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UNIVERSITY STUDENTS' INTENTION TO ADOPT A WEEKLY ONLINE CLASSES DAY: THE ROLE OF TRAVEL SAFETY AND LEARNING EFFECTIVENESS IN PAKISTAN

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KEYWORDS

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ABSTRACT

University students may value a regular day of online classes differently depending on their learning expectations, travel arrangements and living conditions. Informed by Situated Expectancy-Value Theory, this study examines seven predictors of intention to adopt a weekly online classes day in Pakistan. An instructor-mediated survey recruited students at the National University of Sciences and Technology and COMSATS University, Islamabad. Partial least squares-structural equation modelling was performed using SmartPLS 4 on a sample of 145 students. Perceived learning effectiveness and travel safety benefits were positively associated with intention. Travel cost savings, travel time savings, additional home/hostel costs, digital security concerns and home/hostel study disturbances were not statistically significant predictors. The model explained 57.5% of intention variance. The findings may extend the application of Situated Expectancy-Value Theory to a planned weekly online arrangement, highlighting anticipated learning effectiveness and travel safety as relevant considerations in educational choice. Universities considering a weekly online classes day may consider prioritising effective teaching and retaining campus attendance for practical activities while supporting safe mobility for students.

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Introduction

Background

A regular online classes day offers an alternative to physical classes at a campus for suitable teaching activities. Its appeal may depend on learning effectiveness and avoided travel (Tsang et al., 2021; Weldon et al., 2021). Students walking from nearby accommodation and those commuting longer distances face different burdens. Evaluation therefore requires separate consideration of educational expectations, travel benefits and the demands of studying from home or a hostel.

Educational disruptions provide context for considering continuity of access through online instruction. In March 2026, the State Bank of Pakistan linked the Middle East conflict to higher fuel prices and disrupted trade and travel (State Bank of Pakistan, 2026), and in response, Higher Education Commission (HEC) directed universities to shift classes online under fuel-conservation measures (Askari, 2026). Islamabad's educational institutions closed during the November 2024 protests (BR Web Desk, 2024). Together with pandemic-era experience, these episodes may make access and teaching continuity relevant to discussion of a planned weekly online option.

Digital platforms offer tools for planned teaching, including Google Meet's scrollable caption history (Google, 2025). Pakistan's Economic Survey documents broadband, 4G and fibre-to-the-home expansion (Ministry of Finance, 2025). Such developments may not ensure affordable, reliable access for every student. Electricity, connectivity, space and instructional support remain concerns in Pakistani pandemic-era research (Iqbal et al., 2022; Saleem et al., 2022).

Research problem and gap

The appeal of a weekly day of online classes depends on students' circumstances. Avoiding a paid commute may reduce household spending, whereas walking from a nearby hostel offers limited savings. When parents pay, household savings and students' personal incentives may differ. Connectivity, electricity, space and interruptions can also affect participation (Iqbal et al., 2022; Saleem et al., 2022). Situated Expectancy-Value Theory (SEVT) provides a framework for interpreting this educational choice through anticipated successful participation, subjective value and perceived costs within students' circumstances (Eccles & Wigfield, 2020, 2024).

Previous Pakistani studies examined pandemic-era experiences, support and perceived learning quality (Iqbal et al., 2022; Saleem et al., 2022). Iqbal et al. (2022) also asked about opting for online classes after the pandemic. In an international context, Prasetyanto et al. (2022) examined intended numbers of online-learning days, and Van Wart et al. (2020) studied willingness to enrol in future online classes. Thus, future participation in online learning has been examined in several contexts (Zhu et al., 2023). The present contribution is narrower: it jointly examines distinct travel benefits, residential burdens, digital concerns and learning expectations in relation to a fixed weekly day of online classes alongside physical campus teaching on the other days of the week. This planned arrangement differs from emergency instructional continuity (Hodges et al., 2024).

Research problem

The research problem to be addressed is how universities can assess students' willingness to attend one day of online classes per week without assuming that avoided travel dominates or that residential burdens are exclusively monetary.

Research questions and objectives

Research question 1 (RQ1): How are expected travel cost savings, travel time savings, and travel safety benefits associated with students' intention to adopt one day of online classes per week?

Research question 2 (RQ2): How are additional home/hostel costs, digital security concerns, and study disturbances associated with students' intention to adopt one day of online classes per week?

Research question 3 (RQ3): How is perceived learning effectiveness associated with students' intention to adopt one day of online classes per week while considering other benefit and burden perceptions together?

Research objective 1 (OBJ1) is to examine the associations between travel benefits and students' intention to adopt one day of online classes per week.

Research objective 2 (OBJ2) is to examine the associations between anticipated burdens and students' intention to adopt one day of online classes per week.

