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An Examination of Social Influence and ICT Use Among Grade 10 Learners in South African Secondary Schools

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ABSTRACT

Despite the significant investments in information and communication technology (ICT) within South African schools, Grade 10 students persist in underutilising digital learning tools, hence constraining engagement and the cultivation of digital competences. This quantitative study investigates the influence of social factors, specifically peers and authority figures, on ICT usage among 1,483 Grade 10 students from nine purposively sampled secondary schools. Data were collected using a Likert-scale questionnaire and processed using descriptive and inferential statistics. The results indicate that authoritative people have a greater perceived impact on the use of ICT (M = 4.42) compared to peers (M= 2.89). The Pearson correlation analysis indicated a statistically significant, moderately positive association between social impact and learners' propensity to utilise ICT ($r = .308$, $p < .001$). The study advocates for improving teacher and family support, promoting structured peer modelling, and integrating guided digital learning methodologies into classroom instruction to facilitate ICT adoption. These findings inform educational policy and practice to improve significant ICT integration among Grade 10 students in underdeveloped countries. The study addresses a gap in the literature by presenting learner-level evidence about the influence of significant others on ICT utilisation in South African secondary schools. It broadens the scope of technology acceptance research beyond its conventional emphasis on higher education and organisational contexts. The findings improve our understanding of the social aspects that affect the adoption of ICTs in educational systems in developing countries.

Keywords: Information and Communication Technology Adoption, Learners' Intentions, Significant Others, Secondary Schools, Social Influence.

INTRODUCTION

The use of digital technology to support, improve, and automate teaching and learning processes is known as information and communication technology (ICT) in education. The use of ICT tools has therefore become increasingly widely acknowledged as a crucial resource for improving learners' engagement, supporting creative teaching methods, and giving learners the digital skills needed in a knowledge-based economy.[1] Through increasing access to digital technologies and educational

[1] Msafiri Mgambi Msambwa, Kangwa Daniel, and Cai Lianyu, "Integration of Information and Communication Technology in Secondary Education for Better Learning: A Systematic Literature Review," *Social Sciences & Humanities Open* 10 (2024): 101203, https://doi.org/10.1016/j.ssaho.2024.101203; Yangchun Li, "Predicting Factors Behind Students' Perceived Usefulness and Behavioral Intention to Adopt E-Learning: A Case Study of a Private University in Zhanjiang, China," *AU-GSB E-Journal* 18, no. 4 (2025): 237.

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resources, it has been instrumental in lowering the global digital divide and fostering more equitable learning opportunities across the globe.[2]

ICT integration has been given top priority in educational policy agendas around the world as a way to enhance learning resource accessibility, encourage interactive education, and support equitable educational opportunities.[3] In South Africa, a series of government-initiated educational technology initiatives has provided infrastructure, connectivity, and digital platforms in secondary schools to promote ICT-enabled learning.[4] Research suggests that learners' use of ICT is still restricted and uneven despite these investments, especially in secondary education.[5] Considering the educational value that the use of ICT offers, such as curriculum delivery, assessment administration, recording and reporting, and the development of digital literacy skills, underutilisation of ICT remains at a shocking level.[6] Previous studies mostly focused on physical and technical infrastructural challenges, digital access, teacher competency, adoption, and confidence.[7] Social and behavioural dimensions at the learner level with respect to the use of ICT resources have not been adequately addressed.[8]

Grade 10 learners in the participating public secondary schools were allocated tablets that will assist them with their schoolwork as they get ready for their post-secondary school, at this crucial point in their secondary education transition. Understanding the social determinants of ICT adoption at this juncture is crucial, encompassing awareness, usage frequency, and overall adoption, to tackle ongoing underutilization and guarantee that learners effectively utilize the existing digital resources.[9]

The study aims to address the gap by investigating how social factors influence the use of ICT by Grade 10 learners in South African secondary schools. In accordance with the Unified Theory of Acceptance and Use of Technology (UTAUT) framework, the study investigates how the perceptions of learners, educators, parents, and policymakers affect learners' behavioural intention to make use of the GDE-initiated EDP. By integrating descriptive and inferential analysis, this study presents empirical data on learner-level influence on society, offering insights that can inform teaching and learning strategies, school leadership, and policy in the context of emerging economies. As a result, the current study investigates how social factors affect learners' use of ICT in secondary schools. This study produces empirical data on social factors at the learner level by combining descriptive and inferential analyses.

