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Examining University Students' Acceptance of Online Learning in Terms of Some Variables

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Abstract
The aim of this study is to determine university students' levels of acceptance of online learning (AOL) and to examine whether these levels differ significantly based on variables such as gender, type of institution, internet access at home, having a personal computer, grade, field of study, grade point average (GPA), and parental education levels. The study was conducted using the survey model, one of the quantitative research designs, and the sample consisted of 522 university students. Data were collected using the "Online Learning Acceptance Scale" and analyzed through descriptive statistics such as arithmetic mean, standard deviation, minimum, and maximum values, as well as inferential statistics including independent samples t-test and one-way ANOVA. According to the findings, students' overall levels of AOL were found to be high. Male students exhibited significantly higher acceptance levels compared to female students. Students who had internet access and a personal computer at home reported significantly higher acceptance levels than those who did not. In terms of grade level, third-year students demonstrated significantly greater acceptance than first-year students. When comparing different academic programs, students enrolled in social sciences and technical fields had higher acceptance levels than those in health sciences. Students whose mothers were university graduates reported significantly higher acceptance levels than those whose mothers were illiterate or had completed only primary, middle, or high school. Similarly, students whose fathers had completed high school or university education had higher acceptance levels than those whose fathers were illiterate. On the other hand, no significant differences were found in students' acceptance levels based on type of institution attended or overall GPA.

Keywords: University students, Acceptance of online learning, Distance learning

INTRODUCTION

The global rise in online learning has been largely influenced by the ongoing transformation of instructional methods in higher education institutions (HEIs), driven by rapid developments in digital technology (Maatuk et al., 2022). This transformation, which has significantly impacted students' communication styles, access to information, and interactions with their peers, was further intensified by the COVID-19 pandemic in 2020 (Parida et al., 2023; Alami & El Idrissi, 2022). Moreover, this shift has improved the ability of HEIs to respond flexibly to unexpected economic and environmental challenges (Raaper, 2021).

Online education, increasingly recognized as a viable and effective alternative to traditional face-to-face instruction, holds great potential for supporting students in developing essential 21st-century skills. Technologically enriched platforms provide flexible and inclusive learning opportunities, particularly for individuals facing geographical, temporal, or personal barriers to higher education (Chakraborty et al., 2021). These platforms enable self-paced learning and offer diverse multimedia tools that accommodate various learning styles (Dhawan, 2020). Additionally, students can communicate with instructors as needed, which promotes learner autonomy and

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supports personalized engagement with the course content (Culduz, 2024). The ability to revisit lessons enhances comprehension and retention, while easy access to digital tools from home increases convenience and participation, especially for students balancing academic responsibilities with work or family commitments (Mizrak, 2023). Beyond these practical benefits, online learning environments also play a critical role in developing 21st-century competencies such as digital literacy, collaboration, and critical thinking—skills considered fundamental in contemporary education (Demir Öztürk & Eren, 2020). Accordingly, fostering meaningful student interaction and advancing these competencies should be central objectives in distance education practices (Şen Akbulut, 2020). Therefore, online education can be regarded not only as a means of expanding access to learning, but also as a strategic environment that equips students with the essential competencies required for success in the digital age.

Although online learning offers numerous advantages, it can also evoke various adverse emotional responses in some students, including feelings of isolation, apprehension, stress, or discouragement (Bakhtiar et al., 2018). Factors such as reduced interaction, inadequate digital skills, and interruptions during lessons may hinder the overall success of online learning environments (Hollister et al., 2022). Students might feel uneasy due to the lack of face-to-face interaction with instructors and classmates, worry about underachieving academically, fear being judged negatively (Hilliard et al., 2020), or experience anxiety stemming from the need to navigate unfamiliar digital learning tools (Estriegana et al., 2021). These challenges underline the continuing relevance of conventional face-to-face teaching methods within higher education. Ng et al. (2023) and Darley (2021) emphasize the need for educators to strengthen their digital pedagogical competencies, foster active participation in virtual settings, and efficiently organize online instructional content to ensure effective learning.

The quality and effectiveness of online learning are shaped by several interrelated factors, among which students' acceptance of the system plays a pivotal role. Previous studies have emphasized the importance of students' AOL (Aguilera Hermida, 2020; Pal & Vanijja, 2020). If students refuse to use it or use it only because they have to, the effectiveness of e-learning becomes uncertain (Akbari et al., 2023). In this context, students' AOL emerges as a critical factor in determining the overall effectiveness and sustainability of digital learning environments.

Existing literature offers valuable insights into the variables that influence students' AOL, particularly among those enrolled in disciplines such as business, education, and management (Alami & El Idrissi, 2022; Darley, 2021; Mariam et al., 2023). Studies suggest that acceptance levels vary across learner groups, shaped by their prior experiences, technological proficiency, and expectations (Briggs et al., 2023; Panigrahi et al., 2018). For instance, López et al. (2023) found that students who regularly use digital tools to search for information tend to develop stronger online learning skills, resulting in greater satisfaction and improved academic outcomes. Moreover, individuals' AOL is influenced by personal expectations and varying levels of digital competence (Panigrahi et al., 2018).

In this context, students' AOL can be understood as their level of comfort, willingness, and perceived ease in engaging with digital educational platforms. Although the concept is not new, it serves as a strong indicator of the usability and perceived effectiveness of online learning systems (Casaló et al., 2008). This construct is often evaluated through key dimensions such as overall satisfaction (Lee, 2010), intention to continue using the platform (Beldad & Hegner, 2018), likelihood of recommending it to others (Zhang et al., 2019), perceived convenience (Chang et al., 2012), and intrinsic motivation to participate (Venkatesh, 2000). Therefore, identifying and addressing the factors that shape student acceptance is essential for enhancing engagement and ensuring successful learning experiences in online education.

