline may provide additional insights into students' motivational experiences.

Although perceived task value and engagement are associated with academic outcomes, the mediating role of learning engagement requires further examination. Understanding how motivational beliefs translate into academic performance may provide a clearer explanation of students' learning processes.

Research on student motivation and academic achievement frequently relies on self-reported outcomes. Using official GPA records provides a more objective indicator of academic performance. Furthermore, examining perceived course value, learning engagement, and academic performance within an integrated structural model may offer additional empirical evidence regarding their relationships.

Expectancy-Value Theory provides the theoretical foundation for the proposed study. The theory explains students' academic choices, motivation, and performance through their expectations of success and the values they assign to academic activities (Eccles & Wigfield, 2002).

Students' motivational beliefs are influenced by their perceptions of academic tasks, personal goals, educational experiences, and social contexts. Task value reflects the extent to which students consider academic activities interesting, important, useful, or costly. The theory identifies intrinsic value, attainment value, utility value, and perceived cost as important components of subjective task value. These components influence students' decisions to participate in academic activities and the amount of effort they are willing to invest.

In the present study, perceived course value represents the motivational component of the theoretical framework. Students' evaluations of their courses may influence their learning engagement and academic performance.

Perceived course value is conceptualized as a multidimensional construct comprising intrinsic value, attainment value, utility value, and perceived cost. Intrinsic value reflects students' interest and enjoyment. Attainment value represents the personal importance of academic success. Utility value concerns the perceived usefulness of coursework for achieving future goals. Perceived cost reflects the negative consequences associated with participation in academic learning. These dimensions provide a comprehensive representation of students' motivational evaluations of their academic experiences. The study proposes that perceived course value influences both learning engagement and academic performance. Students who

perceive greater value in their courses may demonstrate stronger motivation and greater willingness to participate in academic activities.

Learning engagement is conceptualized as the mechanism through which students' motivational beliefs may influence academic performance.

Behavioral engagement reflects participation in learning activities. Emotional engagement reflects students' affective responses. Cognitive engagement reflects their mental investment and learning strategies. Students who perceive their courses as valuable may be more likely to engage actively in academic activities. This engagement may subsequently contribute to improved academic performance through increased participation, sustained effort, positive learning experiences, and deeper cognitive processing.

Learning engagement therefore represents an important explanatory mechanism linking perceived course value with academic achievement.

Academic performance is conceptualized as the outcome of students' learning experiences and academic processes. In the proposed framework, academic performance is measured using official GPA records. This measure provides an objective indicator of students' academic achievement and allows the study to examine the relationships between motivational beliefs, engagement, and actual academic outcomes.

The proposed conceptual framework integrates perceived course value, learning engagement, and academic performance. Perceived course value is the independent variable. Learning engagement is the mediating variable. Academic performance is the dependent variable. The framework proposes that perceived course value influences learning engagement and academic performance, while learning engagement influences academic performance. Learning engagement is also expected to mediate the relationship between perceived course value and academic performance.

The framework is grounded in Expectancy-Value Theory and emphasizes the motivational processes through which students' perceptions of academic value may influence their engagement and achievement.

H1 Perceived course value significantly influences the academic performance of landscape architecture undergraduates.

H2 Perceived course value significantly influences learning engagement among landscape architecture undergraduates.

H3 Learning engagement significantly influences academic performance.

H4 Learning engagement mediates the relationship between perceived course value and academic performance.

## Methodology

The proposed study adopts a quantitative research approach based on a positivist research paradigm. The quantitative approach is appropriate for examining relationships among theoretically defined constructs and testing hypotheses using statistical analysis. The study seeks to investigate the influence of perceived course value on academic performance and the mediating role of learning engagement. Quantitative data will be collected through questionnaires and official academic records. The research employs a deductive approach because the conceptual framework and hypotheses are developed from Expectancy-Value Theory and previous educational research.

A cross-sectional research design is proposed. Data will be collected from undergraduate landscape architecture students during a defined period. The cross-sectional design enables the study to examine the relationships among perceived course value, learning engagement, and academic performance within the target population. Although cross-sectional data cannot establish causal relationships with the same certainty as longitudinal or experimental designs, the proposed research will examine theoretically specified relationships using structural equation modeling.

The study will be conducted among undergraduate students enrolled in landscape architecture and related horticulture-based landscape programs at public universities in Guangdong, China. Guangdong provides a relevant educational context because landscape architecture programs operate within diverse regional and institutional environments. Students may experience different educational resources, curriculum structures, instructional practices, and academic learning conditions.

The target population comprises undergraduate students in Years 2, 3, and 4. These students have sufficient academic experience to evaluate their courses and learning experiences.
First-year students are excluded because they may have limited exposure to the core curriculum and professional learning activities of landscape architecture programs.