This study, therefore, examines the influence of significant others on how Grade 10 learners in South African secondary schools use ICTs. This is made evident by exploring the Grade 10 learners' experiences of using ICT, determining the influence of the most significant people on the use of ICT, and ascertaining whether the use of ICT by learners in Grade 10 has a statistically significant correlation

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[2] Felicia Bosede Bamire, "Utilization Of ICT Tools In The Supervision Of Teaching And Learning Processes In Public Secondary Schools In Osun State, Nigeria," *Journal of Emerging Trends in Educational Research and Policy Studies* 17, no. 2 (2026): 53–62.

[3] Stephen Carney, *Reimagining Our Futures Together: A New Social Contract for Education: By UNESCO, Paris, 186 Pages, ISBN 978-92-3-100478-0*, vol. 58 (Taylor & Francis, 2022).

[4] Department of Education, *White Paper on E-Education: Transforming Learning and Teaching through ICT* (Pretoria: Government Printing works, 2004).

[5] Athanasia Regli et al., "Beyond Digital Natives: A System-Level Analysis of Institutional Barriers and Teacher Experience in Secondary School ICT Integration," *Sustainability* 18, no. 2 (January 21, 2026): 1108, https://doi.org/10.3390/su18021108; Bi Ying and Zulkarnain A. Hatta, "Technological Resources, Teacher-Student Ratio Differences, and Educational Inequality Between Urban and Rural Areas in China," *International Journal on Recent Trends in Business and Tourism* 09, no. 01 (2025): 14–23, https://doi.org/10.31674/ijrtbt.2025.v09i01.002.

[6] Merih Welay Welesilassie and Berhane Gerencheal, "Digital Language Instruction in Ethiopian High Schools: Digital Literacy, Utilization, and Challenges," *European Journal of Interactive Multimedia and Education* 6, no. 1 (January 1, 2025): e02501, https://doi.org/10.30935/ejimed/15722.

[7] Barutoa Ruth Mnisi, Thokozani Isaac Mtshali, and Makgato Moses, "Moving beyond the Challenges of Learning through Technologies: The Current Status of ICT Integration in South African Schools," *Journal of Education and E-Learning Research* 11, no. 1 (February 16, 2024): 128–34, https://doi.org/10.20448/jeelr.v11i1.5396.

[8] Jeanette La Fleur and Reuben Dlamini, "Towards Learner-Centric Pedagogies: Technology-Enhanced Teaching and Learning in the 21st Century Classroom," *Journal of Education*, no. 88 (October 27, 2022): 1–17, https://doi.org/10.17159/2520-9868/i88a01; Nicholas Bremner, Nozomi Sakata, and Leanne Cameron, "The Outcomes of Learner-Centred Pedagogy: A Systematic Review," *International Journal of Educational Development* 94 (October 2022): 102649, https://doi.org/10.1016/j.ijedudev.2022.102649;Ju Lim and Peter Wardrip, "Technology Integration as a Spectrum: Integrating Technology in Early Childhood Classrooms," *Teachers and Teaching* 32, no. 2 (February 17, 2026): 289–307, https://doi.org/10.1080/13540602.2024.2420137.

[9] Marco Angrisani et al., "Gaps in Large Language Model Awareness, Usage, and Perceptions in the United States: Evidence from a Nationally Representative Longitudinal Survey," *PNAS Nexus* 5, no. 2 (February 5, 2026), https://doi.org/10.1093/pnasnexus/pgag007.

with social influence.

Pursuant to these objectives, the study was motivated by the following research questions:

1. What is the influence of important others on ICT utilisation?
2. Is there statistical significance between social influence and ICT utilisation?

The research questions were directly related to the goals of this study, which is to examine the influence of important others on Grade 10 learners' ICT use in South African secondary schools. By answering these research questions, the study seeks to produce empirical data that advances the theoretical knowledge within the Unified Theory of Acceptance and Use of Technology and its additional constructs.

This investigation is grounded in the UTAUT framework, examining factors influencing learners' behavioural intentions and actual technological system use in order to explain technology adoption, and serves as the theoretical basis for the study. In accordance with the UTAUT framework, learners' behavioural intentions to use an educational system are influenced by performance expectancy, effort expectancy, social influence, and facilitating conditions.[10] This study operationalised the UTAUT framework and examined learners' behavioural intention to use the GDE-initiated EDP. To investigate learners' behavioural intention to use the GDE-initiated EDP. Specifically, the idea of social influence is put into perspective by dissecting reference groups in the educational ecosystem, including learners, peers, parents, educators, and the school leadership, whose attitudes, expectations, and behaviours may influence learners' behavioural intentions to use the EDPs. Additionally, favourable circumstances are examined using the institutional and infrastructural support systems provided at the district or school levels. Through the adaptation of the UTAUT model to the South African basic education system, the study offers a more nuanced understanding of how socially mediated and structurally enabled variables influence learners' uptake and planned use of the EDP.