Research objective 3 (OBJ3) is to examine the association between perceived learning effectiveness and students' intention to adopt one day of online classes per week.

Research significance

The study separates financial savings, time, safety, residential conditions and educational expectations. SEVT provides an educational-choice perspective linking expectancies, task values and perceived costs to achievement choices (Eccles & Wigfield, 2024). Examining these perceptions together may extend the theory's application to a recurring choice within a campus-based programme. The practical contribution may be evidence that helps universities assess willingness alongside teaching requirements and access conditions.

Literature review

Online education and the planned weekly arrangement

Iqbal et al. (2022) examined Pakistani university students' experiences of online education, including institutional support, instructors and home study environments, and asked whether they would opt for online classes after the pandemic. Saleem et al. (2022) identified relationships between institutional support, instructor support, motivation and perceived online-learning quality. These studies suggest the relevance of educational and residential conditions. Their broad questions about future intentions and pandemic experiences differ from the present study's focus on a day of online classes each week within an otherwise in-person teaching schedule.

Delivery medium alone may not explain effectiveness (le Roux & Nagel, 2018). Means et al. (2013) found advantages in blended-learning comparisons but noted differences in learning time, resources and instruction. Rasheed et al. (2020) identified self-regulation and technology-related challenges in blended learning. These findings support attention to instructional design and participation conditions rather than assuming that digital delivery is intrinsically better or worse.

A day of online classes each week is a limited scheduling arrangement within a campus-based programme. Universities can plan it around content, assessment and access, but changing the timetable does not itself create a designed blended-learning intervention. Educational value may depend on activities and support (Kintu et al., 2017). The choice examined here is narrower than replacing campus education.

Theoretical foundation

Situated Expectancy-Value Theory (SEVT) underpins this study. It explains achievement-related choices through expectations of success and subjective task values situated within individuals' experiences and social and cultural contexts (Eccles & Wigfield, 2020, 2024). Task value includes utility, intrinsic value and attainment value, alongside perceived cost. Costs include effort, foregone alternatives and emotional demands (Eccles & Wigfield, 2024; Flake et al., 2015). Here, the choice concerns participation in suitable university-level online classes on any one day each week from the student's current home or hostel.

The study applies this perspective to seven perceptions. Perceived learning effectiveness (PLE) captures expected understanding, participation, and completion of learning activities, which are conceptually related to successful participation. Travel cost savings (TCS), travel time savings (TTS) and travel safety benefits (TSB) capture practical advantages of the weekly option: reduced travel spending, more usable time and avoided travel-related safety concerns. Additional home or hostel costs (AHC), digital security concerns (DSC) and home or hostel disturbances (HSD) capture anticipated financial, security-related and study-environment burdens. Travel safety and residential conditions are context-specific considerations in applying SEVT to this study, rather than established dimensions of SEVT measures (Eccles & Wigfield, 2024).

The conceptual model of the study estimates seven direct associations with behavioural intention. It applies SEVT to students' appraisal of a recurring educational arrangement, using study-specific perceptions rather than a complete set of established SEVT scales. Research on usefulness and performance expectations offers related empirical context (Davis, 1989; Venkatesh et al., 2003).

Financial demands, living arrangements, and study conditions

Avoided commuting expenditure and added residential spending need not move together. Students may save commuting expenses while incurring additional costs for internet access or electricity. However, students with existing resources may not face substantial additional expenditure. Non-financial demands include interruptions, preparation of study space, and

maintenance of usable resources. Consequently, online education delivery cannot be assumed to produce uniform net savings.

Pakistani pandemic-era studies appear to document connectivity and home-study constraints (Iqbal et al., 2022; Saleem et al., 2022). These motivate examining residential demands but do not establish conditions under planned weekly provision. Residence, journeys and existing resources provide context here.

Travel safety and digital concerns

Travel safety differs from expense and duration. Gender differences in Pakistani mobility and mode choice support attention to travel context (Adeel et al., 2017), without establishing this study's safety–intention relationship. Here, safety concerns perceived benefits of avoiding a campus journey, rather than measured incidents.

Chen and He (2013) and Blackmon and Major (2023), among others, examined security and privacy concerns in online learning. These concerns warrant separation from physical travel safety and household disturbance: students may regard an online day as physically safer while remaining concerned about accounts and information privacy.

Conceptual Framework and Hypotheses

Research model

The framework is underpinned by SEVT (Eccles & Wigfield, 2020, 2024). Expected learning effectiveness and the practical advantages of avoiding travel may make the weekly option more attractive, while additional expenditure, digital concerns and study disturbances may increase its perceived demands. TCS, TTS, TSB, and PLE may be positively associated with BI; AHC, DSC, and HSD may be negatively associated with BI. Table 1 aligns the seven hypotheses with the research objectives.