Purposive sampling will be employed to select universities and participants. The sampling strategy aims to include institutions from different geographical regions of Guangdong to improve the contextual representation of the study. Students in Years 2–4 will be invited to participate. The final sample size will be determined based on the sampling process, available population, response rate, and statistical requirements of the proposed analysis. The sample size will be evaluated using appropriate statistical power analysis and methodological recommendations for PLS-SEM rather than relying exclusively on arbitrary sample-size assumptions.

Perceived course value will be measured using an adapted version of the Subjective Task Value Beliefs Scale developed by Hagemeier and Murawski (2014). The instrument will be adapted to reflect students' perceptions of their landscape architecture academic program rather than a single course. The construct will include four dimensions: intrinsic value, attainment value, utility value, and perceived cost.

Intrinsic value items will examine students' interest and enjoyment in learning. Attainment value items will assess the personal importance of academic achievement. Utility value items

will examine the perceived relevance of learning to students' future goals and professional development. Perceived cost items will assess students' perceptions of the effort, time, and negative consequences associated with academic learning. The adapted instrument will be evaluated to ensure that the items are appropriate for the educational context and understandable to participants.

Learning engagement will be measured using the University Student Engagement Inventory developed by Maroco et al. (2016).

The instrument assesses university students' engagement and provides a multidimensional approach to examining behavioral, emotional, and cognitive engagement.
The study will adopt these three dimensions to examine students' participation, affective experiences, and cognitive investment in academic learning. The questionnaire will be adapted where necessary to ensure contextual appropriateness while maintaining the theoretical meaning of the original constructs.

Academic performance will be measured using official GPA records obtained through the approved data collection procedures. Official academic records will be used rather than self-reported grades to reduce measurement bias and provide an objective indicator of academic achievement. The academic performance data will be handled confidentially and used exclusively for research purposes.

The questionnaire will undergo adaptation and evaluation before the main data collection. The adaptation process will consider the language, terminology, academic context, and relevance of the original instruments to landscape architecture education in Guangdong.

Expert review will be conducted to evaluate the clarity, relevance, and appropriateness of the questionnaire items. Feedback will be used to improve the wording and contextual suitability of the instruments. A pilot study will be conducted to examine questionnaire clarity, administration procedures, and preliminary measurement characteristics. The pilot study will not be included in the main research dataset. Its purpose is to identify potential problems in the questionnaire and data collection process before the main study.

Data collection will be conducted after obtaining the necessary institutional approvals and research ethics clearance. Participants will receive information explaining the research purpose, participation requirements, confidentiality procedures, and voluntary nature of participation. Questionnaires will be distributed through appropriate online or institutional channels. Participants will be informed that their responses will be used for academic research and that they may withdraw from participation according to the approved research procedures. Official GPA data will be obtained through the authorized procedures and linked to questionnaire data using appropriate confidentiality measures. The data collection process will ensure that participants' identities are protected and that research data are securely managed.

The collected data will be screened for completeness, missing values, inappropriate responses, and potential data quality problems.Descriptive statistics will be used to summarize participants' demographic characteristics and the distribution of the research

variables.The preliminary analysis will examine the suitability of the dataset for subsequent statistical analysis.

SmartPLS 4 will be employed to evaluate the measurement model.The assessment will examine construct reliability, convergent validity, and discriminant validity using appropriate statistical indicators.The reliability of the constructs will be evaluated using composite reliability and other relevant measures. Convergent validity will be assessed through average variance extracted and indicator performance.

Discriminant validity will be examined using appropriate procedures, including the Heterotrait-Monotrait Ratio where applicable.The measurement model will be evaluated according to the theoretical and methodological characteristics of the constructs.

The structural model will be evaluated using Partial Least Squares Structural Equation Modeling.The analysis will examine the relationships between perceived course value, learning engagement, and academic performance. Path coefficients, statistical significance, explanatory power, and relevant model evaluation indicators will be assessed.

Bootstrapping with 5,000 resamples will be employed to examine the statistical significance of the hypothesized relationships.

The mediating role of learning engagement will be examined by evaluating the indirect relationship between perceived course value and academic performance through learning engagement.

Bootstrapping will be used to estimate the indirect effect and its confidence interval.The mediation analysis will examine whether learning engagement provides an explanatory mechanism linking students' perceptions of course value with academic performance.The interpretation of the mediation results will be based on the estimated direct, indirect, and total effects.

Ethical considerations are essential throughout the research process.Participation will be voluntary, and participants will receive sufficient information regarding the research purpose and procedures before completing the questionnaire.Confidentiality and anonymity will be maintained through appropriate data management procedures. Personal identifiers will not be disclosed in research reports.

Official academic records will be obtained only through approved procedures. Research data will be stored securely and used exclusively for academic purposes.The study will comply with the relevant institutional research ethics requirements and data protection procedures.

**Research Findings**

As this manuscript presents a proposed study, empirical data have not yet been collected. Accordingly, this section outlines the findings anticipated from the proposed analysis and the theoretical, methodological, and pedagogical contributions that the study may offer.