LITERATURE REVIEW

This section critically examined the literature on the use of ICT by learners and the influence of significant others on technology use in secondary schools. Some scholars have alluded to the fact that social influence is one of the major determining factors in the adoption and use of technology.[11] The review synthesizes available knowledge by emphasizing the contradicting findings, identifying areas of consensus, and examining contextual factors that elucidate the variations in ICT utilisation, rather than merely describing individual studies. The review ends by pointing out gaps in the research that serve as justification for the current study, which examines how instructors, departmental officials, parents, and peers influence Grade 10 learners' use of ICT in South African secondary education.

Learners' perceptions of ICT utilization

The views, attitudes, and experiences of learners on the educational value and usefulness of digital technology for learning are called their perceptions of ICT utilization. According to theories of technology acceptance, learners are more likely to have good attitudes regarding the use of ICT if they believe it is relevant, helpful, and supportive of their learning.[12] Research suggests that positive learners' views about educational digital tools are associated with higher levels of likelihood of engagement, better access to learning materials, improved collaboration and enhanced learning attainments.[13] These results imply that meaningful use of ICT requires favourable attitudes.

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[10] Viswanath Venkatesh, James Y. L. Thong, and Xin Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology1," *MIS Quarterly* 36, no. 1 (March 1, 2012): 157–78, https://doi.org/10.2307/41410412.

[11] Viswanath Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View1," *MIS Quarterly* 27, no. 3 (2003): 425–78; Venkatesh, Thong, and Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology1."

[12] Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View1"; Venkatesh, Thong, and Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology1."

[13] Abid Haleem et al., "Understanding the Role of Digital Technologies in Education: A Review," *Sustainable Operations and Computers* 3 (2022): 275–85, https://doi.org/10.1016/j.susoc.2022.05.004; Chen Tang et al., "Deep Reinforcement Learning for Robotics: A Survey of Real-World Successes," *Annual Review of Control, Robotics, and Autonomous Systems* 8, no. 1 (May 5,

However, the relationship between learners' perceptions and their actual use of ICT is not always. Although learners may recognize the educational value of digital tools, favourable opinions may not always result in consistent or meaningful use.[14] According to studies done in South Africa, learners often appreciate ICT but underutilize it because of uneven classroom integration, few opportunities for independent use, and unequal access outside of school.[15] These conflicting results imply that learners' perceptions are not enough to account for ICT use.

The discrepancies observed in earlier studies may be attributed to contextual factors that transcend individual attitudes. Differences in school infrastructure, teachers' methods of teaching, home digital environments, and socioeconomic circumstances shape learners' possibilities to interact with ICT are shaped by . These factors also affect whether favourable perceptions are translated into regular use.[16] As a result, understanding ICT use requires taking into account the broader institutional and social framework in which learners learn.

There is limited empirical data on how Grade 10 learners taking part in the GDE's ICT project see ICT use in South African secondary schools, despite the fact that learner attitudes have been extensively studied. To close this gap, this study looks at how learners perceive the use of ICT in the Gauteng environment and lays the foundation for further research into the social aspects that can affect technology use.

Social influence and ICT utilization

The Unified Theory of Acceptance and Use of Technology (UTAUT) defines social influence as the degree to which people believe their significant others think they should use a specific technology.[17] In secondary education, influential figures include teachers, departmental officials, parents, and peers, whose expectations, support, and behaviours influence learners' choices to adopt and use ICT. Therefore, social influence goes beyond personal opinions by acknowledging that technology use takes place in institutional and social contexts.

A substantial body of research agrees that significant others are vital to improving the use of ICT by learners. Although departmental officials set institutional standards and foster ICT adoption, teachers have an impact on technology use by incorporating digital resources into teaching, learning, and assessment.[18] According to certain scholars, parents can help by promoting the use of educational technology, granting access to digital resources, and rewarding positive learning behaviour at home.[19] During adolescence, peer acceptability, social modelling, and collaborative learning all have an additional influence on ICT use.[20] All of these studies show that interactions between the home and

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2025): 153–88, https://doi.org/10.1146/annurev-control-030323-022510; Regli et al., "Beyond Digital Natives: A System-Level Analysis of Institutional Barriers and Teacher Experience in Secondary School ICT Integration."

