

## Exploring Parents' Attitude to Subscribe to the Ed-tech Services: Evidence from India

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### *Abstract*

*There have been numerous Educational Technology (Ed-Tech) companies investing in the Online Teaching & Learning ecosystem in the last few years. Parents play a significant role in making academic decisions for their kids. However, the peer pressure of kids, the educational background of parents, and the academic performance of wards would play an essential role in intending to subscribe to Ed-tech services. The research design is based on a self-administered questionnaire is developed to collect data from the parents of school-going students of the age between 10 years to 16 years. Convenience sampling was used to manage the data from 208 samples. The findings of the study showed that parents' awareness of ed-tech (PAE), wards' peer influence (WPI), and academic performance of ward (APW) significantly affect attitude towards ed-tech (ATE), whereas peer influence of parents (PIP) has no significant impact on their attitude towards ed-tech. The study will help stakeholders make online learning platforms more effective, engaging, and reachable. Existing literature contributes regarding the digital facility, and satisfaction of online learning. However, very limited research has been done in the area of parents' subscribing attitude to Ed-tech services.*

**Keywords:** Ed-Tech services, online learning, subscribing attitude, surrogate buying.

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## 1. Introduction

In the present technological era, where technology has colonized almost every sector, education is no exception. The education sector is further considerably impacted by the emergence of mobile and wireless technologies (So & Brush, 2008). EdTech (Education Technology) companies exploit these technologies to provide a comprehensive and accessible educational environment to the wards. Over time, the definition of EdTech has evolved. Today's definition of "EdTech" includes a wide range of startups and other organizations that are seeking to alter education and quality via the use of technology, as opposed to a decade ago when the term "EdTech" referred to the supply of computers in classrooms (Renz & Hilbig, 2020). Even the "Techlords" (Google, Microsoft, Netflix, Samsung, and Facebook) are attempting to create new data-based learning programs that enable new pedagogic tools in public institutions.

EdTech companies have flourished on online platforms thereby fostering e-learning or online education. E-learning has expanded immaculately since the advent of information technology (Yusnilita, 2020). After the pandemic, the growth of e-learning has not been restricted to developed countries, but it has now its grip on most developing countries also. Many E-Learning EdTech's, including Byju's, Extra Marks, Vedantu, and others, have emerged most successfully in the contemporary Indian environment post-pandemic. This might be used as a chance for entrepreneurship, creating e-learning through multiple internet platforms for emerging countries like India with diverse ethnicities and enormous marketplaces, creating a favourable climate for entrepreneurship (Dana, 2000). Many e-learning systems have profited from the expanded use of the internet to support e-learning. In this regard, the recent example of the phenomenal rise of "Zoom," "Google Meet," and other similar applications amid the pandemic outbreak is notable. Such Ed-tech companies flush a lot of money in advertisements across multiple channels, especially television. This may be due to the television viewing rate has increased to an average of one and a half hour (Vaidya et al., 2022) daily.

The paradigm shift from traditional to online education has generated changes in student's perception of teaching (Coman et al., 2020). Former studies about students' perceptions regarding online education highlighted certain benefits, which included flexibility and student-centredness (Dhawan, n.d.); fostering good interaction among peers using synchronous media (Adnan & Anwar, 2020; Marinoni et al., 2020);

facilitating control over time and content (Coman et al., 2020); knowledge up gradation (Jaganathan, 2021). Further, EdTechs at the primary level target mastering learning skills among pre-schoolers (Elofsson et al., 2016; Lovato & Waxman, 2016; Patchan & Puranik, 2016). It caters to the needs of specially-abled children entailing special educational needs (Bratitsis & Ziannas, 2015; Dulleck et al., 2011; Yun et al., 2016). There are also certain constraints addressed in different studies like infrastructural issues, financial bottlenecks, solitude, lack of personal touch, congestion on websites, poor awareness, and credibility issues (Fedina et al., 2017) Gudanescu, 2010; (Nisar, 2002); Fry, 2001). Besides, parental intervention is critical to a child's learning success. When the involvement of parents is found to be substantially high, the learning outcome seems to be intensified (Goodall & Montgomery, 2014). Many economic, social, and psychological forces play a critical role in the adaption of EdTechs by parents or guardians of the ward. Cultural and demographic differences also play a decisive role. Moreover, the customer (parents) and consumer (child), being different, may have conflicting interests in the perception and adoption rate of EdTech products. Thus, the present study primarily explores parents' perception and adaption rate of EdTech products for their wards.

