Research on the Influencing Factors and Mechanisms of College Students' Online Learning Behaviour in Newly Established Local Undergraduate Institutions in Hebei Province

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A R T I C L E   I N F O

A B S T R A C T

Purpose: The objective of this article is to evaluate the correlation between teacher orientation, student teacher trust, student initiative, and the online learning behaviour of students. Additionally, the article also investigates the potential mediating influence of student-teacher trust and student initiative in this relationship. **Design/ Methodology/ Approach:** This study employed a cross-sectional research design and a quantitative research approach. Questionnaires were utilized to collect data from students in Hebei Province. The sampling method chosen for this study was simple random sampling. A total of 199 valid responses were analyzed using Smart PLS 3.3.9.
Findings: The study's findings indicated that teacher orientation had a notable impact on online learning behavior. Furthermore, student trust exerted an influence on online learning behavior, and the teacher's orientation also had an impact on both trust and student initiatives. The study also provided support for the mediating role of student trust. **Implications:** This research highlights the significance of cultivating trust between students and teachers as a means to enhance students' engagement with online learning. Additionally, the role of teacher orientation in influencing student behaviour is emphasized. These insights hold great importance for policymakers, as they have the potential to optimize resource allocation and broaden educational accessibility for a larger student population. **Originality:** This study stands out as one of the limited research endeavours that has investigated the intermediary function of student trust and student initiative in connecting orientation with students' online learning behaviour within a unified framework.

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Introduction

The transformation brought about by education endures, as educators employ specific techniques such as comprehending scientific concepts, altering attitudes, and fostering skills (Gilakjani & Sabouri, 2017). To instigate changes within the higher education system, each student should be treated in a manner befitting mature learners, affording them the right to pose questions and alleviate any uncertainties they may have. Learning orientation, as a concept, revolves around knowledge acquired through personal experience (Ro et al., 2021). Researchers have identified learning orientation as an individual's self-engagement within specific workplace contexts. The level of learning orientation among individuals serves as a connecting factor. Individuals with this type of learning orientation prove highly productive, capitalizing on mistakes and leveraging experiences as learning tools (Harvey et al., 2019).

Various educational institutions have embraced online learning environments, capable of providing education through blended learning within an academic framework. Researchers like Azlan et al. (2020) have referred to this approach as mixed-method or hybrid learning, which combines traditional face-to-face classroom instruction with online learning components. This hybrid approach enables educational establishments to adopt a learner-centered teaching methodology, offering learners greater flexibility and autonomy in engaging with learning activities (Chan, 2019). Additionally, online learning is gaining worldwide attraction. This scenario is applicable across various fields of study, where the characteristics of the subject matter and instructional delivery align well with this teaching approach. While Nambiar (2020) has deliberated on its consequences for students, some researchers advocate for students to embrace diverse learning methodologies. Embracing online learning can also be advantageous for students, as it enables them to engage in learning from anywhere in the world. The adoption of online learning is gaining momentum within the education sector.

Cultivating trust is essential across all echelons of educational institutions, encompassing administrators, students, and educators alike. It stands as a cornerstone of the learning milieu, holding significant import. When there exists a robust trust framework between teachers and students, the outcome tends to be elevated student accomplishments (Ransom, 2020). Within a student's academic journey, the interplay of trust between educators and learners assumes a pivotal role. Trust ranks among the traits that foster and amplify learning within the educational context (Duong et al., 2019). Nurturing trust between students and teachers is pivotal for students' academic progression. This dynamic reinforces students' sense of significance and extends support for their scholastic challenges. These educators galvanize students to attain achievements across behavioral, affective, and cognitive domains. Trust stands as the bedrock for students' well-being, its cultivation bolstered by corrective endeavours. Moreover, Zheng (2022) underscores that it is fortified by well-structured practices and institutional programs.

he development of student initiative emerges as a product of educational reforms geared towards students (Singer-Brodowski & Bever, 2016). It has risen to prominence on educators' agendas, with fostering and nurturing students' initiative in learning recognized as a fundamental endeavour in delivering quality education. Factors rooted in motivational dimensions significantly shape students' participation in learning and their inclination to take proactive steps in their educational journey, a pivotal aspect of the learning process.