[14] Sandrotua Bali et al., "Social Influence, Personal Views, and Behavioral Intention in ChatGPT Adoption," *Journal of Computer Information Systems*, December 20, 2024, 1–12, https://doi.org/10.1080/08874417.2024.2441758.

[15] Mnisi, Mtshali, and Moses, "Moving beyond the Challenges of Learning through Technologies: The Current Status of ICT Integration in South African Schools"; Chinegbonkpa Hope Nwakanma and Maryam Chinasa Adewunmi, "Use of ICT in South African Schools and the Plight of Marginalized Learners During the Covid-19 Pandemic," *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan* 10, no. 3 (2025): 125–35.

[16] Reuben S Dlamini, "Complex Inequalities and Inequities in Education: Expanding Socially Just Teaching and Learning through Digitalisation in South Africa.," *Alternation*, 2022, 193.

[17] Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View."Venkatesh, Thong, and Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology."

[18] Samuel Attuquayefio and Hillar Addo, "Using the UTAUT Model to Analyze Students' ICT Adoption," *International Journal of Education and Development Using ICT* 10, no. 3 (2014); Li, "Predicting Factors Behind Students' Perceived Usefulness and Behavioral Intention to Adopt E-Learning: A Case Study of a Private University in Zhanjiang, China"; Nosica Rizkalla, Hendy Tannady, and Ricky Bernando, "Analysis of the Influence of Performance Expectancy, Effort Expectancy, Social Influence, and Attitude toward Behavior on Intention to Adopt Live.On," *Multidisciplinary Reviews* 6 (February 6, 2024): 2023spe017, https://doi.org/10.31893/multirev.2023spe017.

[19] Duygu Gür and Yalın Kılıç Türel, "Parenting in the Digital Age: Attitudes, Controls and Limitations Regarding Children's Use of ICT," *Computers & Education* 183 (July 2022): 104504, https://doi.org/10.1016/j.compedu.2022.104504; Jing Wang, Shuyu Chen, and Barry Bai, "Cultivating Children's Online Self-Regulated Learning: The Role of Parental Mediation and Support," *Education and Information Technologies* 30, no. 13 (August 10, 2025): 19297–328, https://doi.org/10.1007/s10639-025-13555-z.

[20] Brett Laursen and René Veenstra, "Toward Understanding the Functions of Peer Influence: A Summary and Synthesis of Recent Empirical Research," *Journal of Research on Adolescence* 31, no. 4 (December 24, 2021): 889–907, https://doi.org/10.1111/jora.12606; Rakshak Bharti et al., "Transformative Impact of ICT on Education: Leveraging Technology and Communication to Enhance Teaching and Learning," *Feedback International Journal of Communication* 1, no. 3 (2024): 131–41.

school contexts influence how ICT is used.

Despite widespread consensus on the significance of social influence, previous research presents contradictory results regarding which key individuals have the most substantial impact. While some emphasise parental support when home access and parental digital literacy are better,[21] others identify teachers as the key factors because ICT use is primarily ingrained within classroom practice.[22] Other studies have shown that peer influence becomes more significant during adolescence because learners are especially sensitive to peer approval and group learning.[23] These variations imply that the impact of important people varies greatly depending on the situation.

These variations in findings could be due to differences in educational level, cultural context, socioeconomic conditions, ICT infrastructure, and access to digital technologies. Therefore, it is not possible to assume that findings from higher education or foreign contexts will automatically apply to the South African secondary schooling system.

Although social influence has been extensively studied in technology acceptance research, comparatively few studies have simultaneously examined the impact of peers, parents, teachers, and departmental officials on South African secondary school learners. To close this gap, this study looks at how learners perceive these important people and examines the statistical correlation between social influence and ICT use among Grade 10 learners taking part in the ICT initiative of the GDE.

METHODOLOGY

Research design

This study used a cross-sectional survey design and a quantitative research methodology. The design was deemed suitable for analysing correlations between constructs linked to ICT utilization in secondary school contexts and for investigating learners' perspectives. To achieve the goals of the study, descriptive and inferential statistical methods were used. To improve effective technology integration in schools, specific interventions, including educators, school administration, peers, and parents, can be informed by an understanding of whether and to what extent social influence strongly predicts the use of ICT by learners.

