

Digital Pedagogical Transparency and Institutional Attractiveness: The Moderating Role of Governance Structure in Jordanian Higher Education

Vijay Parmar*

Department of Education, Lloyd Institute of Management and Technology, Greater Noida, Uttar Pradesh, India.

*Email: vijayparmar@lloydcollege.in

Received: 28 December 2025

Accepted: 18 March 2026

DOI: <https://doi.org/10.32479/jalef.23869>

ABSTRACT

In the digital world of a fast-changing environment with emerging expectations of learners, colleges need to think of creative ways of signaling to potential students to enroll in their programs. This paper presents the concept of Digital Pedagogical Transparency (DPT) as a new institutional indicator and explores its role in the institutional attractiveness (IA) at Jordanian schools. The research is based on Signaling Theory and the Institutional Trust Theory, and the authors examine the idea of the connection between DPT, in the context of university communication platforms, and IA mediated by perceived epistemic credibility (PEC) and learner-institution resonance (LIR). Applying an experimental design with a scenario, the results indicate that DPT has a strong indirect positive impact on IA via the mediating effect of PEC and LIR in their sequence. Moreover, the relationship will depend on the governance structure (GS) (public vs. private institutions). In particular, DPT has large and positive impact on credibility perceptions and resonance in public universities, but its impact is relatively more attenuated in private institutions, where students are more skeptical of institutional assertions. The results can be added to the new trends in adaptive learning ecosystems because they reveal the influence of transparency-related signals on the decision-making process of students. Practically, the research indicates that DPT practices should be strategically integrated in the communication strategies of higher education institutions in Jordan and aligned with GS to enhance the appeal of institutions.

Keywords: Digital Pedagogical Transparency, Institutional Attractiveness, Perceived Epistemic Credibility, Learner–Institution Resonance, Governance Structure

JEL Classifications: I21, I23

1. INTRODUCTION

The world of higher learning is experiencing a radical change that has been brought about by digitalization, changing expectations of learners, and an increasing competition to enroll their students. Academic reputation is being less and less used as the criteria by which universities are judged; rather, future students are becoming more aware of the institutions in terms of transparency, credibility, and correspondence to their own values of learning (Al-Dmour et al., 2025; Koeswayo et al., 2024). In new education markets like Jordan, where the population of young individuals is rising

and cross-border education opportunities are increasing, education institutions are under increased pressure to distinguish themselves in a highly saturated and digitized context (Malik and Akbar, 2025; Taamneh et al., 2022). Such a changing environment has resulted in new institutional signaling practices, especially those embedded in digital platforms, where universities share pedagogical practices, learning environments, and student-centric innovations. DPT has become a key construct that is not well explored in this transformation. DPT is defined as the degree to which schools are transparent in their approach to teaching, evaluation policies and adaptive learning platforms using online platforms. Compared to

the traditional promotional cues like rankings or accreditation, DPT indicates openness to processes, where potential students can assess not only what institutions can provide them but also how they can learn (Jaboob et al., 2025; Herzallah and Ayyash, 2024). The increased significance of such transparency is reflected in recent statistics showing that more than 68% of potential students worldwide use digital institutional information to shape their choices, and almost half of them consider clarity in instruction methods and educational outcomes to be important (Ta'Amnha et al., 2025).

In Jordan, where the internet penetration is more than 88% and the impact of digital learning was expedited during the COVID-19 pandemic, the transparency in pedagogical communication has become the determinant that affects the perceptions of students (Wagdi et al., 2021; Zhang and Wang, 2025). The success of DPT as a signal, however, dependent on how it influences deeper psychological and cognitive judgments of potential students. PEC, in this case, which is the degree to which learners regard institutional knowledge claims as reliable, valid and trustworthy, is central in this case (Nematollahi et al., 2025). According to previous studies, the credibility perception is a contributing factor to educational choice behavior, especially when there is a high level of information asymmetry in digitally medium environments (Peña-Lang and Villa, 2026; Hardan et al., 2026). Concurrently, LIR notion has become popular as a new explanatory model that explains the correspondence of the personal values of students with their learning preferences and the institutional identity. LIR is based on self-determination and person-environment fit lenses, which reflect a more profound psychological relationship beyond superficial attractiveness to impact long-term investment and enrollment intentions (Ravichandran and Shanmugam, 2024; Sadeh, 2026). Although these developments have taken place, the current literature has mostly studied IA in traditional terms of its brand reputation, employability outcomes, and service quality (Karajeh, 2023; Bobek et al., 2024).

The research on signaling in education has mainly centered around the use of fixed indicators such as rankings or accreditation, ignoring the use of dynamic and process-driven indicators such as transparency (Zhang and Wang, 2025; Malik and Akbar, 2025). In addition, although studies have recognized the influence of trust and fit in student decisions, the two constructs have seldom been incorporated into a single framework of explaining the interpretation of digital signals into IA. More to the point, there is little empirical research on the emerging education ecosystems, especially in the Middle East, which restricts the extrapolability of current results (Dalain and Mansour, 2025; Omoush, 2026). Another important but neglected aspect of this discussion is the moderating aspect of GS, especially the aspect of public and private universities. The structure of governance determines the institutional legitimacy, perceived motives and the stakeholder trust and, as a result, the interpretation of the signals (Nematollahi et al., 2025; Karajeh, 2023). Public universities are considered more reputable than their counterparts in Jordan because of state support, and those of the private sector are sometimes interpreted through the prism of the market-based approach, which results in different degrees of distrust among potential students

(Koeswayo et al., 2024). According to recent reports, about 65% of all student enrolments are recorded in the public universities but the number of the private institutions is increasing at a high rate, which is enhancing competition and forcing universities to use more efficient communication strategies (Malik and Akbar, 2025; Jaboob et al., 2025). This disjuncture implies that the same signals, e.g., transparency in teaching practices, can have varied effects in various governance settings, which has not been well researched in the previous literature. It fills a number of research gaps, particularly in the field of adaptive learning ecosystems, and extends the signaling theory to the digital pedagogical communication domain. It applies PEC and LIR as sequential mediators, addressing the need to develop more context-sensitive models in the research of higher education.

Together, these contributions address limitations that have been found over 10 years of research that have necessitated multi-level and contextually-driven and dynamic frameworks (Bobek et al., 2024; Hart and Rodgers, 2024). The rationale behind the study is further strengthened by the fact that the issue of student decision-making in digitally mediated and uncertain conditions is in dire need of comprehension. With the shift in the higher education system to adaptive and personalized learning ecosystems, institutions cannot afford to stick with the old way of marketing and use transparency-related strategies to promote trust and alignment. This especially applies to Jordan, where demographic and population pressures, a growing rate of unemployment among graduates and growing mobility among students are requiring greater institutional differentiation (Alsharairi et al., 2026; Nematollahi et al., 2025). By targeting this context, the study is not only able to fill a huge empirical gap but also offers a perspective with an extreme practical level to the policymakers and leaders of the institutions. Based on this, the main aim of this paper is to analyze the effect of DPT on IA mediated by PEC and LIR, and the variability of this relationship in GS in Jordanian higher education.