## 2. Review of Literature

### 2.1 *EdTechs*

The term "EdTech" primarily refers to those seeking to improve education and quality via technology, especially startups and other similar organizations. It involves software companies providing technological solutions for educational institutions or businesses digitizing educational services and commercial models (Renz & Hilbig, 2020). It is the moral application of novel technology to facilitate learning by developing, utilizing, and controlling suitable technical procedures and resources for enhancing the educational ecosystem (Chen et al., 2019) describes EdTech as an innovation ecosystem aimed at developing, adopting, and implementing novel goods and services for enriching teaching and learning outcomes. In particular, fields related to computers, smartphones, and the Internet—have sparked a resurgence in education technology (EdTech), which describes any ICT application that seeks to enhance education (Escueta et al., 2017).

Owing to the present complexities, the domain of educational technology has also become intricate, encompassing a wide range of academic learning scientists, educators, course designers, educational technologists, managers,

and commercial businesses. Recent years have witnessed a growth in the networked and multisectoral nature of the EdTech ecosystem (Castañeda & Williamson, 2021). For the tremendous growth of these companies, one of the factors responsible could be the Perceived Ease of Use (PEOU) and Perceived Usefulness (PU), which exerts a certain influence on users' attitudes and, subsequently, the behavioural intention to use technology (Davis, 1987). The contributing factor, as seen in Antonenko et al., (2014) study, was that quite a good number of crowdfunding platforms (a method of supporting a project or business venture that involves soliciting funds from a large number of people, usually via the internet) like RocketHub, Kickstarter, and Indiegogo provide decent financial support (Antonenko et al., 2014). The popularity of EdTech's is also because that it is not just meant for students but also teachers and professors, as it substantially creates engaging and interactive learning experiences (Ravichandran & Shanmugam, 2023). By way of venture capital funding, Indian EdTech's have also gotten a boost of almost \$16.1B which is 32 times more than it had a decade ago. Further, the EdTech sector in India is anticipated to grow to \$30 billion during the following ten years (India Today, February 12, 2022).

## ***2.2 Growth of E-learning***

By 2026, the market for eLearning is projected to be worth USD 374.3 billion, expanding at a CAGR (Compound Annual Growth Rate) of 9.1% between 2021 and 2026 (Corporate Learning Advisor). To endure efficacy in education, e-learning uses various technologies, including the internet, email, chat, new groups and messages, audio, video conferencing, and the World Wide Web. It enables the learners to study at their own pace and convenience (Dhull & Arora, 2017).

The rapid improvement of technology in the realm of education is one of several elements that have contributed to the enlargement of e-learning. E-learning is now more accessible and practical than ever because of the high-speed internet, ubiquitous availability, and the escalation of smartphones and other such e-devices (Schweizer & Schweizer, 2004). Numerous gigantic companies like Tata and Reliance have commenced financing to aid the infrastructural setup of E-learning modules (Goyal, 2012). In addition, to accelerate the growth of e-learning, Scalable Vector Graphics (SVG), a high-performance graphics format, and semantic data have been integrated into a new version of the World Wide Web called Web 3.0 has been presented as an impending revolution in the field of education

and the Web 3.0 based software would further augment the development of EdTech's (Rana et al., 2014).

Most emerging nations have enormous requirements for education and training, which is presaged to be catered to by the mounting e-learning sources. This pertinent problem of the massive demand for secondary and tertiary education can be met by proliferating access to internet-based learning. Nationwide access to such learning sources would provide tutoring support to the masses (Capper, 2001).

### \* 2.3 *Students' Perceptive towards EdTech Products*

The study by Arkorful and Abaidoo (2015) emphasized certain advantages available to students by employing EdTech tools, including accessibility, improving the effectiveness of information, cost-effectiveness, and addressing learner variations individually. It offers the learner temporal flexibility (Hamid, 2002; Kimiloglu et al., 2017).