Research context and participants

The investigation was carried out in eight South African secondary schools that were purposively chosen. The schools were chosen based on their involvement in the Educational Digital Platform (EDP) program, which was started by the Gauteng Provincial Education Department (GPEDU). Since Grade 10 learners represent a crucial stage in secondary school where ICT use is anticipated to help curriculum delivery and evaluation, they made up the target group. Instead of a sampled subset, a census of the accessible population was produced by including all Grade 10 learners in the participating schools.[24] The study involved 1,518 learners in all nine secondary schools in the selected districts within the province. 1,483 valid questionnaires were kept for statistical analysis following data screening and the elimination of incomplete responses. This sample size increases the findings' robustness and surpasses the minimum requirements for correlational analysis.[25]

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[21] Eliana Maria Osorio-Saez, Nurullah Eryilmaz, and Andres Sandoval-Hernandez, "Parents' Acceptance of Educational Technology: Lessons From Around the World," *Frontiers in Psychology* 12 (August 30, 2021), https://doi.org/10.3389/fpsyg.2021.719430; Mariecris Galabay and Henriquito Tepacia, "Parental Support for Information and Communication Technology Learners," *GEO Academic Journal* 6, no. 1 (August 29, 2025), https://doi.org/10.56738/issn29603986.geo2025.6.103.

[22] Timothy Teo, "Factors Influencing Teachers' Intention to Use Technology: Model Development and Test," *Computers & Education* 57, no. 4 (December 2011): 2432–40, https://doi.org/10.1016/j.compedu.2011.06.008; Li, "Predicting Factors Behind Students' Perceived Usefulness and Behavioral Intention to Adopt E-Learning: A Case Study of a Private University in Zhanjiang, China."

[23] Bharti et al., "Transformative Impact of ICT on Education: Leveraging Technology and Communication to Enhance Teaching and Learning."

[24] Ilker Etikan, Sulaiman Abubakar Musa, and Rukayya Sunusi Alkassim, "Comparison of Convenience Sampling and Purposive Sampling," *American Journal of Theoretical and Applied Statistics* 5, no. 1 (2016): 1–4.

[25] Barbara G Tabachnick, Linda S Fidell, and Jodie B Ullman, "Using Multivariate Statistics," 1996; Andrew L Comrey and Howard B Lee, *A First Course in Factor Analysis* (Psychology press, 2013).

Research Instrument

A structured self-administered questionnaire based on validated instruments from the Unified Theory of Acceptance and Use of Technology (UTAUT/UTAUT2) framework was used to collect data.[26] The questionnaire examined independent constructs of performance expectation, effort expectation, social influence, facilitation conditions, hedonic motivation, price value, and habit, and the dependent construct of behavioural intentions. The key constructs of interest for this investigation are the social influence and the behavioural intentions constructs.

Data Collection Procedure

With approval from the school's leadership, data collection was carried out during regular school hours. Learners were made aware of the study's objectives, given the assurance of anonymity and secrecy, and told that participation was entirely voluntary. Data protection and informed consent ethics were closely adhered to.

Data analysis

IBM SPSS Statistics was used for data analysis. Learners' impressions of social influence were summed up using descriptive statistics (frequencies, percentages, means, and standard deviations). To investigate the connection between social influence (SI) and behavioural intention (BI), inferential analysis was restricted to Pearson product-moment correlation.[27] In accordance with theory-driven findings drawn from the UTAUT framework, a one-tailed significance test was used. The $p < .001$ level was used to determine statistical significance. To put it another way, Pearson correlation analysis looked at the connection between behavioural intention and social impact. A one-tailed significance test was performed at $p < .001$.

PRESENTATION OF FINDINGS

Using SPSS software, Cronbach's alpha was used in this study to assess the reliability and consistency of the multi-item scale. Cronbach's alpha coefficients were calculated to assess the internal consistency of the measuring instrument for the two constructs examined in this study. Table 1 illustrates the internal consistency of the study constructs. The behavioural intention construct had satisfactory internal consistency (Cronbach's alpha = 0.743). The social influence construct produced a Cronbach's alpha coefficient of 0.644, indicating moderate internal consistency. Considering that the construct consisted of merely three items, this degree of reliability was deemed sufficient for the study's objectives; however, the results pertaining to this construct should be interpreted with due caution.

Table 1: Internal Consistency Reliability of the Measurement Constructs (N = 1,483)

Constructs	N of Items	Cronbach alpha
Social Influence (SI)	3	0.644
Behavioural Intention (BI)	3	0.743

Although demographic variables may not directly relate to the research objectives, they offer significant contextual information about the study population. The participants are summarized in Table 2 by district, school, school type, years in Grade 10, gender, and age.

[26] Venkatesh, Thong, and Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology1."