To put it succinctly, learning initiative constitutes a fundamental facet of student learning. As a result, Zheng, Zhou, and Zou (2022) have expressed interest in investigating strategies for fostering students' initiative in their learning pursuits.

Consequently, the study's primary aim is to assess how teacher orientation, student-teacher trust, and student initiative impact online learning behaviour. Furthermore, the study delves into the potential mediating role played by student initiative and student-teacher trust in this context.

Literature review & Hypotheses building

Students' online learning behaviour

Globally, the adoption of online learning methods is on the rise. This trend is alleviating the constraints related to geographical and temporal limitations inherent in traditional educational approaches. The primary impetus behind the integration of online platforms is not solely to enhance the quality of learning or educational training, but rather to optimize cost efficiency and streamline business operations. In the realm of education, the hybrid model that combines in-person instruction with online learning has become a standard practice (Prior et al., 2016). Over recent years, there has been a notable transformation in the management of educational systems. Educators and learners have embraced e-learning technologies, enabling instructors to deliver lectures, share resources seamlessly, and foster interactions among students (Barrot, Llenares, & Del Rosario, 2021).

Conversely, an online learning environment offers advantages to training developers, curriculum creators, and educators as they can design more tailored online courses. Furthermore, students have the flexibility to structure their study time according to their availability around the clock. Teachers also enjoy the flexibility to work at their convenience, striking a balance between familial responsibilities and professional commitments (Song et al., 2018). This flexibility extends to students as well, enabling them to manage their educational pursuits alongside their domestic obligations. The autonomy to regulate their learning schedule empowers students. Unlike traditional settings where attendance is mandatory, students can allocate time for web-based learning. This flexibility equips students to effectively strategize their education, making the most of available resources. Some individuals may prefer studying in the evening, while others opt for daytime learning. Conventional systems offer classes solely during daylight hours, which can be limiting for certain students. Flexible learning allows students to personalize their schedules to align with their preferences and requirements (Zhang, 2021).

Learning-orientation of teacher; Relationship with Students' Online Learning Behavior, Teacher-Student Trust and Student initiative

Numerous research studies have delved into the concept of learning orientation, with a significant focus on educators' learning approaches. The academic accomplishments of individuals are significantly influenced by their personal orientations (Derakhshan & Ghiasvand, 2022). Within the academic realm, three distinct orientations are recognized: work avoidance orientation, performance orientation, and learning orientation. Previous literature has defined learning orientation as an individual's inclination to actively seek

knowledge, a trait associated with enhanced performance (Ghosh & Shah, 2017). Notably, individuals demonstrating a strong learning orientation are likely to employ self-regulatory strategies that contribute to their knowledge and skill development, thereby augmenting their overall performance. The learning environment plays a pivotal role in fostering a learning orientation within an educational context. Educational practitioners aiming to cultivate learning orientation should consider factors such as open-mindedness, a shared vision, and dedication to learning (Goswami & Agrawal, 2019). Undoubtedly, a commitment to learning is indispensable in the development of this attribute.

The commonly utilized term to describe observable behaviour is "teacher behaviour," primarily intended to aid students in their learning journey. This encompassing term encompasses both verbal and nonverbal actions of educators, with a pivotal role in advancing the educational landscape. Notably, the techniques, orientation, and methodology employed by teachers have a direct impact on student performance (Rashid & Zaman, 2018).

Within the realm of literature, the concept of the teacher effect pertains to the measurable impact that a teacher has on a student's academic progress and overall performance. It is anticipated that proficient educators will not alone enhance pupils' academic performance, but also offer them emotional assistance. According to Blazar and Kraft (2017), the aforementioned skills and strategies have the potential to facilitate critical thinking, ensure the dissemination of factual information, effectively manage classroom behaviour, and promote the emotional and social growth of students. According to Shahzad and Naureen (2017), the academic achievement of pupils is influenced by the attitude of their teachers. The authors suggest that it is imperative for academic decision-makers to prioritise the enhancement of teachers' behavioural and academic competence in order to enhance their academic performance and learning capabilities. Therefore, it can be noted that the learning behaviour of students is influenced by their favourable learning orientation (Mozie et al., 2022), knowledge, and guidance (Aras, 2023).

