



## Examining the perspectives of university students towards mobile advertising and marketing: A Review

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### Abstract

This study set out to investigate how students at China's Xiamen University felt about mobile advertising. In addition to determining whether or not college students have a favourable opinion of mobile and SMS advertising, the study seeks to understand the challenges students faced and the concepts they understood from a pedagogical perspective. Using a sampling strategy based on convenience, data were obtained from 98 different pupils. Students' negative attitudes toward mobile advertising and their belief that it diminishes the quality of education are the study's most important findings. The research concluded that China Unicom should start using permission marketing to protect its users from being disturbed and that mobile marketers should better segment their client bases to avoid sending customers communications that are not relevant to them.

**Keywords:** Mobile Advertising; China Unicom; Mobile Marketing; Xiamen University

### Introduction

Email, SMS (Short Message Service), and MMS are three examples of the new types of marketing transmission channels or media that have emerged as a result of technical progress (Multimedia Messaging Service). It is considered that these digital media can increase the likelihood of reaching customers since they make it possible to modify both the subject and the structure of the notion being conveyed (Bahrini & Qaffas, 2019). As more advanced mobile devices, especially smartphones, have been more widely available, the new convergence of e-marketing has given shoppers greater agency by putting entire marketplaces at their fingertips. Thanks in large part to the proliferation of social media, mobile communication technologies have been increasingly pervasive since the turn of the millennium. The development of portable technologies that enable connection from any area and are not limited by physical geography has had far-reaching effects on both technology and society (Siriwardhana *et al.*, 2021; Bahrini & Qaffas, 2019).

By 2019, Statista predicted that there would be 4.68 billion mobile phone users worldwide. Inland China had 420 million individual mobile customers at the end of 2016, which is the same as a 43% penetration rate. The adoption and use of mobile phones increased in the region more quickly than in any other region in 2017, according to the GSM Association. As of the end of 2016, there were 731 million active SIM connections in the region, and experts predict that figure would approach 1 billion by 2020. It is projected that over half of the 115 million new members will come from just four of the most populous marketplaces in the region: Xiamen, Stanley, Beijing, and Flea & Street Markets (Aemro *et al.* 2020). Mobile marketing presents a significant chance for expansion for local

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companies. When they are out and about, an increasing number of consumers are turning to their always-connected, internet-capable smart phones to locate local businesses in the area in which they are now located. The market's processes and mentality have been shifted as a result of the proliferation of mobile phones. It serves as a tool for creating relationships with customers as well as targeting and connecting with those customers (Tong, Luo & Xu, 2020). Despite the fact that mobile phones present businesses with new promotional options, the issue of consumer interruption highlights the necessity of permission marketing (Sharma, Pathak & Siddiqui, 2021). Mobile phones are giving businesses new options. Permission marketing, a phrase that was initially defined by Godin (1999), is redefining the way in which businesses connect with their clients as it relates to this topic. With permission marketing, a customer gives their prior consent to receive promotional materials before ever making a purchase decision. This type of marketing requires the customer's permission (Monaghan, Tippmann & Coviello, 2020). It is an idea that, if implemented, is thought to lower the level of discontent felt by telecom customers. This is because it may make it less likely that people will get unwanted messages from unidentified senders, which is a huge deal.

Getting a client's permission before sending them a mobile marketing message is mandated by law in many nations. This is done so that customers are not bombarded with messages that are irrelevant to their interests. However, as of now, there is no infrastructure in place in Xiamen to safeguard the rights of mobile users to an interruption-free experience (Sun *et al.*, 2021).

### **Statement of the problem**

The number of people who own a mobile phone is now higher than six billion. It's abundantly obvious that people in modern societies have an inherent need for frequent social contact. Mobile phones have become an integral part of people's daily lives, allowing them to stay in constant contact with friends and family, access the internet, and join social networking sites. In this day and age, people can't live without their phones and use them for pretty much everything. The use of cell phones in the classroom has become increasingly popular in recent years. As a result, institutions of higher education and the faculty that work there are now faced with new issues (Haftu, 2019).

Digital devices like iPhones, iPods, iPads, and laptops have greatly facilitated human progress in the fields of communication and information gathering at desks, in classrooms, and in dorm rooms. As a result, young people are more driven than ever to discover their place in the global marketplace, driving up demand for technological advancements. A great number of clients keep their mobile phones on them at all times, and for many of them, it serves as their primary method of staying in touch with the outside world. Many people claim they can't imagine surviving without their cell phones and that they'd be completely lost without constant access to information. As a result, the growth and development of mobile marketing should not come as a shock to anyone (Müller *et al.*, 2018).