[27] Néstor Israel Quinapanta Castro and Andres F Orbea, "An Active Three-in-One Teaching Approach Integrating Article Analysis, SPSS Simulation, and Lectures in Biostatistics Education for Medical Students," *Cureus*, January 21, 2026, https://doi.org/10.7759/cureus.102038.

Table 2: Demographic characteristics of the participants (N = 1,483)

Demographics Data		Count	Column N %
DISTRICT	Gauteng East	50	3.4%
	Gauteng West	258	17.4%
	Johannesburg Central	753	50.8%
	Johannesburg West	201	13.6%
	Johannesburg East	221	14.9%
SCHOOL NAME	School 1	50	3.4%
	School 2	258	17.4%
	School 3	156	10.5%
	School 4	302	20.4%
	School 5	87	5.9%
	School 6	208	14.0%
	School 7	221	14.9%
	School 8	201	13.6%
SCHOOL CATEGORY	Fee Paying	87	5.9%
	No Fee Paying	1396	94.1%
YEARS IN A GRADE	1st	28	87.9%
	2nd	512	10.2%
	3rd	28	1.9%
GENDER	Male	512	34.5%
	Female	971	65.5%
AGE	14 - 15 Years	498	33.6%
	16 - 17 Years	850	57.3%
	18 - 20 Years	135	9.1%

Table 2 illustrates that the predominant proportion of participants originated from the Johannesburg Central area (n = 753, 50.8%), succeeded by Gauteng West (n = 258, 17.4%), Johannesburg East (n = 221, 14.9%), Johannesburg West (n = 201, 13.6%), and Gauteng East (n = 50, 3.4%). The sample was made up of learners from eight participating secondary schools. School 4 contributed the most respondents (n = 302, 20.4%). The majority of participants attended non-fee-paying schools (n = 1396, 94.1%), while only a few of them (n = 87, 5.9%) attended fee-paying secondary schools. In terms of advancement through Grade 10, the majority of learners were enrolled for the first time (n = 1 304, 87.9%), succeeded by those who repeated the grade twice (n = 151, 10.2%) and three times (n = 28, 1.9%).

Research Question 1: What is the influence of important others on ICT utilisation?

Descriptive statistics were employed to analyse learners' perceptions of social influence on the use of ICT. Three questionnaire items (SI1 – SI3) on a six-point Likert scale from strongly disagree to strongly agree were used to quantify social influence.

Table 3: Learners' perceptions of social influence on ICT use (N = 1,483)

	Strongly Disagree/ Disagree	Slightly Disagree	Slightly Agree	Agree/ Strongly Agree	Mean	Std Deviation
Count	172	79	289	943	4.42	1.404
SII Row N %	11.6%	5.3%	19.5%	63.6%		
Count	255	108	254	866	4.29	1.438
SI2 Row N %	17.2%	7.3%	17.1%	58.4%		
Count	831	128	140	384	2.89	1.662
SI3 Row N %	56.0%	8.6%	9.4%	25.9%		

Note: *SI 1 - Most people who are important to me think I should use the GDE-initiated Educational Digital Platform since it is easy*
SI 2 - People whose opinion I value prefer me to use the GDE-initiated Educational Digital Platform since it is easy
SI 3 - I use the GDE-initiated Educational Digital Platform because my friends are using it.

Table 3 demonstrates that respondents predominantly expressed favourable perceptions for SI1 (M = 4.42, SD = 1.40) and SI2 (M = 4.29, SD = 1.44). While 58.4% of learners indicated agreement or strong agreement with SI2, almost 63.6% of learners agreed or strongly agreed with SI1. SI3, on the other hand, had a significantly lower mean score (M = 2.89, SD = 1.66), with 56.0% of learners disagreeing or strongly disagreeing. The findings indicate that learners viewed certain sources of social influence as having a more significant impact on their use of ICT than others.

Research Question 2: Is there statistical significance between social influence and ICT utilization?
A Pearson correlation analysis was performed to ascertain the relationship between impact and learners' behavioural intention to utilize ICT.

Table 4: Pearson correlation between social influence and behavioural intention (N = 1,483)

Variable	Pearson's r	p-value	Interpretation
Social Influence and Behavioural intentions	0.308	< 0.001	Moderate positive, statistically significant relationship

Note: *N = 1483. Pearson's product-moment correlations (One-tailed)*

The research found a statistically significant positive correlation between social influence and behavioural intention ($r = 0.308$, $p < 0.001$). This result suggests that among Grade 10 learners, higher levels of perceived social influence were correlated with stronger behavioural intentions to use ICT. According to Cohen's recommendations, the correlation shows a somewhat favourable relationship, indicating that learners' behavioural intentions are influenced by social influence; however, other factors may influence the use of ICT.[28]

DISCUSSION

This study examined how social influence shapes Grade 10 learners' behavioural intentions to use ICT in South African secondary schools. The results provide empirical evidence that social influence is a statistically important element, although its effects differ depending on the type of influence. The relevance of the findings in the context of existing literature or contemporary practice is discussed within the confines of the research questions posed.