H1. Learning-orientation of teachers is significantly related to Students' Online Learning Behaviour.

Students' trust is influenced by variables such as teacher orientation, pedagogical knowledge, and expertise. The adoption of a positive learning orientation by students fosters strong teacher-student partnerships and nurtures a sense of trust between them. Educators who cultivate robust rapport with their students not only establish a constructive learning atmosphere but also cater to their academic and emotional requirements (Yuan et al., 2018). Furthermore, students who establish meaningful connections with their instructors exhibit heightened interaction and receive increased academic mentorship. These educators frequently acknowledge and commend such students, fostering an environment of trust and heightened engagement with the educational process. Consequently, this dynamic contributes to elevated academic achievements. Shafait et al. (2021) corroborate the notion that trust between teachers and students is a catalyst for fostering meaningful engagement with education.

H2: Learning-orientation of are significantly related to Teacher-Student Trust.

Numerous prior studies have endeavoured to examine the influence of students' choices and how these choices impact their learning behaviours. According to McKnight

et al. (2016), educators are increasingly utilizing technological tools to facilitate online instruction, leading to enhanced student engagement and trust. However, a central challenge in online settings revolves around cultivating supportive interactions, given the inherent difficulty of fostering communication in virtual environments. Proficiency in time management, self-directed learning, initiative-taking, and self-motivation are pivotal attributes for students participating in online learning, constituting core traits of successful learners (Heflin & Macaluso, 2021).

Within the online learning context, teachers play a crucial role in instilling student initiative. These instructors provide guidance to empower students to navigate their learning path autonomously, and they facilitate the creation of additional academic materials. Such proactive students exhibit proficiency in various learning modes and are adept at leveraging diverse educational resources. The overarching objective of an open learning environment is to cultivate student-centred learning, wherein a multifaceted and interactive learning milieu serves as a vital repository of knowledge (Peng et al., 2021).

H3: Learning-orientation of teachers is significantly related to Student initiative.

Teacher-Student Trust; Relationship with Student initiative and students' online learning behaviour

Previous research has conceptualized trust as a sentiment marked by unwavering commitment, belief devoid of doubt, hesitation, or fear. Interpersonal trust is rooted in emotions of reliance directed toward specific individuals. Trust vested in a particular person signifies an anticipation of their reliability while not causing harm to others. These interactions often yield various advantages for those involved (Arslan & Polat, 2016). The bond of trust shared between a student and a teacher evolves over time. The cultivation of trust hinges on the formation of students' perceptions regarding their teachers' trustworthiness, which then matures and deepens as time progresses. In the realm of education, comprehending the student-teacher relationship within the framework of teacher-student trust is of paramount significance (Roberts-Young, 2018).

Fostering a strong sense of motivation for learning among students can be achieved through the cultivation of mutual trust between teachers and students. Establishing authentic relationships based on trust is pivotal to enhancing the learning capacity. Positive interactions between students and teachers are marked by reciprocal care, respect, collaboration, trust, intimacy, warmth, empathy, and acceptance (Wentzel, 2022). In the context of online learning, the significance of trust is underscored, as emphasized by Chae, Lee, and Seo (2016). Particularly in the online setting, the teacher-student trust dynamic holds heightened importance, given the physical separation. In certain instances, this teacher-student rapport can serve as a substitute for the cultural, pastoral, and social support that traditional students find externally. For online learners, the relationship with their teachers constitutes a means of experiencing the university environment.

The degree of trust a student possesses significantly shapes their learning environment. It is imperative for educational institutions to grasp the strategies that foster trust and cooperation between students and educators. The effective implementation of educational reforms hinges upon the establishment of trust among both students and teachers, as suggested by Koca (2016). When students share a cordial rapport with their teachers, they

are more inclined to pose academic queries. This interaction subsequently enhances students' learning initiative (Xie et al., 2022).