To be more exact, the study aims to answer: (1) how DPT is used as a strategic indicator in the process of forming the perception of students, (2) in what ways this effect is carried out with the help of cognitive and psychological processes, and (3) in which conditions this effect is reinforced or undermined. This research has a distinct interdisciplinary contribution since it fills the gap between adaptive learning, institutional signaling, and educational psychology in terms of importance. It builds on theoretical knowledge by incorporating ST and ITT and SDT viewpoints, and empirically enriches an underreported regional setting. In practice, it offers practical points that universities should consider in order to become more appealing by means of transparency and alignment strategies. Finally, the paper leads to the ongoing discussion of educational futures by showing how openness-based ecosystems have the power to transform institutional competitiveness in the digital world.

2. THEORETICAL BACKGROUND

To determine how potential students can examine higher education institutions in digitally mediated setting, it is essential to have a strong theoretical base that models signaling mechanisms,

trust-building, and motivational congruence. In this paper, Signaling Theory (ST), Institutional Trust Theory (ITT), and Self-Determination Theory (SDT) are used as complementary lenses to understand how DPT affects IA using cognitive and psychological processes. Originally suggested by Spence (1973), ST offers the initial framework of the way institutions can convey unobservable attributes in order to minimize information asymmetry. In institutions of higher learning, potential students do not necessarily have full access to the quality of teaching, the learning conditions, and the effectiveness of the institutions before enrolling (Ta'Amnha et al., 2025; Herzallah and Ayyash, 2024). Consequently, they use observable signals to deduce the institutional attributes. Classical indicators such as rankings and accreditation have received extensive research (Peña-Lang and Villa, 2026; Al-Dmour et al., 2025), but these indicators are more static and result-oriented. Conversely, DPT is a process-based signal, denoting transparency in instructional design, evaluation approaches, and responsive learning systems. According to recent research, dynamic and transparent signals have proven more useful in digital environments, where the users are actively interested in detailed and real information (Malik and Akbar, 2025; Balaskas et al., 2024).

The main hypothesis of ST, that credible and expensive signals minimize uncertainty and affect decision-making, lends the argument that DPT can make IA more accurate and giving more valuable information (Dalain and Mansour, 2025; Karajeh, 2023). Nevertheless, signals do not directly translate into the behavioral outcomes, they have to be interpreted and validated by the individuals. This process of interpretation is described by ITT that focuses on the way that individuals gain trust in organizations according to the perceived credibility, legitimacy, and reliability (Mayer et al., 1995; Rousseau et al., 1998). In this context, PEC stands out as a significant construct, which helps to understand how acceptable, accurate and reliable claims of institutional knowledge are perceived. Credibility is a determining factor of user judgment in digital contexts where information overload and mistrust are the norm (Alshammari et al., 2025; Hardan et al., 2026). Empirical research on education and online communication proves that transparency and clarity play a crucial role in boosting credibility perceptions, which consequently leads to increased trust and positive judgments (Jaboob et al., 2025; Yadav et al., 2026). ITT presupposes that the participants base their judgment about the organization as trustworthy on the cognitive heuristics when there is no direct experience. This is in line with the hypotheses of this study, which proposed that DPT improves PEC, which subsequently affects IA. Credibility explicates cognitive validation, but does not comprehensively reflect the motivational congruence between institutions and students. This gap is filled in by SDT, created by Ryan and Deci (2024) that is oriented on intrinsic motivation and satisfaction of psychological needs: autonomy, competence, and relatedness. SDT has been extensively used to elucidate student engagement, satisfaction, and decision-making in educational settings (Omoush, 2026; Yadav et al., 2026). Developing this point of view, the paper presents a new construct, LIR, in which the personal value and learning preferences of students are adjusted to the organizational identity. The previous studies on the topic of person-organization fit demonstrate the

significance of value congruence in determining attraction and commitment, Wagdi et al. (2021); Bobek et al. (2024), but tend to ignore the motivational and experiential aspects of SDT. The postulation of SDT that environments that fulfill the psychological needs of individuals are more prone to be involved in supports the argument that higher resonance yields higher IA (Shehadeh et al., 2024; Malik and Akbar, 2025). The combination of these theories is an all-encompassing explanatory model. ST describes the way in which DPT acts as an external stimulus, ITT explains the way in which this signal can be cognitively processed in credibility tests, and SDT describes how motivational alignment (LIR) can turn these perceptions into attractiveness results.

This chronological reasoning is informed by earlier research which highlights how signals, trust, and fit interact to influence organizational assessments (Jaboob et al., 2025; Bobek et al., 2024). Additionally, the framework uses GS as a contextual boundary condition as it acknowledges that institutional traits affect the interpretation of the signals and the formation of trust (Koeswayo et al., 2024). Although these theories are relevant, there is a larger application of the theories in isolation as seen in the existing literature. There is a paucity of studies that have incorporated signaling, trust, and motivational alignment into a single model, especially in the digital and non-Western education settings (Sadeh, 2026; Nematollahi et al., 2025). In addition, the conventional uses of ST in the education field have been based on the unchanging indicators, whereas SDT has seldom been associated with the institutional communication practices. These theoretical gaps restrict the capacity of explaining the impact of modern, transparency-oriented signals on student decision-making in a complete manner. The combination of these points of view into the current work stretches the limits of theory and provides a more comprehensive view of IA in adaptive learning ecosystems. It links macro-level signaling processes to micro level cognitive and motivational processes, which explain student choice behavior in the digital age more powerfully and contextually relevant.