Table 1: Conceptual framework

Hypothesis	Relationship	Expected sign	Research objective
H1	TCS → BI	Positive	OBJ1
H2	TTS → BI	Positive	OBJ1
H3	TSB → BI	Positive	OBJ1
H4	AHC → BI	Negative	OBJ2
H5	DSC → BI	Negative	OBJ2
H6	HSD → BI	Negative	OBJ2
H7	PLE → BI	Positive	OBJ3

Travel cost and time savings

Travel cost savings (TCS) concern the reduction in personal or household expenditure that may arise when a day of online classes prevents a campus journey. Under SEVT, the value of an educational option depends partly on its usefulness within the student's circumstances (Eccles & Wigfield, 2020, 2024). Avoiding travel expenditure may make weekly online participation more worthwhile. The relevance of this saving may depend on whether a paid journey is necessary and whose spending budget is reduced. TCS remains distinct from additional home or hostel costs, since avoiding fares can coexist with extra spending on data or electricity (Simamora, 2020). H1 proposes that travel cost savings may be positively associated with behavioural intention to adopt a day of online classes per week.

Travel time savings (TTS) concern usable time released by avoiding the campus journey. Expectancy–value cost research recognises foregone alternatives as a non-financial demand (Urhahne & Wijnia, 2023). Applied here, less commuting may release time for study, rest, or other valued activities. In the SEVT application, these opportunities may increase the practical value of the weekly option by reducing time committed to travelling. Prior research suggests time-management benefits in intended future online participation (Prasetyanto et al., 2022). Its relevance depends on the journey avoided and the demands of preparing for online participation. H2 proposes that travel time savings may be positively associated with behavioural intention to adopt a day of online classes per week.

Travel safety benefits

Travel safety benefits (TSB) concern the perceived advantage of avoiding exposure to journey-related hazards or insecurity. SEVT situates students' motivational beliefs within their available choices and circumstances (Eccles & Wigfield, 2024). Socially patterned mobility constraints in Pakistan may render safety particularly relevant, given documented differences in mobility and mode choice (Adeel et al., 2017; Farooq et al., 2024). Avoiding these concerns may make the weekly option more worthwhile and reduce the anticipated burden of participation. This may provide the context-specific rationale for including travel safety in the SEVT-informed model. H3 proposes that travel safety benefits may be positively associated with behavioural intention to adopt a day of online classes per week.

Additional home or hostel costs

Additional home/hostel costs (AHC) concern extra expenditure on internet, electricity, cooling, or other study resources needed for online attendance. SEVT considers perceived costs when explaining educational choice (Eccles & Wigfield, 2020, 2024). Applied here, additional expenditure represents a financial demand on participation, whose importance may depend on the student's existing resources and payment responsibilities. Online-learning research also documents resource constraints (Barrot et al., 2021; Koh & Daniel, 2022). Students anticipating greater spending may be less willing to choose the online day, even when it offers travel benefits. H4 proposes that additional home/hostel costs are negatively associated with behavioural intention to adopt a day of online classes per week.

Digital security concerns

Digital security concerns (DSC) involve anticipated threats to information privacy, account security, and platform security. These concerns may heighten apprehension about participation and increase its perceived non-financial demands. This proposed link is informed by the emotional-cost component of expectancy-value research (Flake et al., 2015); DSC measures specific digital concerns rather than the full emotional-cost construct. Online-learning research documents concerns about security and privacy (Blackmon & Major, 2023; Chen & He, 2013). Greater concern may reduce students' willingness to participate in online classes. H5 proposes that digital security concerns are negatively associated with behavioural intention to adopt a day of online classes per week.

Home or hostel study disturbances

Home/hostel study disturbances (HSD) concern noise, interruptions, and competing activities at the place of online participation. Because restoring concentration or negotiating study time may require effort, HSD may represent a non-financial participation demand within expectancy–value cost research (Flake et al., 2015). Under SEVT, anticipated difficulty sustaining participation may make the option of a day of online classes per week less attractive. Pakistani online-education research supports attention to residential study conditions (Iqbal et al., 2022; Saleem et al., 2022). Students anticipating greater disturbance may be less willing to attend online classes. H6 proposes that home/hostel study disturbances are negatively associated with behavioural intention to adopt a day of online classes per week.

Perceived learning effectiveness

Perceived learning effectiveness concerns whether students expect to understand material, ask questions, participate, and complete learning activities online from their current location. Situated Expectancy-Value Theory identifies expectations of success as an important factor influencing educational choices (Eccles & Wigfield, 2020, 2024). Students who anticipate effective participation may therefore be more willing to choose a weekly online class day. PLE is a context-specific perception of learning effectiveness, conceptually related to successful participation rather than an established SEVT expectancy scale. H7 proposes that perceived learning effectiveness is positively associated with behavioural intention to adopt one day of online classes per week.