Despite the growing body of research on students' AOL, there remains a need for further exploration across diverse institutional and socio-demographic contexts, particularly in settings affected by extraordinary circumstances. One such context is Hatay Mustafa Kemal University, where the continuation of online instruction after the 2023 earthquake has created a unique post-

disaster learning environment. This situation provides an opportunity to investigate how students' AOL is shaped not only by technological access and personal factors, but also by broader structural and environmental disruptions. In this regard, the present study seeks to fill this gap by addressing the following research questions:

1) *What is the AOL level of university students?*
2) *Does AOL level of university students differ by gender, type of institution attended, internet access, having a personal computer, grade level, field of study, GPA, and parental education variables?*

Purpose of the Research

Building upon the theoretical insights that highlight the impact of digital competence, prior experience, and motivational factors on students' engagement with online platforms, the present study aims to provide an empirical examination of how various demographic and educational variables relate to students' acceptance levels. Through a quantitative survey design, this study offers an understanding of how access to digital resources and socio-demographic background can influence students' readiness and comfort in engaging with online learning. By identifying these differences, the study contributes to the development of more inclusive and effective online learning environments that are responsive to diverse learner profiles.

METHOD

This study employed quantitative research design using the survey model. Survey research is commonly used to describe participants' opinions, current conditions, or events as they exist, without manipulation or intervention (Tuncer, 2020). In this context, the study aimed to reveal students' levels of AOL based on their existing conditions, without applying any experimental treatment.

Population and Sample

The population of the study consisted of approximately 8,000 students enrolled in online education at Hatay Mustafa Kemal University. The sample comprised 522 students who voluntarily agreed to participate in the study. Hatay Mustafa Kemal University was specifically chosen as the research setting because many faculties and vocational schools within the institution continue to deliver instruction online following the earthquake.

A convenience sampling method was employed to select participants, allowing the researcher to save time and easily access suitable respondents (Dawson & Trapp, 2001; Kılıç, 2013). Among the 522 participants, 65.9% (n = 344) were female, and 34.1% (n = 178) were male. Regarding educational institution type, 70.9% (n = 370) of the students were enrolled in vocational schools, while 29.1% (n = 152) were studying in faculties. In terms of grade level, 39.8% (n = 208) were first-year students, 47.1% (n = 246) were second-year, 10.7% (n = 56) were third-year, and 2.3% (n = 12) were fourth-year students. With respect to field of study, 44.4% (n = 232) of students were enrolled in social sciences, 34.5% (n = 180) in technical sciences, and 21.1% (n = 110) in health sciences. Regarding academic performance, 19.2% (n = 100) had a GPA below 2.50, 37.9% (n = 198) had a GPA between 2.51 and 3.00, 37.2% (n = 194) had a GPA between 3.01 and 3.50, and 5.7% (n = 30) had a GPA between 3.51 and 4.00. In terms of technological access, 69.7% (n = 364) of students reported having internet access at home, whereas 30.3% (n = 158) did not. Additionally, 67.0% (n = 350) stated that they had a personal computer. An examination of parents' educational backgrounds revealed that 47.5% (n = 248) of mothers and 41.4% (n = 216) of fathers had completed primary school education, which was the most common education level among both groups.

Data Collection Tool

In this study, the *Online Learning Acceptance Scale*, developed by Akyürek and Battal (2024), was used to determine students' levels of AOL. This scale was chosen due to its alignment with the study's objectives and the lack of any other valid and reliable Turkish-language scale specifically

measuring online learning acceptance. The scale is a 7-point Likert-type instrument, consisting of five sub-dimensions as *"Students' technological proficiency"*, "*The effectiveness and competence of instructors in delivering online education"*, "*Students' digital literacy levels"*, "*The technical support provided for online activities"*, and *"Overall acceptance of online learning activities*". The response range as *"Strongly Disagree"* (1), *"Disagree"* (2), *"Somewhat Disagree"* (3), *"Neither Agree Nor Disagree"* (4), *"Somewhat Agree"* (5), *"Agree"* (6), *"Strongly Agree"* (7). The Cronbach's alpha internal consistency coefficient for the overall scale was reported as .92 by the researchers (Akyürek & Battal, 2024). The Cronbach's alpha values related to the subdimensions were calculated as .85, .81, .83, .87, and .94, respectively, indicating high internal consistency. Furthermore, construct validity of the scale was supported through confirmatory factor analysis (CFA) conducted in the original study. The five-factor structure of the AOLS was confirmed with acceptable model fit indices (χ^2/df = 2.77, RMSEA = .06, NFI = .93, and CFI = .95), demonstrating a good fit of the measurement model. In the current study, the overall internal consistency coefficient was found to be .93, and the subdimension coefficients were .82, .84, .84, .85, and .94, respectively. These findings indicate that the scale has a high level of reliability.

Data Collection Process

The data for the study were collected in March 2025 using an online questionnaire created via Google Forms. The survey link was sent to students through social media platforms. Participation was voluntary, and students who agreed to take part completed the form online. The data collection process lasted for approximately one month.

Data Analysis

To determine students' AOL, descriptive statistics such as arithmetic mean, standard deviation, minimum, and maximum values were utilized in the analysis. The instrument employed in this study was a 7-point Likert-type scale, with response options ranging from 1 to 7. In order to interpret the students' acceptance levels meaningfully, score ranges corresponding to each category were calculated using the formula: (Maximum score – Minimum score) / 5, which resulted in a range of 1.20. Based on this, perception levels were categorized as follows: 1.00–2.19: Very Low; 2.20–3.39: Low; 3.40–4.59: Moderate; 4.60–5.79: High; 5.80–7.00: Very High. To determine the appropriate data analysis methods, normality tests were first conducted. Skewness and kurtosis values were examined, and Shapiro-Wilk and Kolmogorov-Smirnov tests were used to assess whether the data followed a normal distribution. The results indicated skewness of –0.286 and kurtosis of –0.081, both of which fall within the acceptable range of –1.5 to +1.5. In addition, the p-values from both normality tests were greater than .05 ($p > .05$), confirming that the data were normally distributed. Based on these findings, parametric statistical tests were deemed appropriate for further analysis. To examine whether students' acceptance levels varied significantly based on variables such as gender, type of institution (faculty vs. vocational school), internet access at home, and having computer, an independent samples t-test was conducted. For variables of year of study, field of study, GPA and parents' education level, a one-way analysis of variance (ANOVA) was employed. When the ANOVA results indicated statistically significant differences, post hoc tests were used to identify the source of group differences. To select the appropriate post hoc procedure, Levene's test was used to assess homogeneity of variances across groups. As the Levene's test results confirmed variance homogeneity for all variables, the Scheffé test was applied for pairwise comparisons.

FINDINGS

This section presents the results of the analysis conducted according to the research problems. Student AOL levels are presented in Table 1.