In many third-world nations, the number of individuals who have access to mobile phones has surpassed the number of people who have access to more traditional technologies such as telephone landlines, newspapers, and radio. Cardinale (2022) estimates that 45 million individuals in China use mobile phones out of a total population of 49.99 million (Eze *et al.*, 2021). Because of the widespread availability of this technology and the ability to conduct highly targeted marketing campaigns, businesses are considering implementing a method known as mobile marketing. Toubes *et al.* (2021) report that mobile phones are being seen by marketing managers as a promising medium for reaching target audiences. This is supported by the fact that mobile phone usage is on the rise. However, past researchers failed to account for their impact on the level of disruption they caused to potential clients. The push model and the pull model are the two primary types of mobile advertising models. Under the pull model, the marketer is responsible for disseminating the information concerning the campaign that the customers have already expressed an interest in receiving. With contrast, in the push model, the marketer proactively initiates communication with

customers by texting them the campaign's messages. SMS texts are deployed frequently in the projects that fall under this second group (Elhoseny & Shankar, 2019). In a push-model campaign, the advertiser begins and sends out the advertisements without any requirement from the consumer; hence, the advertiser must first obtain the consumer's consent before sending any promotional text messages. For starters, it's the advertiser's responsibility to start the advertising campaign and distribute the ads. In that case, it has the ability to annoy the people who subscribe to the mobile service (Martins *et al.*, 2019; Elhoseny & Shankar, 2019).

China Unicom, the sole provider of telecommunications services in China, recently held a news conference at which it announced that the country's total number of mobile users had surpassed 53 million. In comparison to the results of the prior financial year, this number represents a growth that is 11 percent higher. Despite assertions that mobile phones are crucial for gathering market data in rural China, there are many short digit numbers engaged in mobile marketing in that country by sending SMS to every registered number with China Unicom. Despite the fact that smartphones are said to play a pivotal role in this area, the situation remains unchanged. These phone lines do not check with the client in advance to see if they have their permission to send promos. Because of this, a great number of consumers are found to be making complaints to the telecom monopoly, and these customers are complaining about China Unicom because there are no measures in place to combat the disturbance. The next step of this research is to inquire into how Xiamen University students are affected by disruptions and what they think of mobile marketing. This facilitates to clarify the potential consequences for the relaying company and the inconvenience it could cause to telecom consumers if SMS messages were sent without authorization. In particular, it is learned that whether or not college students view Mobile/SMS advertising favourably for exploring the range of factors that are affecting Mobile/SMS advertising; and to better comprehend the difficulties students encountered and the ideas they professed from an instructive or knowledge viewpoint (Cardinale, 2022; Gao, 2018).

### **Methodology:**

#### **Sample, population, and the technique of sampling**

All first-year students at Xiamen University served as the study's primary focus, and a stratified random sample approach was utilized to collect the necessary information for analysis. A two-stage sampling approach was used for this survey because the 11 distinct departments that make up this university are thought to be internally heterogeneous but externally homogeneous in terms of the data that was sought (Athey & Imbens, 2022). First, it was intentionally selected the School of Economics and Management; then, randomly selected  $n = 98$  students from each of the six departments that make up the faculty: accounting; logistics & supply chain management; economics; marketing & business administration; management; and finance. The results showed that four pupils did not participate. The survey was modified based on the feedback of 15 different students who participated in the pilot phase. When the responses from the practice exam were analyzed, it was discovered that the majority of the respondents gave answers that were comparable to one another. As a result of this consideration, it was decided that each department would only be allowed to submit 17 samples total. Initially, 102 questionnaires were sent out to Xiamen University students, but due to low response rates, only 98 were included in the final analysis.