Research Methodology

Research design and population

The study employed a cross-sectional online survey of university students at the National University of Sciences and Technology (NUST) and COMSATS University Islamabad, using instructor-mediated convenience sampling in the Islamabad–Rawalpindi setting. The instructors circulated the questionnaire among their students. The initial response count was 163.

The sample included students living with family and those residing in hostels with other students. These living arrangements may provide context for interpreting travel savings and the costs of studying online.

Instrument development

The instrument contains three items for each of seven predictors and three for behavioural intention (BI). Items use a five-point Likert scale: 1 strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree. Negatively hypothesised predictors are not reverse-coded. Appendix A presents the measurement items.

The items are study-specific and informed by published literature rather than directly adapted from established scales. SEVT provides the framework for interpreting anticipated participation, practical advantages and perceived costs (Eccles & Wigfield, 2020, 2024; Flake et al., 2015). Acceptance research provides related conceptual support for performance expectations (Davis, 1989), while Pakistani online-education studies inform the learning and residential context (Iqbal et al., 2022; Saleem et al., 2022). Related published measures address learning engagement and future intention to use online learning (Zhu et al., 2023). An English language subject specialist at NUST and a senior instructor at Air University reviewed the questionnaire for clarity, face validity and content relevance. TCS addresses avoided travel spending, TTS released commuting time, TSB avoided travel risk, AHC additional expenditure, DSC privacy and account concerns, HSD environmental interruptions, PLE learning participation and BI intended uptake.

Data collection and ethical considerations

Responses were collected between 29 September and 15 October 2026. The survey was anonymous and voluntary. Respondents were informed that no remuneration would be provided for completing the form. In addition to the measurement items, the questionnaire recorded residence, inviting instructor name, expected online attendance, travel arrangement, whether a campus trip would be avoided, usual travel time and previous online-class experience. All these questions were nonessential. Age, gender and programme were not recorded to protect anonymity. Because the questionnaire link was shared only in undergraduate groups, respondents were likely to be undergraduates.

Data screening and reproducibility

Of 163 student responses, nine were excluded because they had missing values. Six further records had the same answer to all 24 items: three all-neutral, two all-agree and one all-strongly-agree. These were excluded using the same straight-line response rule across all response categories (Meade & Craig, 2012), leaving 148 records.

After the straight-line exclusions, screening using the Mahalanobis-distance approach removed three further records from the 148 remaining responses, leaving a sample of 145 for data analysis (Niessen et al., 2016). Table 2 reports the sequential counts.

Table 2 : Sequential sample screening

Stage	Excluded	Remaining
Student responses	—	163
Incomplete measurement responses	9	154
Constant response across all 24 items	6	148
Mahalanobis outliers	3	145

Analytical procedure

Partial least squares structural equation modelling (PLS-SEM) was selected to estimate the seven associations jointly while assessing multi-item measurement, emphasising explained variance in BI (Hair et al., 2019). All eight constructs, 24 indicators, and seven paths were retained. Bootstrap estimates and intervals may inform assessments of statistical support. The pooled analysis may include varied travel circumstances, including unavoidable campus journeys.

The model was estimated in SmartPLS 4 (Ringle et al., 2024). All constructs were specified as reflective. Standardised path coefficients describe conditional associations in standard-deviation units. Estimation used path weighting, initial weights of 1, a maximum of 3,000 iterations, and a stopping criterion of 10^{-7}. Inference used 5,000 bootstrap resamples, two-tailed tests at .05 and 95% percentile confidence intervals.

Measurement assessment used loadings, Cronbach's alpha, rho_A, composite reliability, and average variance extracted (AVE). The heterotrait-monotrait ratio (HTMT) and bootstrap intervals assessed discriminant validity (Henseler et al., 2015). Structural assessment reports inner VIFs, paths, bootstrap uncertainty, f^2 and explained variance (Hair et al., 2019, 2021). Inner variance inflation factors (VIFs) assess predictor collinearity (Kock & Lynn, 2012). The standardised root mean square residual (SRMR) and normed fit index (NFI) are descriptive diagnostics (Henseler et al., 2016).

Results

Demographic characteristics

The screened sample contains 145 respondents: 80 reported living with family, 59 in a hostel with other students and six in other or unspecified arrangements. A total of 116 (80.0%) reported that online classes would result in avoidance of their campus trip; 29 (20.0%) reported otherwise. Ninety-two (63.4%) selected private motorised travel and 53 (36.6%) selected walking or a short local trip. Seventy-five (51.7%) reported a one-way journey of less than 30 minutes. This distribution suggests that the sample includes markedly different travel circumstances.