Table 1. Descriptive Data of Online Learning Acceptance Scale

Variables	N	Min	Max	$\bar{X}$	Ss	Skewness	Kurtosis	Level
AOL	522	1.45	7.00	4.74	1.08	-.286	-.081	High

When the mean score ($\bar{X}$=4.74) obtained from the scale in Table 1 is examined, it can be said that students' AOL are at high level. Table 2 presents whether students' AOL levels differ by gender variable.

Tablo 2. AOL Level by Gender

Variable	Gender	N	$\bar{X}$	S	sd	t	p
AOL	Female	344	4.59	1.04	520	-4.405	.000*
	Male	178	5.03	1.09			

* p<.05

As shown in Table 2, university students' AOL levels differ significantly based on gender ($t_{(520)}$ = –4.405, p < .05). According to the mean scores, male students ($\bar{X}$=5.03) reported higher levels of AOL compared to female students ($\bar{X}$=4.59). The differences in students' AOL levels based on the type of institution attended are presented in Table 3.

Tablo 3. AOL Level by Type of Institution

Variable	Type of Inst.	N	$\bar{X}$	S	sd	t	p
AOL	Faculty	152	4.85	1.02	520	1.520	.520
	VHS	370	4.69	1.10			

VHS= Vocational High School

As shown in Table 3, there were no statistically significant difference in university students'-' AOL levels based on the type of institution attended ($t_{(520)}$ = 1.520, p > .05). Although students enrolled in faculties reported slightly higher acceptance levels ($\bar{X}$=4.86) compared to those studying at vocational schools ($\bar{X}$=4.70), this difference was not statistically significant. The difference in students' AOL levels based on internet access at home is presented in Table 4.

Tablo 4. AOL Level by Internet Access at Home

Variable	Internet Access	N	$\bar{X}$	S	sd	t	p
AOL	Yes	364	4.89	1.07	520	4.721	.000*
	No	158	4.41	1.02			

* p<.05

A statistically significant difference was found in university students' AOL levels based on whether they have internet access at home ($t_{(520)}$ = 4.721, p < .05). Students with internet access at home reported significantly higher acceptance levels ($\bar{X}$= 4.89) compared to those without internet access at home ($\bar{X}$= 4.41). The difference in students' AOL levels based on having a personal computer is presented in Table 5.

Tablo 5. AOL Level by Having a Personal Computer

Variable	Personal Computer	N	$\bar{X}$	S	sd	t	p
AOL	Yes	350	4.91	1.09	520	5.304	.000*
	No	172	4.39	.98			

* p<.05

As shown in Table 5, there is a statistically significant difference in university students' AOL level based on whether they have a personal computer ($t_{(520)}$ = 5.304, p < .05). According to the means, students who have a personal computer reported significantly higher levels of acceptance ($\bar{X}$= 4.92) compared to those who do not have a personal computer ($\bar{X}$= 4.40). The difference in students' AOL levels based on grade level is presented in Table 6.

Tablo 6. AOL Level by Grade

Variable	Grade	N	$\bar{X}$	S	S.V.	S.S.	sd	M.S.	F	p	Dif.
	1-1st	208	4.62	1.06	Between G.	13.034	3	4.345			
	2-2nd	246	4.74	1.06	Within G.	598.061	518	1.155			
AOL	3-3rd	56	5.13	1.14	Total	611.095	521		3.763	.011*	3>1
	4-4th	12	5.06	1.03							

*p<.05; Dif.: Difference

According to the findings in Table 6, students' AOL levels differ significantly by grade level [$F_{(3,518)} = 3.763$, $p < .05$]. Results of the Scheffé test indicate that students in the third year reported higher AOL compared to first-year students. The difference in students' AOL levels based on field of study is presented in Table 7.

Tablo 7. AOL Level by Field of Study

Variable	Field of Study	N	$\bar{X}$	S	S.V.	S.S.	sd	M.S.	F	p	Dif.
	1-Social	232	4.81	1.06	Between G.	14.985	2	7.493			
AOL	2-Technical	180	4.85	1.00	Within G.	596.110	519	1.149	6.523	.002*	1>3 2>3
	3-Health	110	4.41	1.18	Total	611.095	521				

*p<.05; Dif.: Difference

According to the findings in Table 7, students' AOL levels differ significantly by field of study [$F_{(2,519)} = 6.523$, $p < .05$]. Results from the Scheffé test show that students enrolled in social and technical sciences programs reported higher levels of acceptance compared to those studying in health sciences programs. The difference in students' AOL levels based on their GPA is presented in Table 8.

Tablo 8. AOL Level by GPA

Variable	GPA	N	$\bar{X}$	S	S.V.	S.S.	sd	M.S.	F	p	Dif.
	Below 2.50	100	4.70	1.30	Between G.	2.374	3	0.791			
	2.51-3.00	198	4.71	1.00	Within G.	608.721	518	1.175			
AOL	3.01-3.50	194	4.76	1.04	Total	611.095	521		.673	.569	No
	3.51-4.00	30	5.00	0.97							

Dif.: Difference

According to the findings in Table 8, students' AOL levels did not significantly differ based on their overall GPA [$F_{(3,518)} = .673$, $p > .05$]. The difference in students' AOL levels based on mother's educational background is presented in Table 9.

Tablo 9. AOL Level by Mother's Educational Background

Variable	Education	N	$\bar{X}$	S	S.V.	S.S.	sd	M.S.	F	p	Dif.
	1-IL	66	4.68	1.08	Between G.	16.472	4	4.118			
	2-PS	248	4.68	1.08	Within G.	594.623	517	1.150			5>1
AOL	3-SS	94	4.80	1.03	Total	611.095	521		3.580	.007	5>2
	4-HS.	80	4.62	1.02							5>4
	5-U	34	5.38	1.18							

Note: IL: Illiterate; PS: Primary School; SS: Secondary School; HS: High School; U: University; Dif.:Difference

According to the findings in Table 9, students' AOL levels differed significantly based on the mother's educational background [$F_{(4,517)} = 3.580$, $p < .05$]. The Scheffé test results revealed that students whose mothers held a university degree had significantly higher levels of AOL compared to those whose mothers were illiterate or had completed only primary, middle, or high school education. The variation in students' AOL levels based on the father's educational background is presented in Table 10.