The acceptability of education technology tools also depends upon students' acceptance of the internet as a learning tool. It was observed that the students with a positive attitude toward e-tools had a more positive perception than those with a low acceptance rate. It is therefore crucial for universities using e-learning to research additional aspects, including instructor effectiveness, instructional materials, and technological readiness, that may affect students' perspectives toward EdTech products (Srichanyachon, 2014). Another factor that influences the perspective of the student is the capacity to communicate with other students as a valuable tool for formally networking, getting career guidance from other students, or locating employment (Warr et al., 2013). The academic performance of the ward escalated to a certain extent as it played a vital role in helping students develop self-efficacy (Rowbotham & Schmitz, 2013). Among educational technology tools, most wards have an affirmative response toward videoconferencing (Doggett, 2008; Fletcher, 2005).

In a gender-based study, it was witnessed that female students were less inclined toward technology which made them less confident in EdTech tools, while students belonging to the science and mathematics stream showed a greater rate of acceptance (Kahveci, 2010). Besides, m-learning is a widely welcomed step among students as it upsurges the plasticity of access to resources in learning (Al-Fahad, 2009). The two main components of students' views toward technology-based education are utility and ease of use (user-friendliness) (Edmunds et al., 2012).

(Galusha, 1998) chalked out specific ill results of technology-based learning where it was unearthed that the students' stress levels are raised by the absence of support services, technical help, and the potential for late course completion. Amongst the other tailbacks, Gudanescu, (2010) highlights technical difficulties and related issues as one of the main e-learning bottlenecks. In many studies, it was found that quite a sizeable portion of pupils still prefer traditional settings rather than e-learning (Gudanescu, 2010; Nisar, 2002; Fry, 2001). These hindrances resulted in peer pressure inwards connected with both technological factors (e.g., the openness of the web platform) and non-technological factors (e.g., the students' previous repertoire of knowledge and individual differences) (Zhang, 2023). To lessen the above-mentioned adverse effects, (Abou El-Seoud et al., 2014) offered Blended learning as a viable solution.

#### ***2.4 Parents' Perceptive Towards EdTech Products***

Parents' attitudes toward technology also moulds children's involvement in technology (Cheng, 2017; Kong et al., 2019; Valcke et al., 2010). Parents' perceptions were typically found to be positive, where neither age nor education was connected to parents' attitudes toward media (Vittrup et al., 2016). Similar results about the demographic factors were observed in a Turkish study where it was also explored that economic factors also play an important role in parents' involvement in wards' education (Erdener & Knoeppel, 2018). Besides the above-cited constructs, awareness towards EdTech products also plays an instrumental role towards their perception and adoption (Crist, 2002).

Venkatesh & Davis (2000) presented a Technology Acceptance Model to explore the factors contributing to the parents' acceptance rate of technology. The study located a strong influence of cognitive instrumental processes (job relevance, result demonstrability, output quality, and perceived ease of use) and social influence processes (subjective norm, image, and voluntariness) on the adoption rate of technology in education. The above study was further extended to highlight the need for a unified view that consolidates existing models to understand better the factors influencing user acceptance which is essential for a comprehensive understanding of wards' and parents' peer influence (Venkatesh et al., 2003).

The parents of pre-schoolers and primary students exhibited a relatively favourable evaluation of attitudes, usage, and beliefs regarding the use of ICT in the teaching and learning process, with notably high scores in the opinion that the deployment of such resources would enhance the

teaching-learning process (Ramírez-Rueda et al., 2021). While many studies displayed affirmative results regarding parents' perceptions of academic growth, self-driven and motivated children, and successful work life through the involvement of EdTechs' in their child's life (Green, 2016; O'Hara, 2011; Vittrup et al., 2016), some studies highlighted the parents' concern regarding undesirable effects like the possible decline in writing ability or lack of concentration during courses (Keane & Keane, 2018; Lampard et al., 2013)

### 3. Methodology

The present research measures the attitude toward subscribing to Ed-tech services. The exploratory stage of the study determined the factors that may affect the attitude of the Parents towards the Ed-tech service subscription. The first phase explored Parents' awareness of Ed-Tech (PAE), Ward's Peer influence (WIP), and the Academic Performance of Ward. Further, a self-administered digital questionnaire was developed using Google Forms to collect the data from school-going students' parents. The data is collected from Surat, a city of Gujarat province of India. Surat City is divided into seven administrative zones by the Surat Municipal Corporation. These zones were treated as strata and one randomly selected one school from each zone. While selecting the school, it was made sure that the school had undertaken the online learning activity during the COVID-19 pandemic.