### **Theoretical framework**

#### **Mobile marketing**

Mobile marketing, as defined by Nasution, Arnita, and Aghniadi (2021), is the process of employing mobile media for marketing purposes. Sharma and Goyal (2019) offer a different definition of mobile marketing as the purpose of collaborative wireless media to deliver time- and location-responsive, user-specific content to consumers. Value is created for all parties involved as a result of the dissemination of this data's promotion of goods, services, and ideas. Text messaging, mobile advertising, permission-based promotion, user-generated content, mobile matter distribution, and

mobile business are all ways to get people more invested in a business. According to Demena *et al.* (2020), SMS technology makes it possible for marketers to convey messages to customers via the mobile handsets such customers use. Additionally, it can be utilized to bolster the impact of other traditional forms of media, such as print and broadcast media. The SMS method, on the other hand, has significant drawbacks, the most significant of which is the widespread perception among customers that receiving text messages from companies is both annoying and an infringement on their privacy. However, there are professors who think mobile marketing is a great way to attract new customers because it has the highest response rate of any form of marketing communication. This is one of the reasons why mobile marketing is becoming increasingly popular (Sharma & Goyal, 2019).

### **Mobile marketing acceptance**

Acceptability of mobile marketing is described as the capability of an individual's purpose to carry out a specific activity (Chong, Ong, & Tan, 2021). It manifests itself in the respondents' openness to and intentions to partake in activities like receiving things or information relating to marketing and promotional offers on their mobile devices. Additionally, it is expressed through the fact that some of the respondents intend to engage in these activities. In addition to this, the fact that it is a factor demonstrates how it plays a role in the situation. Perceived value influences not just the acceptance of mobile technology, services, and marketing, but also the usage of mobile technology, consumer devotion to mobile services and marketing, and other related factors. The two most common types of models for mobile advertising are known as the push model and the pull model. In the pull model, it is the marketer's responsibility to provide the customers with the information regarding the campaign in which they have previously indicated an interest in receiving (Kapinga *et al.*, 2019). The push approach, on the other hand, has the person in charge of marketing go out on a limb and send out text messages to the target audience on their own initiative. This is done in accordance with the push model. Almost exclusively, text messages are used in push-style marketing efforts. This discovery was backed by the findings of a study that was conducted, and it was determined that the key sacrifice that influences mobile advertising use is perceived discomfort. This finding is particularly relevant to mobile push advertising. It did not appear that monetary costs played a significant role in determining how value was evaluated in the mobile sector, except for trials in which students made up most of the sample. Most of the participants in those trials were students. Permission from customers before delivering mobile push commercials to their devices, or service providers filtering emails before delivering them to their spectators, could modify consumers' negative experiences of mobile push marketing (Gill *et al.*, 2019; Bernritter, Ketelaar & Sotgiu, 2021). The following are some of the possible elements that can influence one's perspective regarding mobile advertising, and they were considered in this investigation as a result of an analysis of earlier research that had been carried out in the same field: 1) Self-Assuredness; 2) Privacy of One's Own Space 3) Hazard, 4) Significance, and 5) Shopping Elegance

### **Results and Discussion:**

Students' opinions on mobile advertising, the problems they encountered, how they see mobile advertising as a tool for education, and the extent to which various factors shape their perspectives on mobile advertising were all subjected to descriptive analysis. This study examined the impact of mobile advertising on students' perspectives and the challenges they faced. The analysis was carried out with the help of SPSS (version 28).

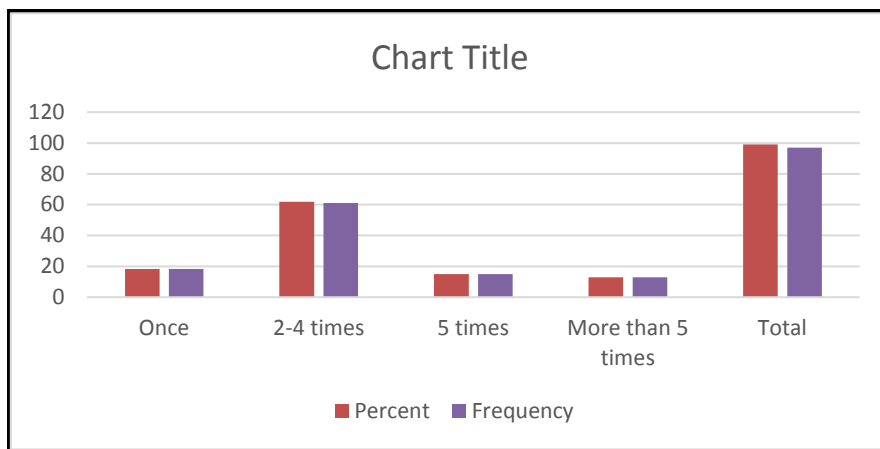
### **Student population characteristics**

About 34.7 percent of the pupils in the sample were female. Students aged 23–29 make up 62.2% of the total, while 37.8% are younger than 23. In line with these results, a 2016 assessment by the GSM Association indicated that mobile uptake by women in the interior of China remained below 40%. While men owned cell phones at a rate nearly double that of women in 2016, only 83% of women did. Another debated topic is that fewer than 20% of the region's youth (who make up more than 40% of the population in most nations) are mobile phone subscribers, when a previous finding

put this proportion closer to 15% (Volkmer & Lermer, 2019).