Tablo 10. AOL Level by Father's Educational Background

Variable	Education	n	$\bar{X}$	S	S.V.	S.S.	sd	M.S.	F	p	Dif.
AOL	1-IL	12	4.25	1.17	Between G.	12.644	4	3.161	2.731	.029	5>1
	2-PS	216	4.63	1.00	Within G.	598.451	517	1.158			5>2
	3-SS	96	4.70	1.12	Total	611.095	521				5>4
	4-HS	134	4.97	1.08							
	5-U	64	4.80	1.19							

Note: IL: Illiterate; PS: Primary School; SS: Secondary School; HS: High School; U: University; Dif.: Difference

According to the findings in Table 10, students' AOL levels varied significantly based on their father's educational background [$F_{(4,517)} = 2.731$, $p < .05$]. The Scheffé test results indicated that students whose fathers held a university or high school degree had significantly higher levels of AOL compared to those whose fathers were illiterate.

RESULTS AND DISCUSSION

The research findings indicate that university students' AOL were at high level. This suggests that students have a positive attitude toward the learning processes offered in online environments. In contrast, Zabri et al. (2023) found that, AOL level among university students was moderate. Although this study directly examined AOL, the discussion also includes findings related to readiness, attitude, self-efficacy, and predisposition, due to the limited number of studies focusing specifically on this concept. Given that acceptance is a multidimensional construct encompassing perceptions of the system, psychological readiness, and motivation, incorporating these variables into the discussion is justified. Several studies (Baykan et al., 2023; Ünal et al., 2021; Uyar & Karakuyu, 2020; Baltacı et al., 2022) have similarly found high levels of readiness and self-efficacy among students and preservice teachers regarding online learning, which align with the present study's results. However, other studies (Tarım & Uyandıran, 2021; Gür-Erdoğan et al., 2017; Hacıömeroğlu & Elmalı, 2021) have reported moderate or low levels of readiness, attitude, or predisposition. These differing results suggest that various individual and systemic factors may influence students' AOL. One key factor emphasized in the literature is perceived usefulness. Research (Alenezi et al., 2011; Sun et al., 2008; Rezaei et al., 2008) highlights that perceived usefulness and ease of use significantly impact students' acceptance and satisfaction with online learning systems. In the present study, students' high acceptance levels may be attributed to their perception of online learning as useful and accessible. Furthermore, improved technological infrastructure, increased user experience, and broader access to digital tools during the study period likely contributed to these positive perceptions. The quality of content and opportunities for knowledge sharing, as noted by Salloum et al. (2019), may also have enhanced student engagement and acceptance. Overall, the findings suggest that high levels of acceptance among students are closely related to factors such as perceived usefulness, ease of use, content quality, and opportunities for interaction.

According to the research findings, male students demonstrated higher level AOL compared to female students, suggesting that gender may play a significant role in shaping students' AOL environments. This result aligns with previous studies (Şener et al., 2022; Tarım & Uyandıran, 2021; Kılıç, 2022; Fidan, 2016), which similarly reported that male students or pre-service teachers tend to exhibit more positive attitudes toward online learning. Supporting this finding, Baykan et al. (2023) found that male students scored higher in computer and internet self-efficacy, a factor widely recognized as critical to online learning acceptance. Likewise, other studies (Kabaran et al., 2016; Pajares & Johnson, 1996; Zhao et al., 2010; Yıldız & Seferoğlu, 2020) have shown that males tend to possess higher levels of digital literacy and self-efficacy. Conversely, several studies contradict these results, suggesting that gender does not significantly influence acceptance, attitude, or readiness for online learning (Demir, 2013; Baltacı et al., 2022; Ünal et al., 2021; Uyar & Karakuyu, 2020; Gömleksiz & Pullu, 2020; Demir Öztürk & Eren, 2021). These discrepancies may stem from differences in contextual variables, participant characteristics, measurement instruments, or cultural factors across studies.

University students' AOL level did not significantly differ based on the type of institution (faculty or vocational school) in which they were enrolled. This suggests that AOL may be more strongly influenced by individual factors—such as personal attitudes, experiences, and digital competencies—rather than the structural characteristics of the academic unit. This result is consistent with previous studies. For instance, Demir (2013) reported no significant difference in pre-service teachers' acceptance of e-learning tools based on their department of study. Similarly, Adnan and Boz-Yaman (2017) found that engineering students' e-learning readiness did not vary significantly by academic department. In line with these findings, Olcay et al. (2018) also reported no significant differences in e-learning readiness among associate degree students based on program type. Ünal et al. (2021) found no significant difference in online learning readiness between associate and undergraduate students, although graduate-level students demonstrated higher readiness levels, suggesting that online learning acceptance may increase with educational level. Overall, the present study's findings align with the literature, indicating that the type of institution (faculty or vocational school) is not a major determinant of online learning acceptance. This may be attributed to the relatively uniform access to online learning environments, infrastructure, and digital services across departments within higher education institutions.

According to the research findings, university students with internet access at home demonstrated significantly higher levels of AOL compared to those without such access. This finding indicates that technical access condition—an essential component of online learning—is a determining factor in individuals' acceptance of this mode of education. A review of the literature shows that this finding aligns with the results of many studies. For instance, Şener et al. (2022) found that students with home internet access had higher AOL than those without. Similarly, Demir (2013) noted that pre-service teachers with internet access exhibited greater acceptance of e-learning tools. The study conducted by Ünal et al. (2021) also reported that students with uninterrupted internet access at home had higher readiness for online learning compared to those with limited or no access. Likewise, studies by Uyar and Karakuyu (2020), Gömleksiz and Pullu (2020), and Demir Öztürk and Eren (2021) showed that the frequency, quality, and consistency of internet access positively impact both readiness for and AOL. The central point shared across these studies is that online learning is not solely a pedagogical process but also one that requires technical competence, with internet access being an indispensable component. The accessibility and sustainability of the system are key determinants in students' AOL. However, in contrast to these findings, the study by Tarım and Uyandıran (2021) reported that internet access did not lead to a significant difference in students' attitudes toward e-learning. This discrepancy may stem from differences in the focus of the measurement tool (i.e., attitude-based), the criteria used to define levels of internet access, or the characteristics of the participant group. Additionally, beyond mere access, how students utilize these resources, interact with content, and their level of digital literacy can also influence attitudes. In conclusion, the findings of the current study reveal that internet access is a critical factor in AOL, and in this respect, it is largely consistent with the existing literature.