2.1. Mediation of Perceived Epistemic Credibility

Applying to ST, DPT is a plausible and information-based indicator that decreases ambiguity in the mind of potential students in the consideration of higher education institutions (Malik and Akbar, 2025). Online mediated spaces, where students are not able to experience the teaching practices in the institution directly, students must use observable features to deduce unobservable attributes like teaching effectiveness and rigor (Al-Dmour et al., 2025). Sharing pedagogical practices, assessment, and adaptive learning procedures contribute to the increased credibility and authenticity of institutional information, which fortifies PEC the degree to which institutional knowledge claims are perceived as credible and trustworthy (Dalain and Mansour, 2025). In terms of ITT, credibility is a perceptual tool that helps people develop positive judgments of organizations, especially in the case of information asymmetry (Wagdi et al., 2021). Having institutional communications perceived as epistemically credible by prospective students increases the likelihood of them cultivating confidence in the academic quality and integrity of the institution, which leads to an improved overall appeal of the institution. This mechanism is backed by empirical data, with previous

research showing that open and authoritative communication plays a significant role in enhancing organizational appraisals and appeal in the educational and online setting (Zhang and Wang, 2025; Ravichandran and Shanmugam, 2024). Furthermore, it has been demonstrated that credibility perceptions mediate the connection between institutional signaling and stakeholder reactions, strengthening their key role in decision-making practices (Ta'Amnha et al., 2025). Therefore, DPT does not have a direct effect on IA, but it works via the cognitive route of credibility development, in which, the signaling of transparency in pedagogy generates trustworthiness, resulting in more positive institutional evaluations. This mediating process represents a cascade event whereby signals are initially determined, confirmed and subsequently converted into appraisal results.

H₁: The effect of DPT on IA is positively mediated by PEC.

2.2. Mediation of Learner–Institution Resonance

The SDT can be expanded upon, whereby people are naturally driven to pursue the environments, which suit their own values, learning styles, and psychological needs to achieve autonomy, competence, and relatedness (Herzallah and Ayyash, 2024). This means that in the higher education scenario, potential students will be more inclined to institutions that are representative of and conducive to their preferred learning experiences. DPT is especially instrumental in that process, as it offers a detailed information about the organization of teaching and learning, thus helping the students to determine whether the pedagogical approach of an institution is aligned with their expectations and goals (Alsharairi et al., 2026; Omoush, 2026). This fit is a conceptualized LIR, intensive, experience based construct which goes beyond traditional perspectives of fit, by focusing on emotional and motivational fit. In contrast to the general views on compatibility, LIR is a measure of the intensity with which students believe that the learning environment of an institution fits their own learning identity. Previous studies of person and environment and person and organization fit show that person fit contributes hugely to attraction, preference and decision making (Sadeh, 2026; Yadav et al., 2026). Research in education also demonstrates that perceived consistency with the values and instructional methods of the institution also has a positive impact on student selection and interaction (Bobek et al., 2024; Jaboob et al., 2025). Mechanistically, DPT helps this resonance by creating less ambiguity around pedagogical practices and enabling students to project themselves in the learning environment. In the case that students feel that their expectations and offerings have a high similarity with institutional offerings they feel more psychologically comfortable and intrinsically motivated and this results in increased IA. Therefore, the impact of DPT is mediated by a motivational mechanism, in which transparency increases the perceived compatibility, which eventually influences evaluative results.

H₂: The effect of DPT on IA is positively mediated by LIR.

2.3. Moderating Role of Governance Structure

Although DPT is an informative tool to potential students, not all institutional settings have equal success with it as a signal. Based on ST, the interpretation of any signal is based on the perceived credibility of the source of the signal (Peña-Lang and Villa, 2026).

GS, in particular, the difference between a public and a private university, is a significant contextual signal in the context of higher education, which influences the way institutional communications are perceived and assessed. The more regulated and socially legitimate and publicly accountable institutions are, the higher is the perceived reliability of public university signals (Koeswayo et al., 2024; Wagdi et al., 2021). Conversely, the latter can be considered more market-oriented, which is why the actuality of the promoted practices of the former can be regarded with a degree of distrust (Hardan et al., 2026; Yadav et al., 2026). In the perspective of ITT, people base their judgment regarding trustworthiness on institutional characteristics in those cases when they cannot directly verify something (Ravichandran and Shanmugam, 2024). GS therefore serves as a heuristic which determines whether DPT is perceived as a true indication of pedagogical quality or a strategic promotional campaign. This difference is supported by empirical research, which indicates that the public institutions are more likely to enjoy a high level of baseline trust and legitimacy, which enhances the effectiveness of their messages on the stakeholder perceptions (Alshammari et al., 2025; Dalain and Mansour, 2025). On the other hand, the messages of the private institutions can be stronger validated to have an impact on the evaluative results. Consequently, the beneficial impact of DPT on IA depends on the governance context. Communicating DPT by the public universities is more likely to be viewed as credible and meaningful, thus having a higher impact on attractiveness. In universities which are privately owned, however, the same transparency might fail to produce the same strong reaction as a result of relatively lower initial trust levels.

H₃: GS (public vs. private universities) moderates the effect of DPT on IA, such that the relationship is stronger for public universities than for private universities.

2.4. Moderated Mediation via Perceived Epistemic Credibility

The indirect impact of DPT on IA via PEC depends on the institutional context with which the signal is impregnated. Though DPT increases the transparency and access of pedagogical information, the degree of transparency converting into credibility is determined by the perceived legitimacy of the institution conveying the information. According to ST, the effectiveness of a signal is jointly determined by its content and the credibility of its source (Ta'Amnha et al., 2025; Malik and Akbar, 2025). Therefore, the same signals of transparency can lead to different perceptions of credibility according to institutional attributes. In the context of ITT, GS can be viewed as a vital contextual process that influences the development of trust (Ravichandran and Shanmugam, 2024). Public universities are typically integrated into systems regulated by the state and enjoy greater baseline legitimacy and tend to be viewed as more responsible and less business-oriented (Nematollahi et al., 2025). This increases the chances that their open pedagogical revelations construed as genuine and trustworthy, which makes PEC stronger. Conversely, the situation with private universities might be more critical because stakeholders might doubt the intentions of their messages, which can undermine the credibility-enhancing impact of DPT (Hart and Rodgers, 2024). This conditional process is evidenced by empirical research, which suggests that the effect of informational signals on the perceptions of credibility and the consequent evaluative

judgments is enhanced by institutional trust (Jaboob et al., 2025; Wagdi et al., 2021). As a result, the mediation between DPT and IA is not constant but varies with GS. In particular, the credibility pathway is reinforced when the message of DPT is conveyed by public universities, resulting in an increased indirect influence on attractiveness. On the contrary, this indirect pathway is relatively dampened in the case of private institutions because of a reduced level of initially trusted relationships.

H₄: GS (public vs. private universities) moderates the indirect relationship between DPT and IA through PEC, such that the mediation effect is stronger for public universities than for private universities.