Hence, there was no inclusion or exclusion criterion exclusively for the respondent. The permission to conduct research was sought from schools in each zone, and research was conducted at those schools which permitted the researchers to engage with the parents for the study. The collection of data was scheduled in consultation with the respective principals of the schools, with specific dates and times designated for the purpose, spread over approximately 65 days. Schools communicated about the research study to parents. Before, undergoing the final survey, a pre-testing survey with 18 parents was undertaken with the help of final-year college students. The basic grammatical and physical appearance errors were corrected before the final survey. Further, for the final survey, parents were invited to participate in the study, and the first thirty parents who agreed to be a part of the research were chosen as sample units from each school. Consequently, a total of 210 parents (Al-Ammari & Hamad, 2008; Al-Ammari et al., 2014; Arenas Gaitán et al., 2010) from seven schools expressed their willingness to participate in the survey. Furthermore, parents were then asked to be present on a given date and time for the study, which

was conducted within the premises of their school. Ultimately, 208 parents showed up for the survey. The present study sought to cover parents from diverse classes from grade 5 to grade 10 (Ages 10 to 16), spanning disciplines such as commerce, humanities, and science. The data collection process was undertaken with the help of two final-year graduate (BBA) students. The items used in the analysis are exhibited in below table 1. Moreover, CFA and SEM were performed to test the hypothesized relationships of the proposed research model using AMOS version 21.

**Table 1: Construct items and Sources**

Sr. No.	Construct	Author(s)	Number of items selected	Remarks
1	Parent's awareness of Ed-tech Service	(Crist, 2002)	4	Adapted and Modified
2	Ward's Peer influence	(Venkatesh et al., 2003)	5	Adapted and Modified
3	Academic Performance of Ward	(Rowbotham & Schmitz, 2013)	4	Adapted and Modified
4	Peer Influence of Parent	(Venkatesh et al., 2003)	4	Adapted and Modified
5	Attitude towards Ed-tech	(Davis, 1987)	4	Adapted and Modified

Source: Author's Adaptation

#### 4. Proposed Research Model with Hypotheses Development

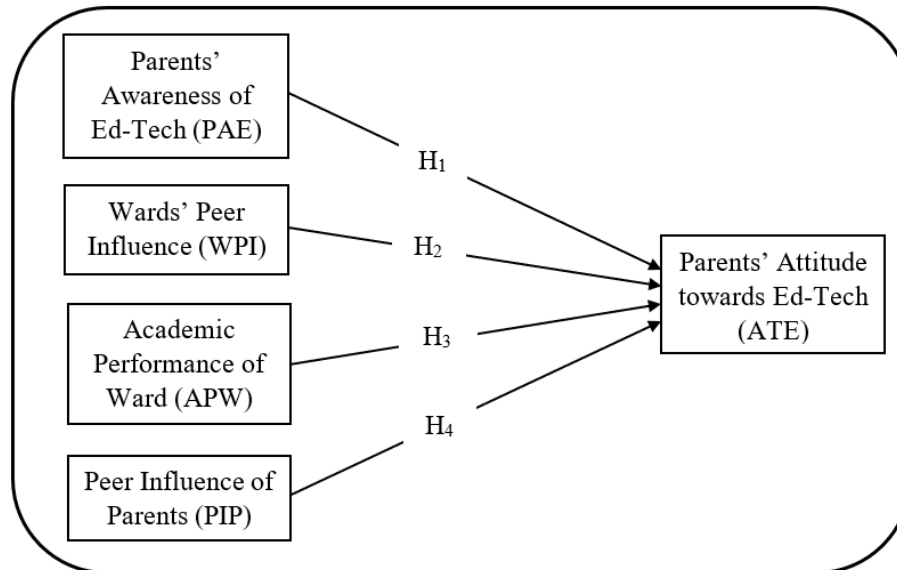
*H<sub>1</sub>: Parents' awareness of Ed-Tech significantly influences their attitude towards Ed-Tech.*