The study found that university students who have a personal computer have significantly higher AOL levels compared to those who do not own a computer. This finding indicates that the technological equipment used in the online learning process is a determining factor in students' acceptance of this mode of education. Considering the use of interactive content, synchronous classes, and online assessment tools, access to a computer enables more active participation in online learning environments. There are various studies in the literature that support this finding. For example, Şener et al. (2022) reported that students who own a computer have higher levels of AOL than those who do not. Similarly, Kılıç (2022) found that pre-service teachers with computers showed more positive attitudes toward e-learning. In a study conducted by Demir (2013), similar results were obtained, revealing that having a computer positively affects the acceptance of e-learning tools. Uyar and Karakuyu (2020) also stated that students who own a computer have significantly higher readiness levels for e-learning compared to those who do not. A similar conclusion was reached in the study by Gömleksiz and Pullu (2020), which found that students using laptops had higher readiness levels for online learning than those using mobile

phones. These findings demonstrate that online learning is directly related to technological infrastructure and that the hardware and functional advantages of desktop or laptop computers support more effective participation in the learning process. On the other hand, Bahadır's (2020) study revealed that having a computer did not significantly affect e-learning readiness levels, which contradicts the findings of the present study. Such discrepancies may arise due to differences in sample characteristics, the type of measurement instruments used, the technical features of the e-learning system, or the participants' levels of digital literacy. Overall, the findings of this study are largely consistent with the existing literature emphasizing that having a computer can be considered a determining factor not only in terms of technical access but also in terms of students' ability to navigate digital environments with confidence, complete tasks on time, and engage more effectively with digital content.

According to the research findings, third-year university students demonstrated significantly higher levels of AOL compared to first-year students. This suggests that acceptance may increase as students progress through their academic years. A possible explanation for this trend could be the development of digital literacy skills and the more frequent use of online platforms among upper-year students. Several studies support this finding. For example, Kılıç (2022) reported that pre-service teachers in their second, third, and fourth years exhibited more positive attitudes toward e-learning than first-year students. Similarly, Gömleksiz and Pullu (2020) found that second-year students had higher readiness levels for online learning compared to their first-year peers. These findings suggest that familiarity with university systems and increased exposure to digital environments may enhance students' acceptance. However, the literature also presents mixed results. Baltacı et al. (2022) observed that first-year students reported higher levels of online learning self-efficacy than third-year students, while fourth-year students outperformed third-year students. Likewise, Şener et al. (2022) found that fourth-year students had lower overall acceptance levels compared to students in earlier years, possibly due to reduced motivation or engagement as graduation approaches. Other studies, such as those by Uyar and Karakuyu (2020) and Baykan et al. (2023), found no significant differences in online learning readiness across grade levels. These inconsistencies may stem from equal exposure to online learning environments across grade levels or institutional factors that standardize digital learning experiences. In conclusion, while this study suggests that mid-level students may demonstrate greater AOL, contradictory findings in the literature indicate that grade level alone may not be a definitive predictor. Individual student characteristics, instructional practices, course content, and the quality of technological infrastructure likely interact to shape students' AOL.

The research findings indicate that students studying in the fields of social sciences and technical sciences have higher levels of AOL compared to students in the field of health sciences. This result suggests that the type of academic program students are enrolled in can influence their perceptions and AOL. Specifically, programs in social and technical fields may be better suited to the delivery of online content and access to digital resources, which could contribute to this difference. There are studies in the literature that support this finding. For example, Uyar and Karakuyu (2020) found that students in technical programs had higher levels of readiness for e-learning compared to those in social science programs. Zabri et al. (2023) found that students from technical-based programmes exhibit a higher level of AOL. These findings align with the studies by Wan et al. (2008) and López et al. (2023), which suggest that more frequent use of information-seeking ICT enhances individuals' online competencies, thereby leading to improved learning outcomes and greater satisfaction. This may be explained by the fact that students in technical fields are more integrated with technology and tend to use digital tools more effectively. Similarly, Fidan (2016) reported that students in technical programs exhibited more positive attitudes toward e-learning than their peers in social programs. These studies show that the level of acceptance and attitude toward online learning is closely related to the nature of academic discipline. These studies indicate that AOL and attitudes toward online learning are often influenced by the nature of academic discipline. However, the present study's finding adds a new perspective to the literature, which has predominantly focused on comparisons between technical and social disciplines. The relatively low acceptance levels among health science students may be

due to the practical and lab-based nature of their education, which online environments often struggle to fully support. In this context, the findings suggest that students in health sciences may perceive online learning environments as more limited or insufficient, while students in social and technical disciplines appear to adapt more effectively to such environments.

The findings indicated that students' AOL levels did not significantly differ based on their GPA. This suggests that academic achievement alone is not a determining factor in shaping students' AOL environments. In other words, both high-achieving and lower-achieving students exhibit similar attitudes toward online learning. Several factors may explain this result. First, individual preferences, access to technology, digital literacy, and prior experience with online platforms may play a more critical role in shaping acceptance than academic performance. Students' perceptions of the functionality and supportiveness of digital platforms, rather than their academic success, appear to influence their attitudes more strongly. Second, with the widespread adoption of online learning post-pandemic, the modality has become more universal and compulsory, possibly diminishing achievement-based differences. Third, the concept of acceptance is inherently multidimensional, encompassing cognitive, affective, and motivational components. As such, it is likely influenced by diverse variables such as learning styles, technological access, instructional quality, and prior digital learning experiences.

The study also revealed that students whose mothers were university graduates had significantly higher acceptance levels than those whose mothers were illiterate or had only completed primary, secondary, or high school. Similarly, students whose fathers were high school or university graduates also reported higher acceptance levels compared to those whose fathers were illiterate. These findings suggest that parental education, particularly maternal education, may positively influence students' attitudes toward online learning. Consistent with this, Uyar and Karakuyu (2020) found that students whose mothers were university graduates had higher levels of e-learning readiness. Given the central role mothers often play in the educational development of children, maternal educational background may significantly shape students' learning attitudes. However, findings related to paternal education show variation across studies. While Uyar and Karakuyu (2020) found no significant relationship between fathers' education levels and students' e-learning readiness, the present study observed a significant difference. This discrepancy may be attributed to differences in measurement tools, participant characteristics, or sample diversity. Additionally, the construct of "acceptance" may encompass broader dimensions than "readiness," making it more sensitive to socio-demographic variables such as parental education. In conclusion, the findings of this study indicate that maternal education level has a strong impact on students' AOL, whereas the findings related to paternal education show partial inconsistency with previous literature. This may suggest that the roles of parents in the learning process differ and that mothers may have a more direct and interactive influence on their children's educational engagement.