Ninety-four (64.8%) expected online attendance, 39 (26.9%) answered maybe and 12 (8.3%) answered no. This expectation item was not an exclusion criterion in the selected analysis. The data provided a description of study and travel circumstances, but not a demographic profile by gender and age.

Table 3: Primary sample characteristics

Characteristic	Category	n	%
Residence	Family home or home with family	80	55.2
	Hostel with other students	59	40.7
	Other or unclear	6	4.1
Trip avoided	Yes	116	80.0
	No	29	20.0
Travel arrangement	Private motorized vehicle	92	63.4
	Walk or short local trip	53	36.6
One-way travel time	Less than 30 minutes	75	51.7
	30 minutes to less than 1 hour	34	23.4
	1 to less than 2 hours	29	20.0
	2 hours or more	7	4.8
Online-class experience	Never	3	2.1
	Very rarely	17	11.7
	Sometimes	77	53.1
	Frequently	44	30.3
	All the time	4	2.8

Measurement model analysis

Outer loadings range from .772 to .941. Cronbach's alpha ranges from .790 to .910, rho_A from .818 to .915, composite reliability from .876 to .943, and average variance extracted (AVE) from .703 to .848. These values suggest internal consistency and convergent validity in the screened sample. All three indicators per construct were retained.

Table 4: Measurement model assessment

Construct	Item loadings (1–3)	α	rho_A	CR	AVE
TCS	0.925, 0.941, 0.895	0.910	0.915	0.943	0.848
TTS	0.872, 0.878, 0.929	0.873	0.884	0.922	0.798
TSB	0.862, 0.877, 0.772	0.790	0.818	0.876	0.703
AHC	0.903, 0.877, 0.804	0.829	0.857	0.897	0.744
DSC	0.880, 0.860, 0.871	0.841	0.847	0.904	0.757
HSD	0.902, 0.900, 0.907	0.887	0.892	0.930	0.815
PLE	0.865, 0.901, 0.927	0.880	0.890	0.926	0.807
BI	0.864, 0.924, 0.931	0.892	0.893	0.933	0.823

HTMT values range from .093 to .772, below the .85 benchmark (Henseler et al., 2015). The largest values occur for PLE–BI (.772) and DSC–HSD (.761). Percentile bootstrap upper limits are below 1. These results suggest discriminant validity; Appendix B presents the complete matrix.

Structural model analysis

Inner VIF values range from 1.570 to 2.401, suggesting no severe predictor collinearity (Hair et al., 2021). The model explains 57.5% of BI variance (R^2 = .575; adjusted R^2 = .553), while SRMR is .059 and NFI is .774. SRMR is compatible with a commonly used approximate benchmark (Hair et al., 2019), whereas the NFI cannot be judged against a settled PLS threshold, so strong global fit cannot be claimed (Hair et al., 2019).

The results appear to support H3 and H7. Travel safety benefits appear to be positively associated with BI (β = .211, p = .007; 95% CI [.065, .368]), with f^2 = .050. Perceived learning effectiveness has the largest estimated standardised coefficient (β = .448, p < .001; 95% CI [.287, .594]) and f^2 = .296.

H1, H2, H4, H5, and H6 do not appear to be supported. Their confidence intervals include zero and each has f^2 below .02. Their estimated directions are consistent with the proposed hypotheses, but none provides statistically significant additional explanatory evidence for BI in the final model.

Table 5: Primary hypothesis tests

H	Path	β	SE	t	p	95% CI	f^2	Decision
H1	TCS → BI	0.034	0.076	0.439	0.660	[-0.118, 0.187]	0.002	Not supported
H2	TTS → BI	0.101	0.091	1.104	0.270	[-0.066, 0.288]	0.012	Not supported
H3	TSB → BI	0.211	0.078	2.701	0.007	[0.065, 0.368]	0.050	Supported
H4	AHC → BI	-0.073	0.077	0.948	0.343	[-0.224, 0.077]	0.007	Not supported
H5	DSC → BI	-0.021	0.069	0.297	0.766	[-0.157, 0.111]	0.001	Not supported
H6	HSD → BI	-0.124	0.077	1.600	0.110	[-0.280, 0.026]	0.015	Not supported
H7	PLE → BI	0.448	0.077	5.789	< .001	[0.287, 0.594]	0.296	Supported