Research Question 1: What is the influence of important others on ICT utilisation?
The research demonstrated that learners typically regarded significant persons as impacting their ICT usage, although the degree of this influence differed among the three social influence metrics. Although lower levels of agreement for SI3 show that not all sources of social influence are viewed equally, higher levels of agreement for SI1 and SI2 reveal that some stakeholders have a greater influence on the use of ICT than others.

These results are in line with the UTAUT framework, which identifies social influence as a significant determinant of technology adoption, especially in structured environments such as schools where learners' technology use is shaped by expectations and guidance from significant others.[29] Because they decide how digital technologies are incorporated into teaching, learning, and assessment, they also corroborate previous research that identifies educators and institutional leadership as key

[28] Jacob Cohen, *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. (Lawrence Erlbaum Associates: Hillsdale, NJ, 1988).
[29] Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View1"; Venkatesh, Thong, and Xu, "Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology1."

players in encouraging educational technology use.[30]

The diminished impact noted for SI3 may indicate the characteristics of ICT utilization in South African secondary schools. Educational ICT is mostly introduced and controlled through classroom activities, where teachers and school leadership set expectations surrounding its use, in contrast to social media or entertainment-based technologies. As a result, rather than associating ICT use with peer interaction, learners are likely to identify it with formal teaching procedures. The systematic implementation of the EDP by the GDE, which assigns educators the task of incorporating the platform into teaching and tracking learners' participation, is also reflected in this finding.

Contextual considerations may provide insight into the varying degrees of social influence. The majority of respondents attend no-fee-paying secondary schools, which may have limited access to digital resources beyond the classroom settings. Because they offer possibilities for meaningful interaction with ICT, access, and direction, educators and school leadership become the main facilitators of technology use in these situations. These findings imply that excellent teaching and learning leadership and ongoing institutional support are just as important to the successful adoption of ICT in secondary schools as the availability of technology.

Research Question 2: Is there statistical significance between social influence and ICT utilization?

The study further demonstrated a statistically significant positive relationship between social influence and willingness of learners to engage with educational technology ($r = 0.308$, $p < 0.001$). This implies that learners who felt supported and encouraged by their significant others were more likely to use ICT for their studies.

This finding is aligned with previous research on technology acceptance, which demonstrates that social influence positively predicts learners' behavioural intentions to use ICT, particularly in educational settings where social norms and institutional expectations encourage technology use.[31] Additionally, it is in line with studies that demonstrate how strong school leadership, family support, and teacher involvement affect learners' willingness to use digital tools for learning.[32]

Although the relationship is statistically significant, its moderate size suggests that social influence is an element that affects the use of ICT by learners. Learners' perceived usefulness and perceived ease of use of ICT are likely to influence behavioural intention. Digital competency, access to reliable infrastructure and opportunities for frequent technology use positively influence learners' behavioural intentions to use ICT in their studies.[33] This research supports the UTAUT postulation that technology adoption is complicated and influenced by the interaction of social, technological, and environmental factors rather than by a single construct.

The findings have substantial implications for educational leadership at various levels, namely: provincial, district and school levels. It is advised that departmental officials and school leadership foster the cultures that support positive attitudes toward ICT by giving teachers professional development opportunities, establishing clear guidelines for integrating technology into the classroom, and encouraging cooperation between teachers, learners, and parents. The Provincial Department of Education should also recognize that effective ICT programmes require leadership commitment and ongoing educational support in addition to digital gadgets and infrastructure. Strengthening these organizational and social support systems is likely to raise learners' likelihood of engaging

[30] Attuquayefio and Addo, "Using the UTAUT Model to Analyze Students' ICT Adoption"; Rizkalla, Tannady, and Bernando, "Analysis of the Influence of Performance Expectancy, Effort Expectancy, Social Influence, and Attitude toward Behavior on Intention to Adopt Live.On."

[31] Venkatesh et al., "User Acceptance of Information Technology: Toward a Unified View1"; Yogesh K. Dwivedi et al., "Re-Examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model," *Information Systems Frontiers* 21, no. 3 (June 8, 2019): 719–34, https://doi.org/10.1007/s10796-017-9774-y; Jiyuan Feng et al., "Key Factors Influencing Educational Technology Adoption in Higher Education: A Systematic Review," *PLOS Digital Health* 4, no. 4 (2025): e0000764.