In this study, university students' AOL levels were examined in relation to various demographic and technological variables. The findings revealed that students generally have a high level of AOL. This indicates that students approach learning processes offered in digital environments positively and are willing to engage with online education practices. The results showed that male students demonstrated a higher level of acceptance compared to female students, while the type of institution (faculty or vocational school) did not lead to a significant difference in acceptance levels. Furthermore, students' AOL level significantly differed based on whether they had internet and computer access at home. Having technological resources emerged as a factor supporting a positive attitude toward online learning. The higher acceptance levels among upper-year students may be attributed to increased awareness gained through greater experience with online learning. Additionally, students studying in the fields of social and technical sciences had higher AOL compared to those in health sciences, which may be related to interdisciplinary approaches and digital literacy skills. Moreover, a significant relationship was found between students' acceptance levels and their parents'—particularly their mothers'—educational background. Based on the results obtained, the following recommendations are presented.

- In order to conduct online learning processes more effectively and inclusively at universities, students' access to technological infrastructure should be taken into consideration. Supportive policies should be developed, and equal opportunities should be provided, especially for students with limited internet and computer access.
- When formulating educational policies, strategies that encourage parental involvement can be developed since parental education level influences students' AOL
- When designing learning materials, students' technological competence levels, interdisciplinary differences, and grade levels should be taken into account to create customized content.
- For fields such as health sciences, where online learning is less accepted, interactive and practice-based content should be increased to foster more positive attitudes toward online learning.
- In addition to the variables addressed in this study, further research examining the relationship between students' AOL and factors such as learning styles, digital literacy levels, and motivation would contribute to the literature.
- Comparative studies across different universities, geographic regions, and disciplines would allow for more generalizable findings.

REFERENCES

Adnan, M., & Boz-Yaman, B. (2017). Mühendislik öğrencilerinin e-öğrenmeye dair beklenti, hazırbulunuşluk ve memnuniyet düzeyleri. *Turkish Journal of Computer and Mathematics Education*, *8*(2), 218–243.

Aguilera-Hermida, A. P. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open, 1*, 100011. https://doi.org/10.1016/j.ijedro.2020.100011

Akbari, M., Danesh, M., Rezvani, A., Javadi, N., Banihashem, S. K., & Noroozi, O. (2023). The role of students' relational identity and autotelic experience for their innovative and continuous use of e-learning. *Education and Information Technologies, 28*(2), 1911–1934. https://doi.org/10.1007/s10639-022-11272-5

Akyürek, M. İ., & Battal, A. (2024). Adaptation of students' acceptance of online learning scale into Turkish: Validity and reliability study. *Turkish Online Journal of Distance Education, 25*(4), 97–108. https://doi.org/10.17718/tojde.1352331

Alami, Y., & El Idrissi, I. (2022). Students' adoption of e-learning: Evidence from a Moroccan business school in the COVID-19 era. *Arab Gulf Journal of Scientific Research, 40*(1), 54–78. https://doi.org/10.1108/AGJSR-05-2022-0052

Alenezi, A. R., Abdul Karim, A. M., & Veloo, A. (2010). An empirical investigation into the role of enjoyment, computer anxiety, computer self-efficacy and internet experience in influencing the students' intention to use e-learning: A case study from Saudi Arabian governmental universities. *The Turkish Online Journal of Educational Technology, 9*(4), 22–34. Retrieved from http://www.tojet.net/articles/943.pdf

Al-Jarf, R. (2004, June). Intercultural communication: Saudi, Ukrainian and Russian students online. Paper presented at the 37th National Educational Computing Conference (NECC), New Orleans, Louisiana, USA.

Bahadır, F. (2020). Raylı sistemler programı öğrencilerinin e-öğrenmeye hazırbulunuşluklarının incelenmesi: Refahiye meslek yüksekokulu örneği. *Yükseköğretim ve Bilim Dergisi/Journal of Higher Education and Science, 10*(2), 310–317. https://doi.org/10.5961/jhes.2020.392

Bakhtiar, A., Webster, E. A., & Hadwin, A. F. (2018). Regulation and socio-emotional interactions in a positive and a negative group climate. *Metacognition and Learning, 13*, 57–90. https://doi.org/10.1007/s11409-017-9178-x

Baltacı, S., Bütüner, S. Ö., & Çalışkan, E. (2022). Ilköğretim matematik öğretmen adaylarının çevrimiçi öğrenmeye yönelik öz-yeterlik düzeylerinin çeşitli değişkenler açısından incelenmesi. *Kırşehir Eğitim Fakültesi Dergisi*, *23*(Özel Sayı), 472–508.

Baykan, Z., Poyrazoğlu, S., & Akşehirli Seyfeli, M. Y. (2023). Erciyes Üniversitesi Tıp Fakültesi öğrencilerinin kendi kendine öğrenmeye ve çevrimiçi öğrenmeye yönelik hazırbulunuşluklarının değerlendirilmesi. *Tıp Eğitimi Dünyası*, *22*(67), 29–43.

Beldad, A. D., & Hegner, S. M. (2018). Expanding the technology acceptance model with the inclusion of trust, social influence, and health valuation to determine the predictors of German users' willingness to

continue using a fitness app: A structural equation modeling approach. *International Journal of Human–Computer Interaction, 34*(9), 882–893. https://doi.org/10.1080/10447318.2017.1403220

Briggs, M. A., Thornton, C., McIver, V. J., Rumbold, P. L. S., & Peart, D. J. (2023). Investigation into the transition to online learning due to the COVID-19 pandemic, between new and continuing undergraduate students. *Journal of Hospitality, Leisure, Sport & Tourism Education, 32*, 100430. https://doi.org/10.1016/j.jhlste.2023.100430

Casaló, L. V., Flavián, C., & Guinalíu, M. (2008). The role of satisfaction and website usability in developing customer loyalty and positive word-of-mouth in the e-banking services. *International Journal of Bank Marketing, 26*(6), 399–417. https://doi.org/10.1108/02652320810902433

Chakraborty, P., Mittal, P., Gupta, M. S., Yadav, S., & Arora, A. (2021). Opinion of students on online education during the COVID-19 pandemic. *Human Behavior and Emerging Technologies, 3*(3), 357–365.