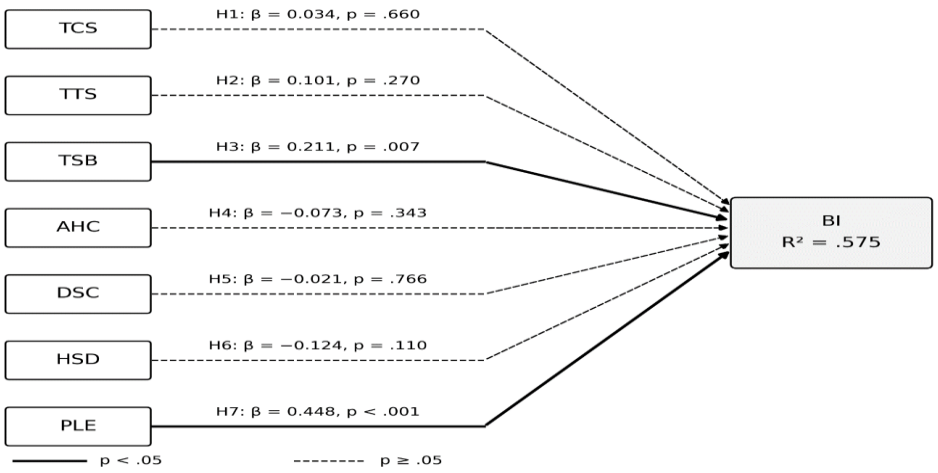

Figure 1: Estimated structural model

Note. Arrows show standardized path coefficients (β) and p-values. Solid arrows indicate significant paths; dashed arrows indicate nonsignificant paths. PLE=Perceived learning effectiveness, TCS=Travel cost savings, TTS=travel time savings, TSB =travel safety benefits, AHC= Additional home or hostel costs, DSC=digital security concerns, HSD=home or hostel disturbances

Discussions

Travel benefits and the first research question

H1 is not supported: TCS has a small conditional coefficient. The proposed positive association between avoided travel spending and intention was not established in this sample. In the situated expectancy-value theory (SEVT) application, financial savings represent one possible source of practical value, but they did not independently distinguish willingness when learning expectations and the other perceptions were considered together.

H2 is not supported. Over one-third selected walking or a short local trip, and just over half reported journeys below 30 minutes. These characteristics describe the travel context of the sample. SEVT recognises that choices depend on the opportunities and costs students perceive in their circumstances (Eccles & Wigfield, 2020, 2024). Prasetyanto et al. (2022) found time-management benefits associated with intended online-class days, although their broader construct differs from travel-time savings here.

H3 is supported: perceived travel safety benefits are positively associated with intention. This is consistent with the SEVT-informed expectation that the value of an educational arrangement can include advantages arising from students' circumstances. Travel safety adds a consideration beyond financial savings and time convenience. Islamabad's protest-related closures provide background to disrupted campus access (BR Web Desk, 2024). The measured association concerns students' perceived safety benefit from avoiding the journey.

Based on a descriptive analysis of responses, online classes would not eliminate the need for a campus trip for 29 respondents. Other campus activities may leave travel necessary, so perceived benefits do not necessarily translate into actual journey savings.

Anticipated burdens and the second research question

The findings confirm that H4 is not supported. Anticipated additional home/hostel costs did not independently predict intention in this sample. Thus, the proposed financial-demand relationship in this application of SEVT was not supported. This distinction may separate willingness to choose the weekly arrangement from the practical issue of whether students can afford the resources it requires.

The results confirm that H5 is not supported: DSC has a near-zero conditional coefficient. The proposed link between digital security concerns, interpreted as an anticipated participation burden, and intention was not supported. Research on online learning nevertheless identifies

privacy and account-security issues as relevant to students' experience (Blackmon & Major, 2023; Chen & He, 2013).

H6 is not supported: HSD has a negative, nonsignificant association with intention. The direction is consistent with the proposed participation-cost reasoning, but the relationship was not established. Pandemic-era research documents residential challenges (Barrot et al., 2021; Iqbal et al., 2022); the present study concerns willingness to attend one weekly online day within an otherwise campus-based schedule.

Together, H4–H6 provide no statistically significant support for the selected burden–intention relationships. The pattern offers limited support for this part of the contextual model. Possible differences in the relevance of these burdens across living and commuting circumstances remain questions for subsequent research.

Learning effectiveness and the third research question

H7 answers RQ3 and OBJ3: students expecting to understand material, participate and complete learning activities online reported stronger intention toward the weekly option. PLE has the largest estimated coefficient among the seven predictors. This is consistent with SEVT's emphasis on anticipated successful participation in educational choice (Eccles & Wigfield, 2024). It also accords with related findings on usefulness and performance expectations in acceptance research (Davis, 1989; Venkatesh et al., 2003).

The PLE association indicates that willingness to adopt the weekly arrangement is connected to its anticipated educational effectiveness. Alongside the TSB finding, it supports considering learning expectations and a contextual advantage together when applying SEVT to this choice.

Contributions of the study

The study may extend the application of SEVT to a weekly day of online classes in Pakistan by examining educational, travel and residential perceptions together. PLE and TSB appear to be significant predictors of intention, whereas five other factors do not. This pattern suggests that anticipated learning effectiveness and travel safety may be relevant considerations in the fitted model.