**The regularity with which you receive mobile marketing communications**

Figure 1 shows that over two-thirds of respondents regularly get between two and four short messaging service (SMS) texts (often marketing communications) on their mobile devices. About 18.4 percent of respondents make up the second largest group, and these are the ones who receive only one marketing communication every day. Although 7.4% of respondents said they receive at least that many marketing texts on their mobile device every day, only 2% said they receive more than five. Uniform with a study by Huang *et al.* (2019), who found that most Chinese college students receive between two and four marketing messages each day via their mobile devices, our findings show that this is indeed the case. Since China has only one telecom service provider, China Unicom, there is no explanation from the company for the sporadic nature of the mobile notifications it sends to its consumers.



**Figure 1: Rate of Mobile Marketing Message Delivery**

**The Reaction of College Students to Mobile Ads**

Most students (38%) said they delete mobile marketing messages without even opening them. The next largest percentage, 33.7%, read them after receiving multiple notifications. In the survey, 24.5% of students occasionally read the marketing messages, while 4.1% read them immediately. The study's findings conflict with those of Siraj, Syed and Sultan (2021), who discovered that 94% of mobile-sent marketing messages were viewed by the intended recipients. It's worth noting that while all pocket study participants agreed to receive third-party marketing communications by SMS, not a single Xiamen University student did so. It's common knowledge in the marketing world that getting customers' approval is far simpler and more effective than begging their pardon (Jan *et al.*, 2019). Customers in the wireless industry may not appreciate being interrupted unless they do so themselves (refer to Table 1).

**Table 1: Evaluation of Students' Reactions to Mobile Ads**

Response	Rate	Percent
Disregard it	37	37.8%
Occasional	24	24.5%
After accumulating too many	33	33.7%
Immediate reading	4	4.1%
Sum total	98	100.0%

Source: Statistics from a Survey in the field

**Preferred location to get notifications for mobile marketing**

Sharma, Pathak and Siddiqui (2021) state that a person's surroundings, including their position, time of day, day of the week, season, etc., are likely to influence their behaviour and receptivity to commercials. As a result of the augmentation, mobile marketing may benefit from the idea that people have routines that lead them to set locations at set times. If this is the case, marketers can focus on specific areas and aim to schedule the delivery of content to maximise its impact, such as on impulse buys. Students were polled about their interest in receiving mobile marketing alerts and where they would prefer to receive them. Nearly six in ten respondents (58.1%) indicated they'd rather stay at home than in a quiet place like a library or classroom if they had to deal with mobile marketing notifications. Eight percent of respondents say they'd want to get mobile marketing alerts when they're in class, and one percent would like to get them while they're at the library. However, 32% of respondents would rather not get any mobile marketing alerts at all (refer to Table 2).

**Table 2: Ideal Location to find Notifications for Mobile Marketing**

Desired location	Rate (R)	Percent (P)
Public library	1	1.0%
Residence	57	58.2%
Group	8	8.2%
No mobile ads, please	32	32.7%
Sum total	98	100%

Source: Statistics from a Survey in the field

**Students' perspectives on mobile marketing and advertising**

Jo and Kim (2019) defined an individual's attitude as a positive or negative sensation in relation to a specific behavior. Attitudes and beliefs held by consumers are considered to be the most important aspects in deciding the accomplishment of mobile commerce. On average, students gave mobile advertising a neutral rating (mean = 2.72) when asked to rate their opinions using these criteria. They don't have a good outlook because the mobile marketing offers, they're exposed to don't line up with what they're actually looking for. The study surveyed the Japanese public about their impressions of mobile advertising (Cruz *et al.*, 2019; Saprikis, Avlogiaris & Katarachia, 2020). They found that the most important factor affecting Japanese customers' opinions was the reliability of the source material (refer to Table 3, here Rate is denoted by R and Percent is denoted by P).