H4: Teacher-Student Trust is significantly related to Student initiative

The classroom environment exhibits a good correlation between students and teachers in terms of their orientation. Developing respect and trust between both parties is a crucial endeavour. The foundation of this relationship is established via a comprehensive understanding of each student, providing them with more opportunities for decision-making, and fostering a consistent commitment to cultivating their abilities as highly proficient learners. Consequently, kids will develop a sense of trust in their educators and actively participate in the educational setting. There is a positive correlation between improved behaviour in the classroom and academic progress (Coristine et al., 2022). Teachers who cultivate robust and trust-oriented connections with their students are more adept at addressing the academic requirements of the students, resulting in enhanced learning conduct (Pawlina et al., 2018).

H5. Teacher-Student Trust is significantly related to students' online learning behaviour.

Student initiative Relationship with students' online learning behaviour

In literature, the concept of learning initiative is commonly defined as an intrinsic motivating mechanism that serves the primary purpose of consistently, positively, and actively involving pupils in the process of education. Given the existence of contemporary information systems, it is imperative for educators to operate with optimal efficiency in order to effectively instruct their students. Educational institutions in several countries worldwide are employing contemporary information systems. Hence, it is imperative for educators to explore other methods for enhancing the learning experience. One such approach is offering provisions, adaptations, and opportunities for involvement while using various technologically-based learning aids as integral components of the learning process. The implementation of effective student initiative development facilitates improved communication between teachers and students, hence enhancing the delivery of lectures (Zheng et al., 2022).

The foundation of student initiative lies in factors such as intrinsic drive for learning, effective learning methodologies, proficiency in information literacy, and a positive learning disposition. Online courses are designed to rely on the self-reliance and accountability of learners. Students are able to cultivate their own drive and initiative in order to sustain their engagement with the course. The utilisation of online courses empowers students to independently take initiative and maintain their involvement with the learning system. The student's academic trajectory is enhanced through the proactive pursuit of opportunities. Furthermore, it aids in effectively managing challenges and attaining objectives (Ravenscroft & Luhanga, 2018).

Studies conducted on the educational endeavours undertaken by students have demonstrated the influence it exerts on their conduct. The primary indicator of behaviour that can be enhanced by learning initiatives is the reduction of absenteeism and the improvement of learning behaviour (Li, Cheng, & Yang, 2022). Students are instructed to exhibit proactivity when engaging in online courses, as the delivery and instructional approach predominantly rely on the student's personal drive to actively pursue knowledge

acquisition. It is imperative to educate students on the significance of online learning and provide them with the necessary tools and techniques to ensure their success and bolster their self-assurance. The significance of initiative for kids is substantial. The enhancement of communication has been found to be a contributing factor in inspiring students through the design of the course (Tsang et al., 2021). Hence, the students' online learning behaviour can be improved by their own initiatives. Instructors can effectively communicate these requirements to students in order to mitigate feelings of solitude and isolation. Consequently, students experience a sense of ownership facilitated by the teacher, thereby enhancing their self-assurance. Ultimately, the process of acquiring knowledge commences with the active involvement of students, wherein the pivotal factor is their level of initiative (Heflin & Macaluso, 2021).

H6: Student initiative is significantly related to students' online learning behavior.

H7: Student initiative mediates between Learning-oriented teachers & Students' Online Learning Behavior.

H8: Student initiative mediates between Teacher-Student Trust & Students' Online Learning Behavior.

H9: Teacher-Student Trust mediates between Learning-oriented teachers & Students' Online Learning Behavior.

H10: Teacher-Student Trust mediates between Learning-oriented teachers & Student Initiative