The bounded weekly choice may complement research on emergency provision and broad future intentions (Aguilera-Hermida, 2020; Zhu et al., 2023) by examining students' willingness to adopt a weekly day of online classes within an otherwise in-person teaching schedule.

Theoretical, Practical, and Policy Implications

Theoretical implications

The study applies SEVT to a specific educational choice: one day of online classes each week within an otherwise in-person, campus-based programme in Pakistan. The positive PLE association is consistent with the relevance of anticipated successful participation. The positive TSB association

adds perceived travel safety as a contextual source of value. Together, these findings may provide partial support for the SEVT-informed model and show how educational expectations and a travel-related advantage can be considered within the same account of intention.

The nonsignificant TCS, TTS, AHC, DSC and HSD paths leave five proposed relationships unsupported. The resulting contribution is a contextual application that distinguishes learning and safety perceptions from the other measured advantages and burdens.

Practical implications

The positive association between PLE and intention suggests that universities should give priority to the educational credibility of a weekly online class day. Instructors should make clear how students can understand material, ask questions, receive feedback and complete learning activities. In SEVT terms, these teaching arrangements address students' expectations of successful participation. Decisions about suitable activities should preserve campus provision where laboratories, clinical facilities or workshops are essential.

During timetable planning, universities should ensure that an online day removes a whole campus trip, since 29 respondents reported they would still need to physically visit campus. They should also consider students' devices, connectivity, affordability, electricity and study space. The unsupported AHC, DSC and HSD paths do not, by themselves, appear to justify withdrawing access support or privacy safeguards.

Policy implications

Students' willingness can inform policy alongside educational suitability, equitable access and safety. The associations with PLE and TSB identify considerations for policy design, but this survey does not establish that a weekly online class day improves learning or reduces actual travel risk. Emergency remote teaching was a temporary crisis response that differs from planned online learning (Hodges et al., 2024), so it offers only limited context for a recurring weekly arrangement, while such an arrangement requires its own implementation evidence.

Any decision to introduce or expand a weekly online class day should preserve essential campus practical work and maintain access and privacy safeguards. Intention alone may be insufficient evidence for institution-wide implementation; decisions should also draw on observed learning, participation and access outcomes.

Limitations and Future Research areas

Limitations

Instructor-mediated convenience recruitment at two universities limits national generalisation. Age, gender and programme were not collected, so their coverage and subgroup differences cannot be assessed. Travel-cost payer status, actual hostel charges, distance to campus and family expectations were not measured.

The sample includes varied travel circumstances, including respondents whose campus trip would remain necessary. The survey measured perceptions and intention rather than actual journey savings, expenditure, learning outcomes, or sustained participation. Accordingly, the survey may not establish whether anticipated benefits and burdens are realised in practice.

The study-specific items require independent validation and do not constitute a comprehensive SEVT instrument (Eccles & Wigfield, 2024). PLE is conceptually related to successful participation, while the other constructs capture selected practical advantages and burdens. Established expectancy, intrinsic value, attainment value and utility-value scales were not administered. Socialisation, developmental processes, expectancy–value interactions and contextual moderation were not assessed. Different expense categories may also not be interchangeable indicators of a reflective AHC factor. TCS items refer to both personal and household expenditure; different cost-bearers may affect responses.

Future Research Avenues

Future studies should replicate the seven relationships across larger and more diverse university samples and collect data on broad demographic and institutional categories with appropriate privacy safeguards. Residence, commute length, travel-cost payer status, access to resources and family expectations should be measured to examine contextual differences directly.

The nonsignificant savings and cost relationships, which may reflect several distinct mechanisms, suggest questions for subsequent investigation. Researchers could examine whether nearby students have little avoidable travel expenditure, whether payment by families affects the personal importance of savings, and whether preparing resources for online classes offsets anticipated time savings. Existing residential facilities may also affect marginal costs: NUST describes internet-equipped hostels near academic facilities, and Shaheen Group advertises fibre internet (National University of Sciences and Technology, 2026; Shaheen Group of Hostels, 2026). These descriptions do not establish respondents' actual access, reliability or charges. Future studies should record prior investment, payment responsibility, additional spending and preparation time rather than assume that these mechanisms explain the present results.

Future travel-focused research should distinguish on-campus residents, students in hostels within walking distance, local motorised commuters and longer-distance commuters. It should establish whether a weekly day of online classes fully avoids, partly avoids or leaves unchanged a campus journey before quantifying financial and time benefits. Safety perceptions should be examined alongside actual travel exposure; the present positive TSB association does not, by itself, establish a reduction in travel risk.