*H<sub>2</sub>: Wards' peer influence significantly influences parents' attitudes towards Ed-Tech.*

*H<sub>3</sub>: Academic performance of ward significantly influences parents' attitude towards Ed-Tech.*

*H<sub>4</sub>: The Peer influence of parents significantly influences parents' attitude towards Ed-Tech.*





**Figure I: Proposed Research Model for Parents' Attitude towards Ed-Tech**

## 5. Data Analysis

### 5.1 Demographic Profile of the Respondents:

Table 1 summarizes the respondents' demographics. Of 208 respondents, 52.40% were females ( $n = 109$ ). Most of the respondents were in the age group between 31 and 40 years (43.27%,  $n = 90$ ). Respondents with a graduate ( $n = 63$ ; 30.29%) dominated the sample, followed by those with high school level academic qualifications ( $n = 50$ , 24.04%). Income-wise, 52.88% ( $n = 110$ ) of them have monthly family income between Rs. 25,001 – 50,000. In terms of relationship to the child, most of them have a mother-child relationship (46.63%,  $n = 97$ ), followed by a father-child relationship (39.90%,  $n = 83$ ).

**Table\_2: Demographic Profile of the Respondents (n = 208)**

Demographic Variable	Category	Frequency	Percentage
Gender	Male	99	47.60
	Female	109	52.40
Age (in years)	21-30	79	37.98
	31-40	90	43.27
	41-50	20	9.62
	Above 50	19	9.13
Academic Qualification	Below 10	28	13.46
	High School (12 <sup>th</sup> Pass)	50	24.04
	Diploma	13	6.25
	Graduate	63	30.29
	Post Graduate	46	22.12
	Ph.D.	8	3.85
Monthly Family Income (in Rs.)	Less than 25,000	32	15.38
	25,001 - 50,000	110	52.88
	50,001 - 1,00,000	44	21.15
	More than 1,00,000	22	10.58
Relationship to the Child	Mother	97	46.63
	Father	83	39.90
	Legal Guardian	28	13.46

Source: Primary survey

### **5.2 Reliability of the Scale:**

To evaluate the consistency of each latent variable's scale, the value of Cronbach's alpha coefficient ( $\alpha$ ) was calculated in the SPSS 20 version. For the survey-based research threshold, an alpha value of 0.600 was suggested (Hair et al., 2009). According to table\_2, all values of Cronbach's alpha coefficient ( $\alpha$ ) ranging from 0.828 to 0.903 were greater than the thresholds, indicating internal consistency of scales.

### ***5.3 Hypotheses Testing Results:***

AMOS 21 version was used to perform structural equation modelling (SEM) in two steps (Anderson & Gerbing, 1988; Arbuckle, 2006). In stage one, confirmatory factor analysis (CFA), sometimes referred to as measurement model analysis, was used to assess reliability, convergent validity, and discriminant validity in order to examine the applicability and quality of the measurement model. Stage two focused on exploring the causal relationships between latent variables using structural model analysis.

### ***5.4 Confirmatory Factor Analysis (CFA):***

The measurement model was tested using CFA employing maximum likelihood estimation (MLE). The fit indices for the measurement model were found to be higher above the cut-off values:  $\chi^2 = 246.914$ , CMIN/df = 1.379, df = 179, p = 0.001, GFI = 0.900, IFI = 0.976, TLI = 0.971, CFI = 0.975, PNFI = 0.781 and RMSEA = 0.043. In CFA, convergent and discriminant validity were established to assess the constructs validity. Discriminant validity, as per Mostafa (2010), is the degree to which measures of two constructs are empirically distinct. Convergent validity measures how closely scale elements 'converge' on a given construct (Bagozzi et al. 1991).