2.5. Moderated Mediation via Learner–Institution Resonance

The association between DPT and IA via LIR is likely to change according to the institutional GS. Although DPT helps prospective students to have a better understanding of pedagogical methods and learning conditions, the likelihood of the development of profound psychological alignment depends on the perception of the prospective student concerning the social and institutional image of the institution. At that, ST implies that the same informational signal may produce various interpretive effects relying on the credibility and legitimacy of the sender (Karajeh, 2023; Herzallah and Ayyash, 2024). Based on SDT, individuals tend to be intrinsically motivated and engaged when they believe that the features of the learning environment align with their personal preferences in learning (Ravichandran and Shanmugam, 2024; Al-Dmour et al., 2025). This correspondence is embodied in the LIR of higher education, in which students sense that an educational establishment has its pedagogical design in place to serve their autonomy, competence development, and relatedness needs. The previous studies prove that this value and experience congruence is a significant determinant of the institutional preference and engagement intentions (Wagdi et al., 2021; Omoush, 2026). But GS is also a significant contextual influence in determining the way this resonance is created. Because of perceived social mission, regulatory regulation and historical educational authority, public universities have a higher probability of being perceived as consistent with student-centered educational values (Sadeh, 2026; Alslaibi et al., 2026). This increases the chances that transparency in pedagogical communication converted to a more emotional and motivational congruence. Conversely, private universities which are typically seen to be more business-oriented might struggle to produce the same level of resonance despite the fact that transparency levels can be similar (Dalain & Mansour, 2025; Alslaibi et al., 2026). Additional empirical research in marketing of higher education further notes that perceived purpose and institutional legitimacy are important factors that influence the way students interpret the value of the institution, which subsequently influences their attraction and enrollment intentions (Hardan et al., 2026; Koeswayo et al., 2024). As such, GS balances the intensity of the indirect impact of DPT on IA through LIR, reinforcing the same route in public institutions and deactivating it in private ones. The research model in this study is Presented in Figure 1.

H₅: GS (public vs. private universities) moderates the indirect relationship between DPT and IA through LIR, such that the mediation effect is stronger for public universities than for private universities.

3. METHODS

3.1. Experimental Design

In Jordan, we undertook this research and we applied a DPT certification, a third-party signal of higher education quality, which identifies the most favorable institutions in the development of a culture of pedagogical openness and adaptive learning transparency. The evaluators review their practices of pedagogical transparency and academic communication systems, their students engagement in learning feedback and co-creation process, their effectiveness in creating more visible learning and more accountable academically, and their capacity to draw new students and make their institutions more appealing. It was the sole certification framework of DPT at the time of the survey in the context of higher education. We came up with four scenarios of admission using real university advertisements. Following the past research (Peña-Lang and Villa, 2026), the scenarios involved content of a fictive university to prevent a possible bias in the case of the brand-reputation effect. Our design was a 2 (public vs. private university) × 2 (no certification vs. a DPT certification logo) factorial design. In the DPT certification scenarios, the logo was put at the bottom of the admission advertisement, and there was a slogan that said that the institution was certified to be pedagogically transparent. We mentioned the form of governance close to the name of the university and in one sentence with the logo, either our institution is a public university; it is under the national system of higher education or our institution is a private university; it is registered under the national accreditation standards. The four scenarios presented in Appendix S1. We randomly selected one of the four scenarios to each respondent, and the same number of respondents was given the same scenario.

3.2. Data Collection and Participants

To collect the data, we published an online survey via the panel of a management school in Jordan which students could register on. In order to test our hypotheses we only recruited current students whom the institutions are interested in recruiting as potential university applicants. We also avoided including in the sample those who were employed in a full-time professional job since they might not have the same expectations with respect to a possible higher education institution. Moreover, only respondents who recognized and properly interpreted the information that was manipulated in the advertisements on the admission (i.e., the institutional GS and the existence of the DPT certification) could fill out the questionnaire. To achieve this, we picked out respondents who responded to the following three binary questions correctly:

1. Two questions to each institutional GS in the study (public or private universities): “The institution that this advertisement is about admission is a public university” and “The institution that this advertisement is about admission is a private university”
2. One of the questions in the certification logo: A logo claims that this institution is known as DPT.

We have a sample of 162 respondents, 64% female with the mean age of 23.6 (SD of 5.1). All the four scenarios and mediating variables are indicated in Table 1.

3.3. Measurement of the Variables

We measured IA and PEC using 5-item scale by Jaboob et al. (2025). We used five items that were modified to measure LIR (Koeswayo et al., 2024). All constructs were measured with the help of a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). The data in Table 2 confirm the unidimensionality and reliability of these three scales. Further, the sensitivity of the respondents towards digital learning was assessed on a single-item scale (How willing are you to engage with digitally transparent and adaptive learning environments, e.g., by engaging in online learning systems, feedback mechanisms, and open pedagogical communication practices?) based on Ta'Amnha et al. (2025) and this variable was included as a covariate in the analysis.

3.4. Data Analysis

We began the data analysis by showing the direct and mediating influence of the presence of a DPT certification logo in an advertisement of an admission and an institutional GS on the two mediators (PEC and LIR) with MANOVAs. We then conducted mediation with 5000 bootstrap samples, which is a moderated mediation (Model 8), using the PROCESS macro of SPSS, developed by Hayes et al. (2013), and our hypotheses were tested. Thanks to this model, it is possible to test the mediating effect of the PEC and the perceived LIR, moderated by the institutional GS (public or private universities). The conditional nature of the direct and indirect effects of DPT on the perceived IA of the fictive university was also examined with the help of this model.

4. RESULTS

To begin with, a preliminary MANOVA involved PEC and LIR as dependent variables, the availability of a DPT certification

logo in an advertisement of admission and institutional GS (public vs. private universities) as independent variables, and the digital learning sensitivity of the respondents as a covariate. The statistics indicate that the use of a DPT certification logo in an advertisement during admission has a considerable impact on PEC relative to the lack of certification ($M_{logo} = 4.48$; $M_{nlogo} = 4.15$; $F = 4.126$, $P < 0.05$). Moreover, the DPT logo presence alone has a strong impact on LIR as compared to the lack of certification ($M_{logo} = 4.52$; $M_{nlogo} = 4.11$; $F = 4.889$, $P < 0.05$). Lastly, the relationship between the presence of a DPT logo in an admission advertisement and institutional GS is also important, both in the case of PEC ($F = 8.642$, $P < 0.01$) and LIR ($F = 5.774$, $P < 0.05$).