[32] Stella Timotheou et al., "Impacts of Digital Technologies on Education and Factors Influencing Schools' Digital Capacity and Transformation: A Literature Review," *Education and Information Technologies* 28, no. 6 (June 21, 2023): 6695–6726, https://doi.org/10.1007/s10639-022-11431-8.

[33] Lu Qiaoqiao and Ishak Nor Asniza, "Exploring Student Satisfaction in Digital Business English Courses: A TAM-Based Mediation Model of Perceived Usefulness and Ease of Use," *International Journal of Instruction* 19, no. 1 (2026): 293–320.

meaningfully with educational digital technologies.

RECOMMENDATIONS

The study findings are of great significance to practice and scholarship. Beyond improving knowledge of how social influence affects learners' use of ICT, the findings offer data that can guide classroom teaching, school administration, and educational policy. Consequently, the study's theoretical contribution, practical recommendations, and future research objectives are presented in the subsequent paragraphs.

Theoretical contribution

This study expands the UTAUT framework by offering empirical evidence about the impact of social influence on ICT usage among Grade 10 learners in South African secondary schools. It highlights the importance of social influence in a secondary school setting, as learners' technology use is influenced by educators, school leadership, and peers. This study advances the theoretical development and contextualisation of the Unified Theory and parents. Prior UTAUT research has focused primarily on higher education students. The results improve knowledge of how social influence influences learners' behavioural intention to use educational technologies in developing-country schooling contexts and provide context-specific data from a government-initiated ICT programme.

Practical recommendations

The results demonstrate that effective ICT utilization requires more than simply supplying digital devices and educational platforms. The GDE must enhance professional development programmes that enable educators to effectively incorporate ICT into teaching and assessment. By encouraging regular implementation of ICT, keeping an eye on technology integration, and cultivating a school culture that supports digital learning, school management teams can offer teaching and learning leadership. Teachers should encourage learners to use digital technology for academic reasons by modelling effective ICT use. To encourage learners' use of educational technology outside classroom hours, schools should also improve their collaboration with parents. These concerted efforts are probably going to improve learners' behavioural intentions and long-term ICT use.

Future research directions

Future research should investigate how the remaining UTAUT constructs such as performance expectancy, effort expectancy, and facilitating conditions affect secondary school learners in South Africa. As learners become more accustomed to using educational digital tools, longitudinal studies could examine how social influence evolves. Understanding the contextual factors that impact ICT use would be further enhanced by comparative research including various provinces, school categories, and educational phases. Lastly, more in-depth understanding of how educators, parents, peers, and school leadership influence learners' ICT adoption experiences may be obtained through qualitative and mixed-methods research.

CONCLUSION

This study used the UTAUT framework to investigate the impact of significant others on Grade 10 learners' ICT utilization in South African secondary schools. The findings demonstrated that learners generally viewed their educators and other school-based stakeholders as significant influences on their ICT utilization, while peer influence was relatively weaker. Furthermore, a statistically significant positive correlation was found between learners' behavioural intention to use ICT and social influence, indicating that learners' intentions to use the EDP are influenced by expectations and encouragement from significant people.

The results highlight the significance of social influence in secondary schools' acceptance of technology. They contend that effective ICT use depends not only on the accessibility of digital tools but also on the support provided by educators, departmental officials, parents, and the broader school community. Therefore, encouraging long-term learners' engagement with digital tools requires

strengthening both the institutional and social support systems.

By extending the UTAUT framework to South African secondary education and by offering learner-level empirical data on the influence of important others in a government-initiated ICT project, this study advances knowledge. The results provide insights that can guide ICT implementation policies and educational leadership practices, and they add to the expanding body of research on technology acceptance in developing-country school contexts.

There are several limitations to the study. The results may not be as applicable to other educational settings because the data were gathered from Grade 10 learners in secondary schools that were specifically chosen to take part in the GDE's ICT project. Furthermore, it is impossible to make judgements about changes in ICT utilization over time or causal relationships because of the cross-sectional design, which recorded learners' perspectives at a specific point in time.

To gain a more thorough knowledge of ICT adoption among secondary school learners, future studies should look into the other UTAUT constructs, such as performance expectancy, effort expectancy, and facilitating conditions. A deeper understanding of how social and contextual factors affect learners' sustained ICT use would be possible through longitudinal, qualitative, and mixed-methods research carried out across several provinces and school contexts.

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