**Table 3: Reliability and Validity of Scale**

Scale	Item	Corrected Item- Total Correlation	Cronbach's Alpha ( $\alpha$ )	Standardized Factor Loadings ( $\lambda$ )*	Average Variance Extracted (AVE)	Compo- site Reliabi- -lity
Parents' Awareness of Ed-Tech (PAE)	PAE1	0.731	0.873	0.758	0.633	0.873
	PAE2	0.704		0.757		
	PAE3	0.747		0.829		
	PAE4	0.739		0.835		
Wards' Peer Influence (WPI)	WPI1	0.730	0.903	0.764	0.651	0.903
	WPI2	0.735		0.772		
	WPI3	0.777		0.809		
	WPI4	0.787		0.856		
	WPI5	0.765		0.829		
Academic Performance of Ward (APW)	APW1	0.632	0.829	0.719	0.555	0.833
	APW2	0.668		0.732		
	APW3	0.717		0.815		
	APW4	0.617		0.709		
Peer Influence of Parents (PIP)	PIP1	0.630	0.828	0.693	0.550	0.829
	PIP2	0.628		0.696		
	PIP3	0.689		0.791		
	PIP4	0.678		0.779		
Attitude towards Ed-Tech (ATE)	ATE1	0.759	0.902	0.805	0.699	0.903
	ATE2	0.782		0.835		
	ATE3	0.791		0.845		
	ATE4	0.795		0.857		

Source: Research Output

**Note:** No rotation or output normalization was applied in CFA.

Convergent validity was obtained through two approaches: (a) all standardized factor loadings ( $\lambda$ ) were significant and above 0.500 (Bagozzi et al.,1991) and (b) all Average Variance Extracted (“AVE”) values were above 0.500 (Ruvio and Shogam, 2008; Fornell & Larcker,1981) and composite reliabilities were above 0.700 (Hair et al., 1998). The results of CFA showed that all standardized factor loadings ( $\lambda$ ) were higher than 0.500

and significant, which provides strong evidence for the convergent validity of the model (Bagozzi and Yi, 1988). Convergent validity is also indicated by composite reliability and average variance extracted (AVE) values that are higher than 0.700 (Fornell and Larcker 1981). All AVEs were higher than 0.500 (refer Table 3). In addition, all the composite reliabilities were also higher than 0.700. Discriminant validity was examined by comparing the square root of AVE ( $\sqrt{\text{AVE}}$ ) for each construct with squared correlations between constructs (Fornell and Larcker, 1981). In table 3, it is shown that  $\sqrt{\text{AVE}}$  is higher than squared correlations, demonstrating discriminant validity.

**Table 4: Discriminant Validity of Constructs**

Constructs		PAE	WPI	APW	PIP	ATE
Parents' Awareness of Ed-Tech	<b>PAE</b>	<b>0.795</b>				
Wards' Peer Influence	<b>WPI</b>	0.787	<b>0.807</b>			
Academic Performance of Ward	<b>APW</b>	0.750	0.786	<b>0.745</b>		
Peer Influence of Parents	<b>PIP</b>	0.750	0.743	0.680	<b>0.741</b>	
Attitude towards Ed-Tech	<b>ATE</b>	0.727	0.718	0.703	0.625	<b>0.836</b>

Source: Research Output

Note: Diagonal values display the AVE's square root for each construct.

### 5.5 Testing Structural Model:

Structural equation modelling (SEM), after having a reasonably well-fitting measurement model, was utilized to assess the structural model. The path coefficients of hypothesized relationships between constructs were evaluated for path analysis using AMOS. A structural model is a group of dependent relationships that interconnect the constructs of a hypothesized model (Hair et al. 1996). The fit indices of structural model are as follows:  $\chi^2 = 246.914$ ,  $\text{CMIN}/\text{df} = 1.379$ ,  $\text{df} = 179$ ,  $p = 0.001$ ,  $\text{GFI} = 0.900$ ,  $\text{IFI} = 0.976$ ,  $\text{TLI} = 0.971$ ,  $\text{CFI} = 0.975$ ,  $\text{PNFI} = 0.781$  and  $\text{RMSEA} = 0.043$  showed a reasonable model-fit. As shown in Figure II, the research model, which has a predictive power of 60.5% ( $R^2 = 0.605$ ), was validated by the analytical findings. Table 4 contains the structural path coefficients for the research model used in this study.