Hypothesis Model

Based on the literature review and the study of influencing factors, this study proposes the following hypothesis model and research hypotheses.
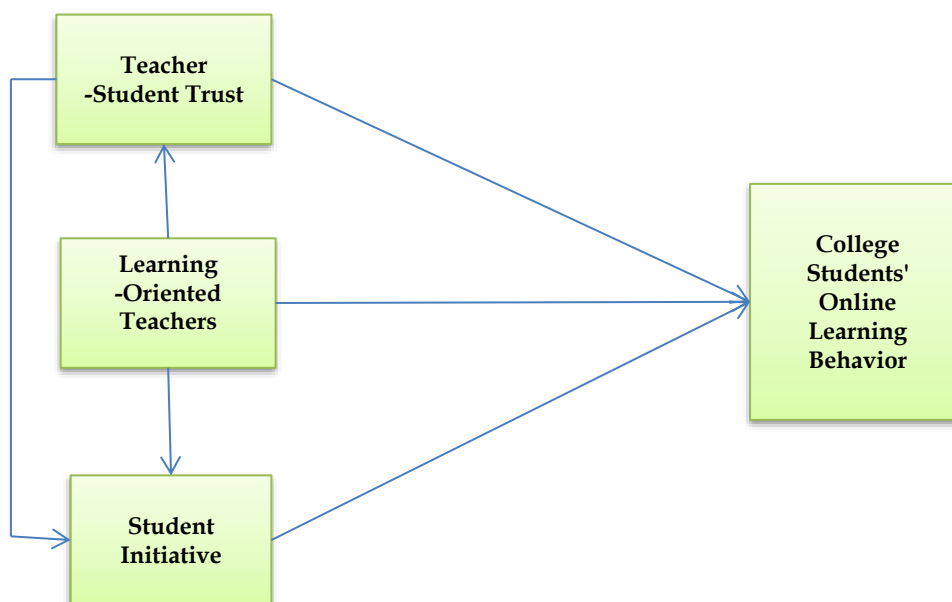

Figure 1. *Research framework*

Research Methods

In this study, a cross-sectional research design was adopted. Furthermore, a quantitative approach was also adopted, keeping in view the objectives of the study (Fraenkel, Wallen, & Hyun, 2011). By using the quantitative method, we are able to generalise an objective, valid, and reliable questionnaire and findings. Moreover, we were unable to generalise the population by using quantitative methodology. Furthermore, the reliability of the quantitative method depends on the objectives and hypotheses of the study (Shank & Brown, 2013). In this study, we tested the online behaviour of the students of institutes in Hebei Province.

To collect data from the participants, we employed questionnaires, adhering to the guidelines proposed by Lew, Lau, and Leow (2019). According to Queirós, Faria, and Almeida (2017), the utilisation of the questionnaire method enables researchers to collect information pertaining to the behaviours and viewpoints of participants. Consequently, a questionnaire was designed based on previous research findings. The questionnaire items were derived from four variables, including learning-oriented teachers, teacher-student trust, student initiatives, and online behaviour. The five-item scale for assessing online learning was derived from the work of Wang et al. (2021). Additionally, three items pertaining to student trust were adapted from the research conducted by Kunanusorn and Puttawong (2015). Furthermore, three items related to student initiative were adapted from the study conducted by Soliman, Salman, and GamalEldin (2022). Lastly, four items concerning teacher learning orientation were adapted from the research conducted by Khan and Bashir (2020). The items were constructed using a five-point Likert scale, with values ranging from 1 to 5. On this scale, a rating of 1 represents a strong disagreement, while a rating of 5 represents a strong agreement. Prior to commencing comprehensive data collecting, we administered questionnaires to a sample of 50 participants with the purpose of conducting a pilot test. The Cronbach Alpha coefficients of all variables included in the study exceeded the threshold of 0.70, indicating that the scale demonstrated satisfactory internal consistency throughout the pilot testing phase. This finding suggests that the scale is suitable for use in further full-scale testing. Subsequently, a survey questionnaire was disseminated to a sample of 300 participants through the utilisation of a simple random sampling technique. A total of 211 questionnaires were received from the respondents. Out of them, a total of twelve were found to be inadequately completed. As a result, the aforementioned surveys were excluded from subsequent research, leaving a total of 199 questionnaires for further examination. The study exhibited a response rate of 66.33 percent. The present study employed structural equation modelling (SEM) as a methodological approach and utilised partial least squares (PLS) as a tool for conducting additional analyses. The present study employed Partial Least Squares (PLS) analysis because of its capacity to effectively manage multiple independent variables (IVs) and intricate model structures. This study incorporates two mediators that contribute to the complexity of the suggested model. Consequently, the researchers employed Partial Least Squares Structural Equation Modelling (PLS-SEM) as the analytical method for the investigation.