The effect of the presence of the DPT on credibility and resonance is an interaction effect of GS, which validates the worth of examining the mediating and moderating effects of the mentioned variables on IA (Table 3). Second, we saw the indirect impact of having a DPT logo on the IA of a fictitious university by taking into consideration the mediating variable of its PEC and LIR. The presence of DPT has an impact on the two mediating variables: PEC ($B = 0.312$, $P < 0.05$) and LIR ($B = 0.336$, $P < 0.05$); in turn, the latter influencing IA ($B_{credibility} = 0.547$, $P < 0.001$; $B_{resonance} = 0.401$, $P < 0.001$). The link between the presence of a DPT logo and perceived IA is therefore fully mediated by both PEC (Effect = -0.492 , $SE = 0.171$, $95\% CI = [-0.918; -0.201]$) and LIR (Effect = -0.298 , $SE = 0.139$, $95\% CI = [-0.631; -0.088]$), thus supporting Hypotheses 1 and 2. Third, institutional GS (public or private universities) has no moderating impact on the relationship between presence of DPT and perceived IA (Table 3). The conditional direct effect of the DPT on the IA at the values of the moderator (public or private university) is not statistically significant. Hence, H_3 is not supported. Fourth, Hypotheses 4 and 5 were that institutional GS (public vs. private

Table 1: Mean and standard deviation for each experimental condition

Scenarios	Experimental conditions	IA	PEC	LIR	N
1	No Certification – Public University	4.52 (1.39)	4.11 (0.94)	4.27 (0.88)	41
2	Yes Certification – Public University	5.08 (1.21)	4.86 (0.91)	5.03 (1.02)	39
3	No Certification – Private University	4.31 (0.95)	4.18 (0.80)	3.96 (1.03)	42
4	Yes Certification – Private University	4.22 (1.08)	4.05 (0.87)	3.89 (0.97)	40

Table 2: Research variables measures

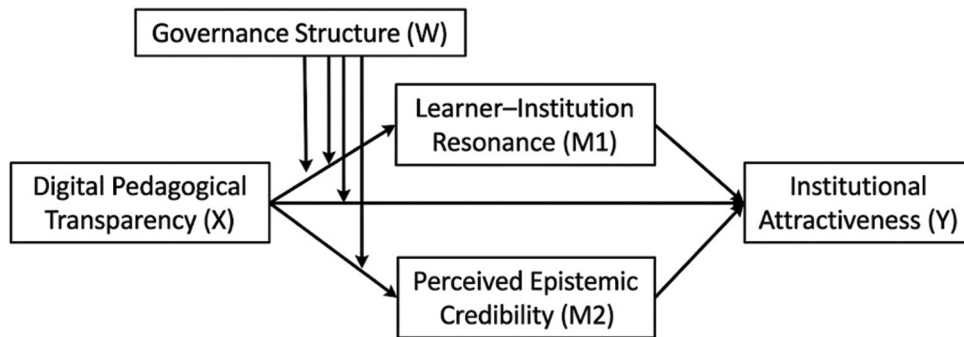
Scales	Items	KMO	Bartlett's test	Cronbach alpha	Explained variance (%)
IA	For me, this university would be a good place to study. I would not be interested in this university except as a last resort (reverse scored). This university is attractive to me as a place for education. I am interested in learning more about this university. A degree at this university is very appealing to me.	0.871	Chi-square=436.28; degrees of freedom=10; P<0.001	0.887	70.1
PEC	This university provides trustworthy academic information. The knowledge shared by this institution is reliable. I believe the academic claims made by this university. This university communicates its educational practices in a credible way. I consider this institution academically dependable.	0.864	Chi-square=401.55; degrees of freedom=10; P<0.001	0.879	67.5
LIR	I feel my personality matches the learning environment of this university. The values of this university are similar to my own values. My values match those of current students in this university. I think the values and learning culture of this university reflect my own values and personality. I feel my values “match” this university and its student community.	0.892	Chi-square=548.33; degrees of freedom=10; P<0.001	0.917	75.6

Table 3: Direct and indirect effects of communicating digital pedagogical transparency on institutional attractiveness

Variable	Mediating variable		Mediating variable		Dependent variable	
	M1 (PEC)		M2 (LIR)		Y (IA)	
	B	t	B	t	B	t
X: DPT certification	0.298	2.118*	0.331	2.274*	-0.074	-0.512
W: Institutional governance (Public vs. Private)	-0.241	-1.692	-0.621	-4.085***	0.013	0.081
X×W (Int 1)	-0.842	-3.021**	-0.763	-2.451*		
M1: PEC					0.547	5.694***
M2: LIR					0.401	4.533***
X×W (Int 2)					0.059	0.201
Digital learning sensitivity	0.107	2.086*	0.088	1.571	0.012	0.163
R ²	0.14		0.18		0.47	

***P<0.001; **P<0.01; *P<0.05

Figure 1: Research model



universities) will mediate the indirect effect between the presence of DPT and IA by PEC (H₄) and LIR (H₃). Institutional GS is also positively correlated with LIR with the institutional GS as a mediating variable (B = -0.621, P < 0.001). Further, the influence of DPT on PEC varies according to the kind of institutional GS (B = -0.887, P < 0.01). The effect of DPT on LIR is also determined by the type of governance (B = -0.804, P < 0.05). The analysis indicates that the factor of interaction between GS and certification plays an important role in affecting both PEC and LIR.

To be more precise, the perceived credibility and observed resonance of the communicating of their DPT is much higher among the public universities but not among the private ones (Figures 2 and 3). The credibility of public universities in the eyes of the respondents with DPT communicated is considerably better than when they are not certified (Mlogo = 4.86; Mnologo = 4.11; P < 0.001). This however does not happen in the case of the private universities where it has a non-significant negative effect on perceived credibility. Likewise, communicating DPT has a great impact on the perceived resonance of public universities relative to the lack of certification (Mlogo = 5.03; Mnologo = 4.27; P < 0.001), but not on a comparable scale among the private institutions. Finally, the index of moderated mediation between the presence of a DPT logo and IA through PEC (Index = -0.492, SE = 0.171, 95% CI = [-0.918; -0.201]) and learner-institution resonance (Index = -0.298, SE = 0.139, 95% CI = [-0.631; -0.088]) is significant. Hence, Hypotheses 4 and 5 are supported. In conclusion, the communication of DPT plays a different role according to institutional GS. DPT enhances public universities’ attractiveness via credibility and resonance, whereas communicating the certification has no influence on this indirect link for private universities.

5. DISCUSSION

The results of this paper give us a detailed conception of the impact of DPT on IA in higher education via cognitive and motivational processes and the ways that the impact differs in institutional governance systems. In general, the findings show that Hypotheses 1, 2, 4, and 5 were accepted, whereas Hypothesis 3 was rejected, which suggests the significant and mainly indirect and situational impact of DPT on the perceptions of the students. To begin with, the findings prove that DPT does not have a direct effect on IA but acts via PEC. This observation is in line with ST, which proposes that signals are perceived based on credibility examinations prior to them affecting decision outcomes (Peña-Lang and Villa, 2026). The credibility as mediation role implies that transparency boosts institutional assessment when it is perceived to be a vision and to be trustworthy and reliable. This aligns with the previous studies indicating that transparency enhances perceived legitimacy and confidence in decisions in digital settings (Malik and Akbar, 2025; Hart and Rodgers, 2024). The same evidence in the higher education setting suggests that credibility is a significant filter that institutional information is perceived with (Koeswayo et al., 2024; Al-Dmour et al., 2025).