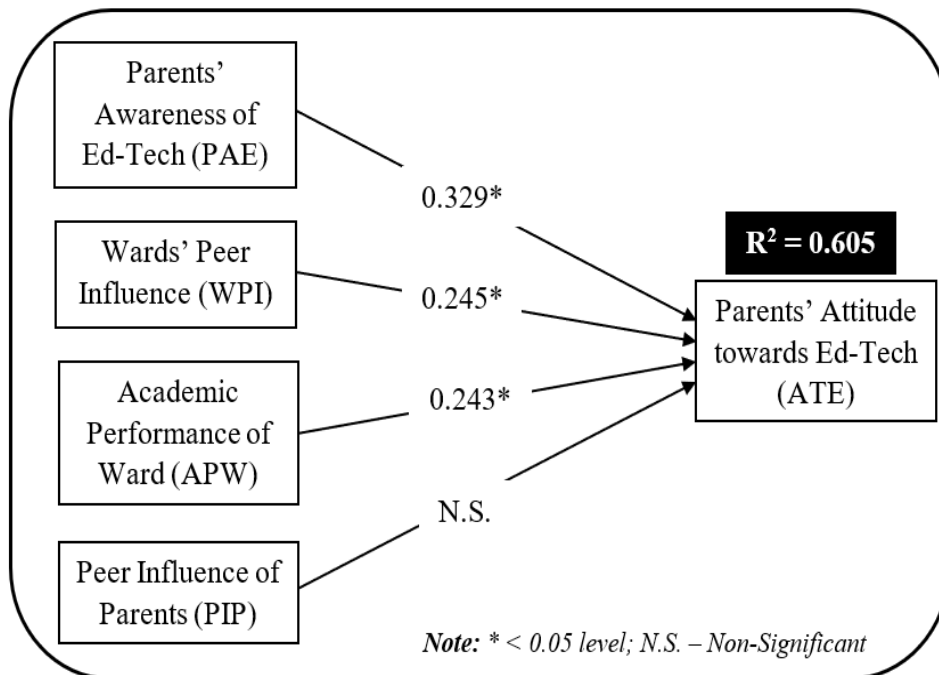
**Table 5: Results of Path Analysis**

Hypothesized Relationship	Standardized Coefficients ( $\beta$ )	t value	Hypothesis Supported
PAE → ATE	0.329	2.708*	Yes
WPI → ATE	0.245	1.967*	Yes
APW → ATE	0.243	2.089*	Yes
PIP → ATE	0.031	0.295	No

Source: Research Output

*Note:* \* < 0.05 level

Parents' awareness of ed-tech was found to have a significant and positive impact on parents' attitudes towards ed-tech ( $\beta = 0.329$ ,  $t = 2.708$ ;  $p < 0.05$ ). Moreover, wards' peer influence ( $\beta = 0.245$ ,  $t = 1.967$ ;  $p < 0.05$ ) and academic performance of wards ( $\beta = 0.243$ ,  $t = 2.089$ ;  $p < 0.05$ ) were discovered to be significantly and positively related to parents' attitude towards ed-tech (refer Table\_4). However, the relationship between peer influence of parents and parents' attitude towards ed-tech—was not significant ( $p > 0.05$ ).