Results

The initial phase of the research involved gathering demographic data pertaining to the participants. Based on the research findings, it was observed that 57.21 percent of the participants identified as male, while the remainder of the respondents identified as female. Furthermore, it was found that 91.11 percent of the participants belonged to the

undergraduate student category, while the remainder participants were enrolled in graduate studies. Subsequently, the obtained results were subjected to analysis using Partial Least Squares (PLS) methodology. The PLS analysis has two distinct steps, specifically the measurement model and the structural model. The initial phase of analysis involves the measurement model. During this phase of the study, the evaluation of convergent validity and discriminant validity is conducted. The model described in this work is a reflective model. Convergent validity was assessed by using statistical measures such as Cronbach's alpha and composite reliability. The purpose of these experiments was to validate the scale's reliability. As stated by Hair Jr et al. (2014), it is recommended that the factor loading in a study should be above a threshold of 0.60. Based on the factor loading statistics presented in Table 2, it can be observed that all variables exhibit factor loadings exceeding 0.60. Therefore, these items were utilised for subsequent investigation.

Table 1

Factor loading

	LOT	**SI**	**SOLB**	**STT**
LOT1	0.812			
LOT2	0.789			
LOT3	0.853			
LOT4	0.748			
SI1		0.896		
SI2		0.896		
SI3		0.885		
SOL1			0.640	
SOL2			0.867	
SOL3			0.874	
SOL4			0.826	
SOL5			0.701	
STT1				0.867
STT2				0.823
STT3				0.750

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behavior; STT= student teacher trust
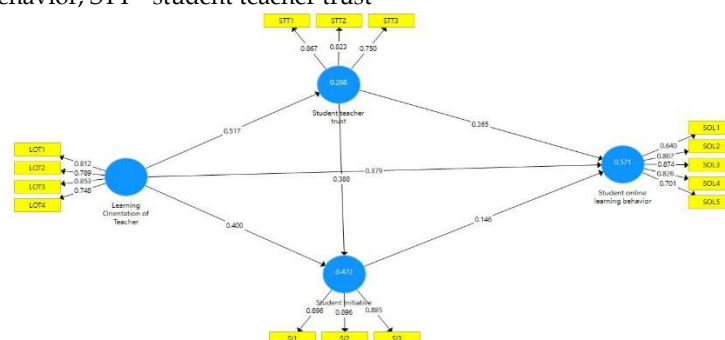
Figure 2. *Measurement model*

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behavior; STT= student teacher trust

Subsequently, an examination was conducted to assess the composite reliability and Cronbach's alpha. Hair et al. (2017) argue that both Cronbach Alpha and CR should have a minimum value of 0.70. The data presented in Table 2 clearly indicates that all observed values of CR and Cronbach Alpha above the threshold of 0.70. To establish convergent validity, this study assessed the Average Variance Extracted (AVE) as suggested by Fornell and Larcker (1981). It has been suggested by scholars that in order to establish convergent validity, the minimum acceptable value for the Average Variance Extracted (AVE) should be 0.50. As indicated by the outcomes of the Average Variance Extracted (AVE) analysis presented in Table 2, it can be observed that all the calculated values above the threshold of 0.50. Therefore, the study's convergent validity has been verified.

Table 2

Reliability and validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
LOT	0.816	0.877	0.642
SI	0.872	0.921	0.796
SOLB	0.841	0.889	0.620
STT	0.746	0.855	0.664

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behaviour; STT= student teacher trust

Table 3

Fornell and Larker

	LOT	SI	SOLB	STT
LOT	0.801			
SI	0.601	0.892		
SOLB	0.655	0.591	0.787	
STT	0.517	0.595	0.648	0.815

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behaviour; STT= student teacher trust

Table 4

HTMT

	LOT	SI	SOLB	STT
LOT				
SI	0.680			
SOLB	0.774	0.683		
STT	0.638	0.728	0.803	

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behavior; STT= student teacher trust