Nevertheless, this research builds on the previous literature as it locates epistemic credibility as a particular mechanism that mediates the relationship between pedagogical transparency and IA, which is not well investigated in the literature (Wagdi et al., 2021; Karajeh, 2023). Second, the mediated influence of LIR was also supported confirming that DPT influences institutional attractiveness based on motivational alignment. This observation is well-founded SDT, which highlights that people tend to get involved in the environment that promotes

Figure 2: Interaction effect of GS and communication of DPT certification (vs. no certification) on the LIR

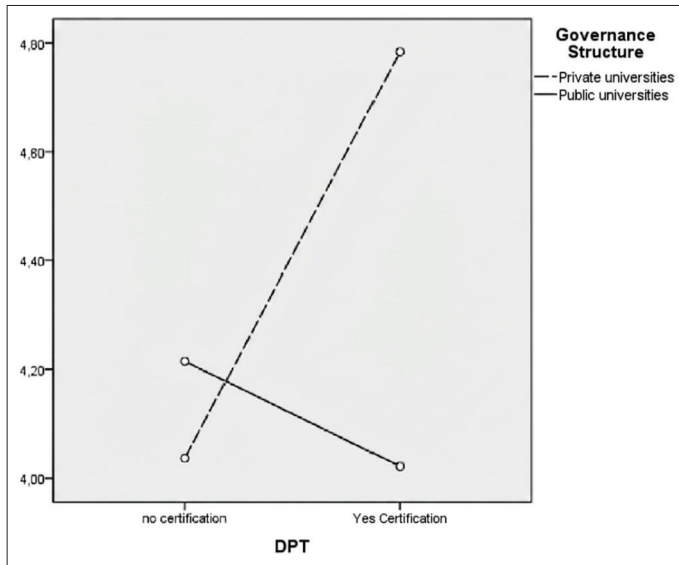
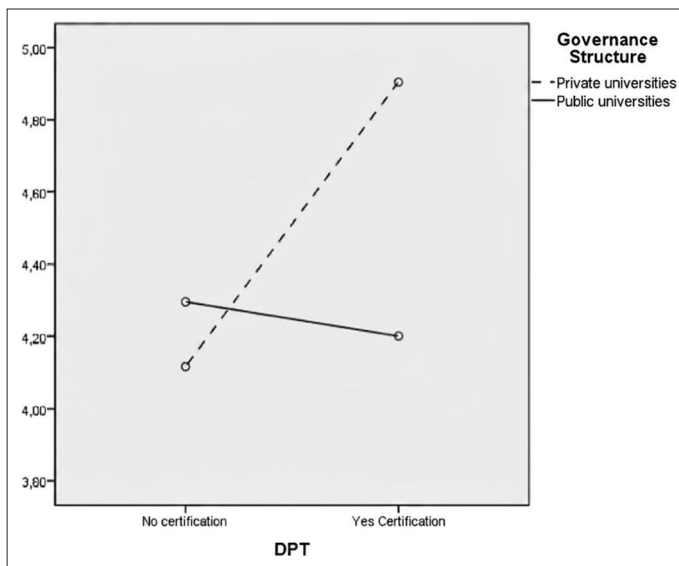


Figure 3: Interaction effect of GS and DPT certification (vs. no certification) on the PEC



the needs of autonomy, competence, and relatedness (Sadeh, 2026; Ravichandran and Shanmugam, 2024). The findings indicate that in a scenario where the institutions publicly share their pedagogical strategies, students can be in a better position to assess whether the learning environment conforms to their values and expectations. This congruence stimulates mental ease and self-drive, which is converted to greater institutional appeal. The previous literature on person environment fit indicates that value congruence has a notable positive impact on the outcome of attraction and engagement (Jaboob et al., 2025; Hardan et al., 2026). Nevertheless, the present paper takes a step forward in this literature by identifying resonance as a dynamic and perception-driven process unique to digital learning settings, as opposed to a construct of fit. This is in line with the emerging studies highlighting adaptive learning ecosystems and student-focused educational design (Omoush, 2026; Herzallah and Ayyash,

2024). Third, the non-significant direct effect of DPT on IA (H_3 not supported) has a theoretical significance. It implies that transparency in itself cannot directly impact student attraction without being cognitively and motivationally processed. This observation is at variance with certain classical studies of signaling which presuppose that institutional signals have direct influences on attractiveness (Ta'Amnha et al., 2025; Alsharairi et al., 2026). Rather, it favors more up-to-date research that signals in digital contexts must be interpreted by interpretive systems like trust and fit in order to drive behavioral consequences (Bobek et al., 2024; Nematollahi et al., 2025). It supports the claim that the choices in higher education have become more intricate and psychologically mediated, not based on the superficial information clues only (Dalain and Mansour, 2025; Yadav et al., 2026). Fourth, there is the moderating influence of institutional governance (public vs. private universities) which gives valuable contextual information. The findings show that GS does not have a direct effect on IA but has a great impact on the strength of the two mediation processes. Namely, DPT was more effective in both PEC and LIR in the case of the public universities than in the case of the private one. This observation can be compared to ITT, which indicates that legitimacy and structural credibility have a strong impact on how signals are decoded (Alslaibi et al., 2026).

Higher baseline legitimacy and perceived accountability of public universities increases the effectiveness of transparency signals (Omoush, 2026; Zhang and Wang, 2025). Conversely, the skepticism towards private universities tends to be more pronounced, undermining the effect of the same signals (Wagdi et al., 2021). The same trends were reported in the research that demonstrated the effectiveness of the communication strategy in the higher education market as moderated by institutional reputation (Taamneh et al., 2022; Balaskas et al., 2024). Fifth, the moderated mediation findings further confirm this interpretation by demonstrating that governance structure influences the indirect impacts of DPT via both PEC and LIR. It means that the institutional context does not only affect the perception formation, but also the way the cognitive and motivational paths should work. This finding has not been well studied before since little research has incorporated governance as a condition in signaling-based education models. Nevertheless, it aligns with the wider research in the organizational domain that highlights the fact that institutional legitimacy moderates the effects of strategic signals on stakeholder reactions (Yadav et al., 2026; Taamneh et al., 2022). In general, the results all show that DPT has a dual-path mechanism-credibility and resonance- rather than a direct influence pathway and the effects are heavily moderated by institutional governance. This cohesive model builds upon the previous literature by integrating signaling, trust, and motivational theories into a single explanatory model. It further emphasizes that in contemporary digital learning ecosystems, transparency is not sufficient to establish IA, but the interpretation of transparency in a particular institutional setting and psychological frames (Jaboob et al., 2025; Malik and Akbar, 2025).