**Figure II: Structural Model for Parents' Attitude towards Ed-Tech**

## 6. Discussion of Research Findings

This study attempts to measure parents' attitudes toward subscribing to Ed-tech services in the context of India. The results of this study provide good empirical support for the structural research model depicted in Figure II and for all the causal relationships among the model's variables, excluding one variable, namely peer influence of parents (PIP). The finding indicates that the research model of this study has good predictive power ( $R^2 = 0.605$ ) and helps policymakers to better understand different factors affecting parents' attitudes to subscribe to the Ed-Tech services in India. The study's main contribution is that parents' awareness of Ed-Tech ( $\beta = 0.329$ ) has a strong impact and appears to be the primary positive determinant of parents' attitudes to subscribe to Ed-Tech services, followed by wards' peer influence ( $\beta = 0.245$ ) and academic performance of ward ( $\beta = 0.243$ ). It implies that parents' awareness of Ed-Tech is the most crucial predictor of parents' attitude toward subscribing to Ed-Tech services, consistent with many previous studies (Vittrup et al., 2016, Cheng, 2017; Kong et al., 2019). This result demonstrates that parents will not sign up for Ed-Tech services if they are not adequately aware of it. Hence, to develop parents' and students' favourable attitudes regarding subscribing to Ed-Tech services, Ed-tech service providers should properly make their users aware of these services, and their associated benefits.

Besides this, following the research model of this study, wards' peer influence is the second most significant factor influencing parents' attitudes to subscribe to Ed-Tech services in India. This finding is also supported by Spaulding et al. (2002). It suggests that peer pressure from wards can impact parents' choices to subscribe to Ed-Tech services. In this situation, system designers and providers of Ed-Tech services must encourage the usage of these services among customers via word-of-mouth advertising.

Finally, an exciting finding of this study is that parents' peer influence had a considerable favourable influence on their attitudes towards subscribing to Ed-Tech services in India. This result was consistent with other empirical research studies (Venkatesh & Davis, 2000; Keane & Keane, 2018), which showed the dominating significance of parents' peer groups on their attitudes toward Ed-Tech subscriptions. As a result, the companies offering Ed-tech services must promote the need for Ed-Tech and its associated benefits, teach customers how to use Ed-tech services, and emphasize positive word-of-mouth marketing.

## 7. Major Scope of the Study

Ed-tech leaped in the late 2010s; however, the recent pandemic has left a significant influence on Ed-tech product-adoption. Many companies are investing heavily in Ed-Tech companies. The current study has only covered the school-going kid's parent; moreover, the present study has only measured the influence of awareness of Ed-tech, wards' peer influence, the academic performance of wards, and peer influence of parents on parents' attitude towards Ed-tech services. There can be many more constructs that can have an impact on the parents' intent to subscribe to Ed-Tech services.

## 8. Implications of the Study

The findings of this study will broaden the body of information previously accessible on the use of EdTech. Parents' attitudes toward subscribing to EdTech services in the education sector in India can have various implications, influencing both individual families and the education system as a whole. Positive parental attitudes toward EdTech subscriptions may lead to increased access to high-quality educational content and student resources. This can contribute to an overall improvement in the quality of education. If parents view EdTech services as practical tools for learning, students may experience improved learning outcomes. Interactive and engaging educational platforms can cater to different learning styles and reinforce classroom teachings. The study highlights the role of parents in supporting online learning through EdTech. This can aid in developing such strategies for involving parents in their children's virtual education.

The research further provides insights into EdTech services effectiveness in facilitating online learning. This information is valuable for educators and institutions seeking evidence-based strategies for improving educational outcomes through technology. These findings shed light on practical pedagogical approaches within online learning environments. Educators can use this information to enhance ~~their~~ teaching methods and design more engaging and interactive online courses. Insights into how technology keeps students motivated and actively participating in virtual classrooms can be leveraged by these EdTech companies. Teacher training programs and professional development initiatives can be accordingly undertaken. This might ease the integration of EdTech services with traditional teaching models. This information is crucial for educators and institutions navigating the transition from conventional to online learning. Understanding these implications can help stakeholders make informed



decisions, develop policies, and improve the design and delivery of online learning experiences through EdTech services.

## 9. Limitations and Future Scope of the Study

The data was collected only from the school students' parents and further studies can be carried out with more classes. Moreover, further studies can be extended to college-going students and working professionals also as there is a significant difference in courses (S Schmitz, 2013). The current study has only focused on specific variables and constructs; future studies can involve more constructs that can deepen the outcome. There can be other variables, such as availability, and recommendations by schools, that can impact the parent's attitude and intention to adopt the Ed-tech services (Morrison et al., 2019). Also, the study can be carried out with the government schemes for free online education and its adoption.

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