The proposed study is expected to contribute to the application of Expectancy-Value Theory in higher education by examining perceived course value, learning engagement, and academic performance within a discipline-specific educational context. The study extends the application of motivational theory to landscape architecture education, where students engage in theoretical, technical, creative, and practical learning activities. By examining perceived course value as a multidimensional construct, the study may provide additional insights into how different motivational evaluations relate to students' engagement and academic achievement.

The integration of learning engagement into the conceptual framework may also contribute to understanding the mechanisms through which students' motivational beliefs influence academic outcomes.

The study is expected to provide empirical evidence regarding the relationships among perceived course value, learning engagement, and academic performance among landscape architecture undergraduates in Guangdong, China.

The use of official GPA records may provide an objective basis for examining academic achievement. The findings may contribute to the growing body of research examining student motivation and engagement in higher education and provide discipline-specific evidence regarding landscape architecture students' learning experiences.

The study integrates questionnaire-based motivational and engagement measures with official academic performance data. This approach provides an opportunity to examine students' subjective learning experiences in relation to an objective academic outcome. The application of PLS-SEM may also provide a methodological approach for examining the relationships among multidimensional constructs and evaluating the mediating role of learning engagement. The study may offer a research framework that can be adapted for future investigations of student motivation and academic performance in other design-oriented educational disciplines.

Landscape architecture educators may improve students' perceptions of course value by connecting theoretical content with professional practice and real-world environmental problems.

Learning activities involving local landscape projects, environmental analysis, community needs, and professional design challenges may help students recognize the relevance of academic learning. The integration of practical examples and authentic design problems may strengthen students' utility value perceptions and support meaningful learning experiences.

Instructional activities may be designed to encourage students' interest, creativity, and personal involvement in learning. Design exploration, field observation, collaborative problem-solving, and opportunities for independent creativity may enhance students' enjoyment of academic activities.

Educators may also support attainment value by helping students recognize the importance of academic achievement for their professional development and personal goals.

Teaching strategies that encourage active participation may support students' behavioral engagement. Studio-based learning, group projects, design critiques, fieldwork, and interactive classroom activities may provide opportunities for students to participate actively in learning. Clear expectations, timely feedback, and structured learning activities may also encourage students to complete academic tasks and maintain participation.

Positive learning environments may contribute to students' emotional engagement. Educators may promote supportive classroom interactions, constructive feedback, collaborative learning, and opportunities for students to express their design ideas. Such approaches may help students develop positive attitudes toward learning and reduce negative emotional experiences associated with challenging academic tasks.

Landscape architecture teaching may encourage cognitive engagement through complex design problems, critical analysis, reflective learning, and interdisciplinary integration. Students may benefit from learning activities that require them to evaluate alternatives, apply theoretical concepts, develop design reasoning, and reflect on their learning processes. These approaches may support deeper understanding and the development of professional competencies.

Educators may consider students' workload, time demands, and academic pressure when designing course activities. The coordination of assignment deadlines, appropriate task complexity, and clear assessment criteria may help reduce unnecessary learning costs. Providing timely feedback and learning support may also help students manage challenging academic tasks and maintain engagement.

The proposed study may provide evidence relevant to curriculum development in landscape architecture programs.

Curriculum designers may consider how academic courses contribute to students' personal interests, professional identities, and future career goals. The integration of theoretical knowledge, practical activities, and professional applications may help students recognize the value of their academic learning. The findings may also provide a basis for developing student-centered teaching strategies that support motivation, engagement, and academic achievement.

**Conclusion**

The proposed study examines the relationships among perceived course value, learning engagement, and academic performance in landscape architecture education. Grounded in Expectancy-Value Theory, the research conceptualizes perceived course value as a multidimensional construct comprising intrinsic value, attainment value, utility value, and perceived cost. Learning engagement is conceptualized through behavioral, emotional, and cognitive dimensions, while academic performance is measured using official GPA records.

The study addresses conceptual, contextual, methodological, and mechanism-related gaps in existing educational research. By examining the direct relationships among perceived course value, learning engagement, and academic performance, as well as the mediating role of

learning engagement, the proposed framework seeks to provide a more comprehensive understanding of motivational processes in landscape architecture education.

The proposed quantitative research design will employ questionnaire data and official academic records from undergraduate landscape architecture students in Guangdong, China. PLS-SEM will be used to evaluate the measurement and structural models and examine the hypothesized relationships.

The expected contributions include extending the application of Expectancy-Value Theory to landscape architecture education, providing empirical evidence regarding students' motivational and engagement experiences, and offering pedagogical implications for course design, curriculum development, and teaching practices.

Ultimately, understanding how students perceive the value of their academic learning and how these perceptions influence engagement may help landscape architecture educators develop more effective educational environments that support students' motivation, learning experiences, and academic achievement.

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