5.1. Theoretical Implications

This research has significant theoretical implications as it brings together ST, ITT and SDT into one comprehensive

explanatory model of institutional attractiveness in digital higher education systems. To begin with, as an extension of ST, the experiment shows that DPT is a process-based signal as opposed to a fixed reputation signal. However, unlike conventional signals like rankings, DPT works by continuous communication of the pedagogical practices, thus enhancing the applicability of the theory in digital and adaptive learning context. Second, the findings contribute to the future of cognition as ITT allows one to realize how the signals are converted into evaluations. The fact that PEC is a central mediator reinforces the idea that trust is not automatic but is created in the light of perceived institutional communication reliability and legitimacy. This builds on previous studies that place credibility as a structural factor that connects transparency to attractiveness consequences within the context of higher education. Third, the implementation of SDT helps to deepen the theoretical base, as it describes the mechanisms of translating informational signals into motivational alignment. The research paper takes the SDT beyond the individual level of learning motivation to an institutional choice behavior by showing that the autonomy, competence, and relatedness needs influence the university selection decisions. Overall, the integrated model contributes to the development of theory by demonstrating that the institutional attractiveness develops in two streams of cognitive trust and motivational resonance, conditional on governance structure and contextual legitimacy.

5.2. Practical Implications

This research has valuable implications to university administrations, policymakers, and higher education marketing. First, the results indicate that merely using DPT is not enough to make IA better unless it is conveyed in a manner that reinforces perceived credibility and resonance in learners. The universities ought thus to formulate communication strategies that explicitly define teaching practices, assessment procedures, and student interaction practices to create epistemic trust among potential students. Second, the institutions must acknowledge that transparency is most appropriate when it becomes consistent with the psychological expectation and learning identities of the students. To improve LIR, universities need to focus on student-centered pedagogies, adaptive learning systems and inclusive academic cultures that are observant of the values of learners. Third, the differences in governance are important. Transparency signals are more advantageous to public universities because of the greater baseline legitimacy and may require further effort by a private university to build trust before transparency efforts bear the fruits of attractiveness. The policymakers should therefore contemplate to aid the private institutions in reinforcing credibility structures and quality assurance system to augment signal efficacy. Lastly, this paper urges higher education institutions to stop relying on conventional marketing metrics and shift to adaptive communication ecosystems incorporating strategies of transparency, trust-building, and learner alignment. This change is especially pertinent to digitally competitive education markets where the choice of students is informed more by online institutional cues and perceived authenticity.

6. CONCLUSION, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This paper will show that DPT is an important, although indirect influence on IA in higher education. Instead of having a direct effect, DPT works via two important psychological processes, PEC, as a measure of trust in institutional communication, and LIR as a measure of motivational congruence between students and universities. The results demonstrate that students do not react to transparency in a vacuum; rather, they receive it in the light of cognitive trust-building procedures and alignment of personal values. Moreover, the efficiency of DPT is not universal but highly relies on institutional GS, and transparency signals are more beneficial to the public universities than to the private ones because of greater legitimacy and trust as the baseline. Theoretically, the research develops ST, IIT, and SDT since the three are combined into one framework that demonstrates how digital transparency is converted into attractiveness via both cognitive and motivational processes. In practice, it highlights the idea that a university needs to do more than merely be transparent and instead it should seek to develop credible, student-centered, and context-sensitive strategies of communication. Comprehensively this study helps to understand better how the contemporary institutions of higher learning can compete in digitally-powered learning ecosystems. It demonstrates that IA is less and less determined by reputation or ranking and more and more by the extent to which universities present their pedagogical identity in a transparent and credible manner and the extent to which such an identity is attractive to student expectations in a changing educational environment.

This study has a number of limitations in spite of the contributions it has made. To begin with, an ecological validity might be impaired by the experimental design of a scenario, since the subjects reacted to imaginary ads of a university, not the actual enrollment choices. Although this method enhances internal validity, it might not be comprehensive in the reflection of actual reality in student choice behavior. Second, the sample was limited to mostly young university students, which limits the ability to generalize the findings to other groups like working professionals or international applicants. The model should be tested in the future using different demographic and cultural settings to increase the external validity. Third, the research concentrates on a few mediators, namely, PEC and LIR, that, in spite of theoretical support, might not reflect all the psychological processes that impact IA. Other variables can be used to explain digital engagement experience, including social influence, digital engagement experience, or institutional reputation, which may add extra explanatory power. Fourth, GS was reduced to the categories of public and private, which might not capture heterogeneity within groups. Further research ought to focus on more sophisticated categories, e.g. research-centered or teaching-oriented institutions, or combined governance systems. Future studies also need to consider longitudinal designs to study the time-varying nature of perception of transparency and its effect on the actual enrollment behavior. Moreover, cross-country comparisons would be useful in establishing the extent to which cultural and institutional differences mediate the perceived relationships.