Stronger SEVT tests should combine established expectancy and task-value measures with the contextual perceptions examined here, validate the study-specific items independently and reassess whether the expense categories are appropriately modelled as reflective indicators. Researchers could examine intrinsic value, attainment value, utility value and perceived costs, together with expectancy–value interactions. Measuring residence, commuting demands and

resource access would allow direct tests of whether the relationships vary across students' circumstances (Eccles & Wigfield, 2024).

Longitudinal studies could connect anticipated benefits and demands with actual uptake and experience. Evaluation could record attendance, participation, course-aligned learning outcomes, connectivity failures, missed sessions, device and study-space access, campus journeys avoided, travel time and expenditure, safety perceptions, and additional data or electricity costs. Student feedback could assess interruptions, expectations of successful participation and the value attached to the option of a weekly online class day. Comparisons across residence and commuting circumstances would help identify differences in access and experience.

Intervention studies could examine whether orientation and practice improve anticipated participation and perceived learning effectiveness. They could also evaluate low-bandwidth materials, managed recordings and assistance routes.

Future research could clarify the benefits and burdens of a recurring weekly online class day. A scoping review could map the available research, populations and contextual factors, while a systematic review could assess findings on student acceptance, learning outcomes, travel savings and costs transferred to homes or hostels. A broader literature review could examine how SEVT has been applied to online educational choices and identify relevant measures for future research models. Meta-analysis could be considered where sufficiently comparable studies and outcomes are available.

Conclusions

Among 145 university students retained after eligibility, completeness and response-quality screening, perceived learning effectiveness and travel safety benefits were positively associated with intention to adopt a weekly day of online classes. Perceived learning effectiveness has the largest estimated coefficient, and the model explains 57.5% of intention variance. Travel cost and time savings, additional home/hostel costs, digital security concerns and home/hostel study disturbances did not emerge as significant independent predictors.

Within the framework of SEVT as applied in this study, the observed pattern can be interpreted as follows: intention is associated with anticipated effective participation and a contextual safety advantage. The study may extend the theory's application to a planned weekly online-class-day arrangement in Pakistan, while the five unsupported paths identify relationships requiring further examination. Its contribution may lie in evidence on selected perceptions associated with educational choice, with perceived learning effectiveness and travel safety potentially informing university planning.

Declarations

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Conflicts of interest

The authors declare no conflicts of interest.

Data availability

The data is available from the corresponding author upon request.

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Appendix A Measurement Items

Table A1 : Measurement items

Item code	Statement
TCS1	A day of online classes would reduce the amount I spend travelling to campus.
TCS2	I expect to spend less on fuel or transport fares on a day of online classes.
TCS3	Avoiding the journey to campus would reduce my household's travel expenses.
TTS1	A day of online classes would save me time normally spent travelling to campus.
TTS2	I would have more usable time because I would not need to make the journey to campus.
TTS3	The travel time I would save on a day of online classes would be substantial.
TSB1	Avoiding the campus journey would reduce my exposure to travel-related safety concerns.
TSB2	I would feel safer on a day of online classes when I do not need to travel to campus.
TSB3	My usual journey to campus involves safety risks I would avoid on a day of online classes.
AHC1	Taking online classes from my current location would increase my internet or mobile-data expense.
AHC2	Taking online classes from my current location would increase the electricity or cooling costs borne by me or my household.
AHC3	I expect additional study-related costs if I take regular online classes.
DSC1	I worry about the privacy of my information when attending online classes.
DSC2	I am concerned that my university or learning-platform account could be misused.
DSC3	Security of the online class platform would concern me.
HSD1	Noise at my current study location would make it hard to focus during an online class.
HSD2	People around me would interrupt my online study.

Item code	Statement
HSD3	Competing activities at my current location would disturb my participation in online classes.
PLE1	I could understand course material effectively in an online class from my current location.
PLE2	I could ask questions and participate adequately in an online class.
PLE3	I could complete the learning activities in an online class effectively.
BI1	If offered, I intend to take one day of online classes per week next term.
BI2	I would choose the option of one day of online classes per week next term if it were available.
BI3	I am likely to use the option of one day of online classes per week next term.

Appendix B Additional Measurement Diagnostics

Table B1: Heterotrait–monotrait ratio matrix

	TCS	TTS	TSB	AHC	DSC	HSD	PLE	BI
TCS	—							
TTS	0.549	—						
TSB	0.667	0.705	—					
AHC	0.165	0.322	0.125	—				
DSC	0.095	0.335	0.093	0.694	—			
HSD	0.199	0.466	0.220	0.719	0.761	—		
PLE	0.366	0.559	0.577	0.240	0.309	0.471	—	
BI	0.423	0.611	0.631	0.344	0.359	0.514	0.772	—

Table B2: Predictor collinearity

Predictor	Inner variance inflation factor (VIF)
TCS	1.570
TTS	1.976
TSB	2.071
AHC	1.809
DSC	1.986
HSD	2.401
PLE	1.597