The present study investigated the discriminant validity of the measurements and ideas employed, aiming to determine whether they are theoretically distinct from one another. When discriminant validity is present, there is an increased likelihood of observing correlations among the data. To ascertain discriminant validity, two methodologies were employed, namely the Fornell and Larcker's (1981) methodology and the HTMT criterion. Based on the technique proposed by Fornell and Larcker (1981), it is expected that the

values along the diagonal should exhibit higher magnitudes compared to the other values. The findings shown in Table 3 demonstrate that the specified criteria have been met. In contrast, Henseler, Ringle, and Sarstedt (2015) put out the suggestion of utilising HTMT criteria as a means to assess discriminant validity. Sarstedt et al. (2014) found that the variables in question have HTMT values below the threshold of 0.85. The fulfilment of this criterion is demonstrated by the results presented in Table 4, indicating the absence of any concerns regarding discriminant validity within the context of this investigation. Following the validation of the measurement model, we proceeded to analyse the structural model in order to confirm the R square and evaluate the presented hypotheses. The examination of the structural model was conducted using a bootstrapping approach. The assessment of the relationship's nature and significance was conducted using the beta value and the t-value. The findings of the direct hypothesis are presented in Table 1.

Table 5

Direct Results

		Beta	SD	T value	P Values	
H1	LOT -> SOLB	0.379	0.151	2.504	0.004	Confirmed
H2	LOT -> STT	0.517	0.113	4.580	0.000	Confirmed
H3	LOT -> SI	0.400	0.106	3.767	0.000	Confirmed
H4	STT -> SI	0.388	0.114	3.412	0.000	Confirmed
H5	STT -> SOLB	0.365	0.114	3.199	0.001	Confirmed
H6	SI -> SOLB	0.146	0.152	0.963	0.168	Not- Confirmed

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behaviour; STT= student teacher trust

Table 5 and Table 6 demonstrate the direct as well as indirect results of the study. Statistical findings postulate that LOT and SI are significantly related to each other (B=0.496, t=4.117, P=0.00) confirming H3. On the other hand, H1 of the study confirmed showing significant relationship among LOT and SOLB (Beta=0.379, t=2.504, P=0.004). Moreover, H2 of the study is also conformed showing that LOT and STT are significantly linked to each other (Beta=0.517, t=4.580, P=0.000). Likewise, H4 of the study is also confirmed as STT has significant impact on SI as (Beta= 0.388, t=3.412). Furthermore, SOLB is significantly affected by STT confirming H5 as Beta=0.365, t=3,199, P=0.001. But results show that SI do not affect SOLB significantly as Beta=0.146, t=0.963, p=0.168

Table 6

Mediation Results

		Beta	SD	T value	P Values	Results
H7	LOT -> SI -> SOLB	0.059	0.062	0.950	0.171	Not- Confirmed
H8	STT -> SI -> SOLB	0.057	0.064	0.888	0.188	Not- Confirmed
H9	LOT -> STT -> SOLB	0.189	0.063	3.005	0.001	Confirmed
H10	LOT -> STT -> SI	0.201	0.084	2.395	0.008	Confirmed

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behavior; STT= student teacher trust

In terms of mediation relationships, mediation of SI is not confirmed among LOT and SOLB; and STT and SI. Thus, H7 and H8 are not confirmed. On the other hand, results confirm the mediating role of STT among LOT and SOLB, and LOT and SI. Therefore, H9 and H10 are confirmed.
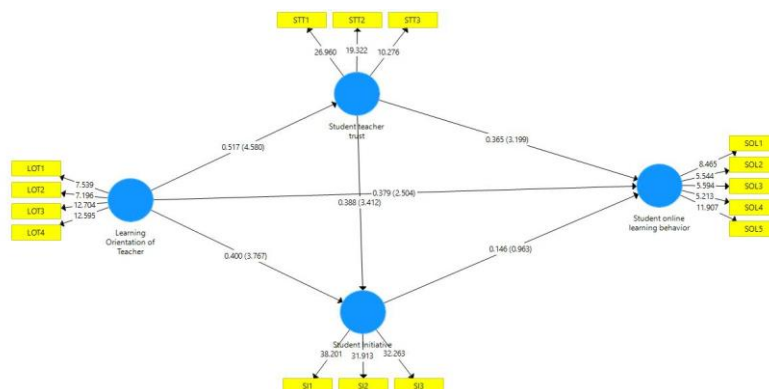
Figure 3. *Structural model*

Note: LOT= learning orientation teacher; SI= student initiative; SOL= student online learning behaviour; STT= student teacher trust

At the end of the study, the R square value is evaluated in order to assess the impact of independent variables on the result variables. The results indicate that the suggested independent variable of the study has a significant impact on SI, with a magnitude of 47.2%. Similarly, SOLB is shown to be influenced by the independent variable, with a percentage impact of 57.1%. Additionally, the investigation reveals that STT is affected by the independent variable, with a magnitude of 26.8%. These findings are presented in Table 7.