REFERENCES

- Al-Dmour, R., Al-Dmour, H., Iskandrani, M., & Al-Dmour, A. (2025). The Impact of Digital Transformation on the Reputation of Public Higher Education Institutions in Jordan. *Sage Open*, 15(4), 21582440251390962.
- Alshammari, W.S., Ajoud, M.E.K., Ibrahim, A.I.H., Al Shamlan, A.E., Alsaman, A.I. (2025), Impact of e-government on institutional performance: Fostering sustainable higher educational practices. *European Journal of Sustainable Development*, 14(1), 169-169.
- Alsharairi, A., Aslam, M.Z., Al-Quran, M.K., Alnawafah, M.K., AlAdwan, M.N. (2026), Toward a framework for online public relations in higher education: A comparative study of PR practices in Jordan and Pakistan. *Cogent Social Sciences*, 12(1), 2635782.
- Alslaibi, N., Qawasmeh, R., Daraghma, Z., Abdelkarim, N., Paz, V. (2026), The behavioral-governance fit theory: Orchestrating profitability through internal dynamics and corporate governance in Palestinian banks. *Journal of Cultural Analysis and Social Change*, 11, 771-791.
- Balaskas, S., Nikolopoulos, T., Koutroumani, M., Rigou, M. (2024), Determinants of tax avoidance intentions in tourism SMEs: The mediating role of coercive power, digital transformation, and the moderating effect of CSR. *Sustainability*, 16(21), 9322.
- Bobek, V., Majaj, S., Horvat, T. (2024), The moderating role of institutions between FDI and GDP: Evidence from China and India. *Economic Research Ekonomika Istraživanja*, 37(1), 2343375.
- Dalain, F., Mansour, M. (2025), Strategic agility on innovative work behaviour in the Jordanian universities: A mediated-moderated model. *Geo Journal of Tourism and Geosites*, 62(4), 2295-2305.
- Hardan, A., Daas, G., Nour, A., Abudiak, A. (2026), Board characteristics, ownership structure, and financial sustainability: Evidence from Palestine and Jordan. *Future Business Journal*, 12(1), 25.
- Hart, P.F., Rodgers, W. (2024), Competition, competitiveness, and competitive advantage in higher education institutions: A systematic literature review. *Studies in Higher Education*, 49(11), 2153-2177.
- Hayes, S.C., Levin, M.E., Plumb-Villardaga, J., Villatte, J.L., Pistorello, J. (2013), Acceptance and commitment therapy and contextual behavioral science: Examining the progress of a distinctive model of behavioral and cognitive therapy. *Behavior Therapy*, 44(2), 180-198.
- Herzallah, F., Ayyash, M.M. (2024), Beyond traditional HRM: E-HRM practices and their influence on organisational performance in higher education institutions. *International Journal of Business Performance Management*, 25(6), 806-825.
- Jaboob, M., Hazaimah, M., Al-Ansi, A.M. (2025), Integration of generative AI techniques and applications in student behavior and cognitive achievement in Arab higher education. *International Journal of Human Computer Interaction*, 41(1), 353-366.
- Karajeh, A.I. (2023), The moderating role of board diversity in the nexus between the quality of financial disclosure and dividends in Jordanian-listed banks. *Asia Pacific Journal of Business Administration*, 15(4), 553-571.
- Koeswayo, P.S., Haryanto, H., Handoyo, S. (2024), The impact of corporate governance, internal control and corporate reputation on employee engagement: A moderating role of leadership style. *Cogent Business and Management*, 11(1), 2296698.
- Malik, A., & Akbar, N. (2025). Using social media for e-government services in Pakistan: The moderating role of digital information literacy. *Information Development*, Available at: <https://doi.org/10.1177/02666669251360726>
- Mayer, R.C., Davis, J.H., Schoorman, F.D. (1995), An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.
- Nematollahi, H., Mohammad Esmaeili, N., Gholipour, A., Zolfagharzadeh, M.M. (2025), Investigating the relationship between the effectiveness of eE-Learning and Self-Regulated learning with the moderating role of personality traits (case study: University of tehran students). *Public Management Researches*, 18(68), 31-60.
- Omoush, M.M. (2026), Human-AI collaboration in HRM and employee-centric outcomes: Evidence from E-supply chain management. *Human Systems Management*, 45(3), 343-358.
- Peña-Lang, M.B., Villa, A. (2026), Assessment of organizational Innovation: An analytical framework for higher education institutions. *Systems*, 14(2), 214.
- Ravichandran, B., Shanmugam, K. (2024), Adoption of EdTech products among college students: A conceptual study. *Management Matters*, 21(1), 1-19.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S., Camerer, C. (1998), Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.
- Ryan, R.M., Deci, E.L. (2024), Self-determination theory. In: *Encyclopedia of Quality of Life and Well-Being Research*. Cham: Springer International Publishing. p6229-6235.
- Sadeh, H. (2026), Exploring the future trends of digital advertising in emerging markets: Insights from palestine and Jordan. *Open Access Library Journal*, 13, e14800.
- Shehadeh, M., Hussainey, K., Alhadab, M., Kilani, Q. (2024), Corporate narrative reporting on Industry 4.0 technologies: Do the COVID-19 pandemic and governance structure matter? *Review of Accounting and Finance*, 23(5), 687-714.
- Spence, M. (1973), Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Ta'Amnha, M., Kurtishi-Kastrati, S., Magableh, I.K., Riyadh, H.A. (2025), Sustainable employer branding as a catalyst for safety voice behavior in healthcare: The mediating role of employee engagement. *Sustainability*, 17(11), 4890.
- Taamneh, M.M., Albdareen, R.Q., Aladwan, S.A., Taamneh, A.M. (2022), The impact of corporate social responsibility on the reputation of universities within developing countries: Evidence from Jordan. *Journal of Public Affairs*, 22, e2807.
- Wagdi, O., Abouzeid, W., Fathy, H.E.D. (2021), Restructuring and transformation of arab educational institutions into fourth-generation universities. *Turkish Journal of Computer and Mathematics Education*, 12(14), 5763-5781.
- Yadav, M., Srivastava, A.P., Alyousef, M.I., Naim, M.F., Amoozegar, A. (2026), Leadership, faculty behaviour, and educational supply chain management: A systemic model for fostering entrepreneurial intentions in higher education. *International Journal of Learning Teaching and Educational Research*, 25(1), 945-971.
- Zhang, R., Wang, J. (2025), Perceptions, adoption intentions, and impacts of generative AI among Chinese university students. *Current Psychology*, 44(11), 11276-11295.

APPENDIX

Appendix S1. Experimental Scenarios

Below are the four fictive university admission scenarios used in the 2 (Public vs. Private University) × 2 (No Certification vs. DPT Certification Logo) experimental design.

Scenario 1: Public University – No DPT Certification

University Name: Jordan National University

Our institution is a public university under the national higher education system. We are committed to providing high-quality academic programs and student-centered learning experiences. Our admission process reflects our dedication to academic excellence and equal educational opportunities for all students. We continuously strive to improve our teaching practices and learning environment to support student success.

Scenario 2: Public University – DPT Certification

University Name: Jordan National University

Our institution is a public university under the national higher education system. We are committed to providing high-quality academic programs and transparent learning experiences. Our admission process reflects our dedication to academic excellence and equal educational opportunities for all students.

Certified for Digital Pedagogical Transparency (DPT)

This institution has been recognized for excellence in transparent teaching practices, adaptive learning systems, and open academic communication. We continuously share our pedagogical methods, assessment strategies, and learning feedback processes to enhance student awareness and academic trust.

Scenario 3: Private University – No DPT Certification

University Name: Amman International University

Our institution is a private higher education provider registered under national accreditation standards. We are committed to providing high-quality academic programs and student-centered learning experiences. Our admission process reflects our dedication to academic excellence and modern educational opportunities. We continuously strive to improve our teaching practices and learning environment to support student success.

Scenario 4: Private University – DPT Certification

University Name: Amman International University

Our institution is a private higher education provider registered under national accreditation standards. We are committed to providing high-quality academic programs and transparent learning experiences. Our admission process reflects our dedication to academic excellence and modern educational opportunities.

Certified for Digital Pedagogical Transparency (DPT)

This institution has been recognized for excellence in transparent teaching practices, adaptive learning systems, and open academic communication. We continuously share our pedagogical methods, assessment strategies, and learning feedback processes to enhance student awareness and academic trust.