Chang, C.-C., Yan, C.-F., & Tseng, J.-S. (2012). Perceived convenience in an extended technology acceptance model: Mobile technology and English learning for college students. *Australasian Journal of Educational Technology, 28*(5), 809–826. https://doi.org/10.14742/ajet.818

Culduz, M. (2024). Benefits and challenges of e-learning, online education, and distance learning. In *Incorporating the human element in online teaching and learning*. IGI Global. https://doi.org/10.4018/979-8-3693-4131-5.ch001

Darley, W. K. (2021). Doctoral education in business and management in Africa: Challenges and imperatives in policies and strategies. *International Journal of Management in Education, 19*(2), 100504. https://doi.org/10.1016/j.ijme.2021.100504

Dawson, B., & Trapp, R. G. (2001). Probability related topics to make inferences about the data. In *Basic and clinical biostatistics* (3rd ed.). Lange Medical Books / McGraw-Hill Medical Publishing Division.

Demir, Ö. (2013). *Eğitim fakültesi öğrencilerinin e-öğrenme araçlarını kabul düzeylerinin çeşitli değişkenler açısından incelenmesi* (Yüksek lisans tezi). Sakarya Üniversitesi.

Demir-Öztürk, S., & Eren, E. (2020). Değerlendirme aracı olarak oyunlaştırma platformlarının kullanımının öğrencilerin derse katılım ve akademik motivasyonlarına etkisi. *Asya Öğretim Dergisi, 8*(1), 47–65. https://dergipark.org.tr/tr/pub/aji/issue/54959/710188

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5–22. https://doi.org/10.1177/0047239520934018

Estriegana, R., Medina-Merodio, J.-A., & De-Pablos-Heredero, C. (2021). E-learning acceptance in face-to-face universities due to COVID-19. *Journal of Educational Computing Research, 59*(8), 1503–1527. https://doi.org/10.1177/21582440231214873

Gökbulut, B., & Atay, S. (2021). Investigation of teachers and university students' attitudes towards e-learning in terms of some variables. *Journal of Multidisciplinary Studies in Education, 5*(2), 41–64.

Gür-Erdoğan, D., Bayat, S., & Şentürk, Ş. (2017). Pedagojik formasyon öğrencilerinin BIT, e-öğrenme ve yaşam boyu öğrenme eğilimleri arasındaki ilişki. *Uluslararası Eğitim Programları ve Öğretim Çalışmaları Dergisi*, *13*(7), 148–159.

Hacıömeroğlu, G., & Elmalı-Erdem, Ö. (2021). Pre-service teachers' attitude, self-efficacy, and perceptions of the learning environment regarding distance learning: A mixed method study. *Journal of Multidisciplinary Studies in Education, 5*(3), 65–87.

Hilliard, J., Kear, K., Donelan, H., & Heaney, C. (2020). Students' experiences of anxiety in an assessed, online, collaborative project. *Computers & Education, 143*, 103675. https://doi.org/10.1016/j.compedu.2019.103675

Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022). Engagement in online learning: Student attitudes and behavior during COVID-19. *Frontiers in Education, 7*. https://doi.org/10.3389/feduc.2022.851019

Kabaran, H., Altıntaş, S., & Kabaran, G. G. (2016). Öğretmen adaylarının eğitsel internet kullanım özyeterlik inançları ile akademik öz-yeterlik inançları arasındaki ilişkinin incelenmesi. *Eğitim Kuram ve Uygulama Araştırmaları Dergisi, 2*(1), 01–11.

Kılıç, M. Y. (2022). Öğretmen adaylarının bilgisayar öz yeterlik algılarının ve e-öğrenmeye yönelik tutum düzeylerinin incelenmesi. *Gazi Üniversitesi Gazi Eğitim Fakültesi Dergisi, 42*(1), 239–271.

Kılıç, S. (2013). Örnekleme yöntemleri. *Journal of Mood Disorders, 3*(1), 44–46. https://doi.org/10.5455/jmood.20130325011730

Korkmaz, Ö., Çakır, R., & Tan, S. (2015). Öğrencilerin e-öğrenmeye hazır bulunuşluk ve memnuniyet düzeylerinin akademik başarıya etkisi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD)*, *16*(3), 219–241.

Lee, J.-W. (2010). Online support service quality, online learning acceptance, and student satisfaction. *The Internet and Higher Education, 13*(4), 277–283. https://doi.org/10.1016/j.iheduc.2010.08.002

López, R., Valarezo, A., & Pérez-Amaral, T. (2023). Unleashing the potential of online learning in Spain: An econometric analysis. *Telecommunications Policy*, *47*(6), 102544. https://doi.org/10.1016/j.telpol.2023.102544

Maatuk, A. M., Elberkawi, E. K., & Aljawarneh, S. (2022). The COVID-19 pandemic and e-learning: Challenges and opportunities from the perspective of students and instructors. *Journal of Computing in Higher Education, 34*(1), 21–38. https://doi.org/10.1007/s12528-021-09274-2

Mariam, S., Khawaja, K. F., Qaisar, M. N., & Ahmad, F. (2023). Blended learning sustainability in business schools: Role of quality of online teaching and immersive learning experience. *The International Journal of Management Education, 21*(2), 100776. https://doi.org/10.1016/j.ijme.2023.100776

Mizrak, F. (2023). Enhancing organizational competitiveness through entrepreneurial education, human resources management, and innovation strategies: A VIKOR and fuzzy AHP approach. *International Journal of Social and Humanities Sciences Research, 10*(100), 2525–2545.

Ng, D. T. K., Ching, A. C. H., & Law, S. W. (2023). Online learning in management education amid the pandemic: A bibliometric and content analysis. *The International Journal of Management Education, 21*(2), 100796. https://doi.org/10.1016/j.ijme.2023.100796

Olcay, A., Döş, B., Sürme, M., & Düzgün, M. (2018). Turizm eğitimi alan öğrencilerin elektronik öğrenmeye hazır bulunuşluklarını belirlemeye yönelik bir çalışma. *Kastamonu Eğitim Dergisi, 26*(2), 427–438.