Table 7

R square

	R Square
SI	0.472
SOLB	0.571
STT	0.268

Note: SI= student initiative; SOL= student online learning behaviour; STT= student teacher trust

Discussion

The advancement of technology is occurring on a global scale. Academic institutions are increasingly using online learning as a mode of instruction. Hence, the present study was devised with the aim of investigating the impact of variables such as teachers' learning orientation, student initiative, and teacher-student trust on students' online learning behaviour. The study's findings indicate a clear relationship between online learning orientation and the online learning behaviour exhibited by students. This finding demonstrates that the teacher's orientation can significantly influence the behaviour of students. The foundation for student achievement lies in the acquisition of a learning orientation. Furthermore, the pedagogical approach adopted by educators significantly influences the formation of students' online learning behaviours. The results obtained in this study exhibit a resemblance to the findings reported by Mozie et al. (2022).

Moreover, the study's findings unveiled that the establishment of trust between students and teachers holds significance in shaping students' online learning behaviour. The educators who are instructing through online platforms serve as the public representation of the educational institution. This constitutes the sole piece of proof indicating the educational institution's engagement with students. Therefore, the behaviour of pupils is contingent upon the level of trust established between the two parties. Pawlina et al. (2018) also documented comparable findings. Likewise, the extent of trust existing between students and teachers serves as an indicator for predicting student initiative. The foundation of the student-teacher dynamic is predicated upon the degree of trust established between the two parties. When a teacher places trust in their pupils, they are able to empower them in the context of online learning. Online communication will facilitate an open channel of interaction between teachers and students. In the present scenario, students experience a sense of care and support from their teacher, thereby fostering their inclination to proactively engage in their academic pursuits and adapt to online learning. The same findings were also reported by Koca (2016) in their study.

The learning orientation of teachers has a significant impact on the development of student-teacher trust. The communication dynamics between students and teachers are influenced by the orientation of the teachers. The primary emphasis of the teacher's positive orientation lies in fostering the development and progress of the students. Furthermore, teachers also impart their lifetime experiences to their students. The various characteristics mentioned in the study conducted by Yuan et al. (2018) have a significant role in fostering trust between students and teachers. This trust subsequently influences the behaviour of students. Furthermore, the study's findings indicate that the learning attitude of teachers also influences student initiatives. The teacher's attitude towards education plays a crucial role in influencing the educational choices made by students. The findings of the study conducted by Heflin and Macaluso (2021) exhibited a resemblance to the outcomes observed in the present study.

Conclusion, Limitations, and Implications

This study intended to identify the elements that influence the online behaviour of students. The findings indicate that the establishment of trust between students and teachers plays a crucial role in fostering favourable views towards online learning. Further, the attitudes and approach of educators towards online learning play a crucial role in influencing students' behaviour and engagement in the online learning environment. Ultimately, the level of student initiative serves as the primary determinant of their online conduct. Likewise, these data provide additional evidence for the notion that student-teacher trust plays a mediating role.

The present study possesses a few drawbacks. The research was carried out in Hebei Province. Future research endeavours may explore analogous models in alternative geographical regions, including South Asia. The variables examined in this study as predictors of online learning behaviour include trust, student initiative, and orientation. Subsequent investigations may explore the involvement of additional variables. In addition, the present study solely focused on investigating the mediating influences of trust and student initiative. The examination of the moderating influence of social media and its associated elements within a comparable model is an intriguing avenue for investigation.

These findings provide valuable insights for education sector strategists seeking to promote the use of online learning among students. Furthermore, these findings offer valuable insights for scholars to inform their future research endeavours.

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