Ordonez-Feliciano, J. (2009). *Self-efficacy and instruction in mathematics* (Unpublished doctoral dissertation). Lynn University, Florida.

Parida, S., Dhakal, S. P., Dayaram, K., Mohammadi, H., Ayentimi, D. T., Amankwaa, A., & D'Cruz, D. (2023). Rhetoric and realities in Australian universities of student engagement in online learning: Implications for a post-pandemic era. *The International Journal of Management Education, 21*(2), 100795. https://doi.org/10.1016/j.ijme.2023.100795

Pajares, F., & Johnson, M. J. (1996). Self-efficacy beliefs and the writing performance of entering high school students. *Psychology in the Schools, 33*(2), 163–175.

Pal, D., & Vanijja, V. (2020). Perceived usability evaluation of Microsoft Teams as an online learning platform during COVID-19 using system usability scale and technology acceptance model in India. *Children and Youth Services Review, 119*, 105535. https://doi.org/10.1016/j.childyouth.2020.105535

Panigrahi, R., Srivastava, P. R., & Sharma, D. (2018). Online learning: Adoption, continuance, and learning outcome—A review of literature. *International Journal of Information Management, 43*, 1–14. https://doi.org/10.1016/j.ijinfomgt.2018.05.005

Raaper, R. (2021). Contemporary dynamics of student experience and belonging in higher education. *Critical Studies in Education, 62*(5), 537–542. https://doi.org/10.1080/00131911.2021.1965960

Rezaei, M., Mohammadi, H. M., Asadi, A., & Kalantary, K. (2008). Predicting e-learning application in agricultural higher education using technology acceptance model. *Turkish Online Journal of Distance Education, 9*(1), 85–95. Retrieved from http://tojde.anadolu.edu.tr/tojde29/pdf/Volume9Number1.pdf

Salloum, S. A., Al-Emran, M., Shaalan, K., & Tarhini, A. (2019). Factors affecting the E-learning acceptance: A case study from UAE. *Education and Information Technologies, 24*(1), 509–530.

Siegle, D., & McCoach, D. (2007). Increasing student mathematics self-efficacy through teacher training. *Journal of Advanced Academics*, *18*(2), 278–312.

Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008). What drives a successful e-learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education, 50*(4), 1183–1202. https://doi.org/10.1016/j.compedu.2006.11.007

Şen-Akbulut, M. (2020). Dijital teknolojilerin eğitimde etkin kullanımı. *Bilim ve Teknik, 53*(631), 48–55.

Şener, Y., Taplak, A. Ş., & Akarsu, R. H. (2022). COVID-19 pandemisi sürecinde hemşirelik öğrencilerinin çevrimiçi öğrenmeye yönelik görüş ve tutumları. *Sağlık Bilimlerinde Değer, 12*(1), 137–146.

Tarım, K., & Uyandıran, A. (2021). Öğretmenlerin ve üniversite öğrencilerinin e-öğrenmeye yönelik tutumlarının bazı değişkenler açısından incelenmesi. *Journal of Multidisciplinary Studies in Education, 5*(2), 41–64.

Topal Deveci, A. (2016). Examination of university students' level of satisfaction and readiness for e-courses and the relationship between them. *European Journal of Contemporary Education*, *15*(1), 7–23.

Tuncer, M. (2020). Nicel araştırma desenleri. In O. Behçet & Ç. Ahmet (Eds.), *Kuramdan uygulamaya eğitimde bilimsel araştırma yöntemleri* (pp. 205-227). Pegem Akademi Yayıncılık.

Türkmen, B., Aşcı, Y., & Uğur-Zor, E. (2020). Covid-19 sosyal izolasyon döneminde meslek yüksekokulu öğrencilerinin e-öğrenmeye hazırbulunuşluk düzeylerinin incelenmesi: Çaycuma Meslek Yüksekokulu örneği. *The Journal of International Social Research*, *13*(72), 691–700.

Uyar, A., & Karakuyu, A. (2020). Meslek yüksekokulu öğrencilerinin e-öğrenmeye yönelik hazırbulunuşlukları. *Journal of Social and Humanities Sciences Research*, *7*(60), 2905–2914.

Ünal, N., Şanlıer, N., & Şengil, A. Z. (2021). Pandemi döneminde üniversite öğrencilerinin çevrimiçi öğrenmeye hazırbulunuşluklarının ve uzaktan eğitime ilişkin deneyimlerinin değerlendirilmesi. *İnönü Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu Dergisi*, *9*(1), 89–104. https://doi.org/10.33715/inonusaglik.812109

Venkatesh, V. (2000). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research, 11*(4), 342–365.

Wan, Z., Wang, Y., & Haggerty, N. (2008). Why people benefit from e-learning differently: The effects of psychological processes on e-learning outcomes. *Information & Management*, *45*(8), 513–521. https://doi.org/10.1016/j.im.2008.08.003

Yıldız, E., & Seferoğlu, S. S. (2020). Uzaktan eğitim öğrencilerinin çevrim içi teknolojilere yönelik öz yeterlik algılarının incelenmesi. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi, 18*(1), 33–46.

Yılmaz, R., Sezer, B., & Yurdagül, H. (2019). Üniversite öğrencilerinin e-öğrenmeye hazır bulunuşluklarının incelenmesi: Bartın Üniversitesi örneği. *Ege Eğitim Dergisi*, *20*(1), 180–195.

Zabri, S. M., Abakar, Y. M., & Ahmad, K. (2023). Exploring the acceptance of online learning among students in technical and non-technical programmes at a higher education institution. *Educational Leadership & Management*, *11*(1), Article 2284552. https://doi.org/10.1080/2331186X.2023.2284552

Zhang, S.-N., Li, Y.-Q., Liu, C.-H., & Ruan, W.-Q. (2019). Critical factors in the identification of word-of-mouth enhanced with travel apps: The moderating roles of Confucian culture and the switching cost view. *Asia Pacific Journal of Tourism Research, 24*(5), 422–442. https://doi.org/10.1080/10941665.2019.1572630

Zhao, L., Lu, Y., Huang, W., & Wang, Q. (2010). Internet inequality: The relationship between high school students' Internet use in different locations and their Internet self-efficacy. *Computers & Education, 55*(4), 1405–1423.