**Table 3: Students' Perspectives on Mobile Marketing Advertisements and Campaigns**

Parameter	Strongly like (5)		Like		Neutral		Dislike		Strongly dislike (1)		Mean
	R	P	R	P	R	P	R	P	R	P	
Stance taken to mobile advertising	6	6.1	32	32.7	12	12.2	25	25.5	23	23.5	2.72

Source: Statistics from a Survey in the field

Both the choice of the type of advertising to use based on the requirements of the target audience and the choice of when to use the advertising each have their own unique effects on the students' perspectives regarding mobile marketing. YouGov found that consumers would be more receptive to mobile advertising if they were able to select the type of ad they saw (mean = 3.99) and the time of day they were exposed to it (mean = 3.98). Consistent with the findings of a study by Tan *et al.* (2018), which suggested that customers consider their smartphones to be private objects, they may

feel invaded if they are frequently subjected to advertisements and other forms of promotion. The majority of respondents, however (mean = 3.33), believe that SMS marketing has a detrimental effect on classroom instruction. Researchers have reached different conclusions about mobile marketing's impact on academic achievement in past studies. As stated by Porter *et al.* (2020), kids, teachers, and parents can all be linked together to better coordinate school-related activities and make use of the technology for tutoring and Internet research. However, there are many who worry about the impact that mobile marketing could have on students' ability to learn. Like this study, one by Chen (2020) found that messaging is a diversion to others sitting close (refer to table 4).

**Table 4: Students' Perspectives on Mobile Advertisements' Impact Upon Education**

Variables	SA (5)		A		N		D		SD (1)		Mean
	R	P	R	P	R	P	R	P	R	P	
Ad type	23	23.5	57	58.1	18	18.1	-	-	2	2.0	3.99
When should I start?	24	24.5	44	44.9	15	15.3	14	14.3	1	1.0	3.78
It's bad for education	12	12.2	46	46.9	11	11.2	20	20.4	9	9.2	3.33

Source: Statistics from a Survey in the field

**Attitudes of students towards mobile marketing and the factors influencing them**

**Trust**

The negative effects of privacy worries can be mitigated by several factors, comprising a strong reputation for the company in question, the trust of its customers, and the presence of official data protection seals. The opinions expressed by the respondents on a range of factors demonstrate the need for permission-based mobile marketing. Most people found mobile marketing service providers to be accommodating in meeting their needs, felt more open to mobile marketing when they knew the marketer personally, and felt safe giving their information to mobile marketers (2.36 on a 4-point scale) (3.74 on a 5-point scale). The study's findings corroborate those of Foltean, Trif and Tuleu (2019), who found that consumers who worry about their privacy are less likely to welcome any kind of individualized marketing or advertising. Another study, this one by Demena *et al.* (2020), found that trust has a positive effect on people's propensity to accept SMS advertisements both immediately and later, with the goal of making those advertisements more useful.

**Table 5: Trust and its Impact on Mobile Marketing Attitudes**

TRUST	Knowing who I'm dealing with makes me more at ease with mobile marketing		The companies that offer mobile marketing services value their clients' opinions and feedback		A marketer's use of my information would be limited to what I've explicitly authorized, in my opinion	
	Rate (R)	Percent (P)	Rate (R)	Percent (P)	Rate (R)	Percent (P)
SA (5)	29	29.6%	5	5.1%	3	3.1%
A	32	32.7%	17	17.3%	43	43.9%
N	22	22.4%	16	16.3%	30	30.6%
D	13	13.2%	30	30.6%	18	18.4%
SD (1)	2	2%	30	30.6%	4	4.1%
Sum total	98	100.0%	98	100.0%	98	100.0%
Mean	3.74		2.36		3.23	

Source: Statistics from a Survey in the field

**Privacy**

Siraj, Syed and Sultan (2021) contend that unwanted communications are more harmful to the owner of a mobile device than those received by traditional mail. According to Aemro *et al.* (2020), due to the

more intrusive nature of mobile marketing compared to traditional media, much more focus should be placed on permission concerns to make mobile advertising a positive experience for consumers and to protect their confidentiality. The user's permission must be sought with highly valuable information. It must result in a situation where both the marketer and the user win. In this vein, respondents agree that non-permission mobile marketing is an invasion of their personal space. They firmly concur that (mean 4.12) customers' consent is required before mobile marketing service providers can send communications. In addition, the students disagree that data privacy rules protect them (mean 2.53) and think that mobile marketers are infringing on their right to privacy (Tong, Luo & Xu, 2020). They are irritated because they feel that mobile marketing content is frequently irritating (mean 3.80), which upsets them (mean 3.58). Information collected from China Unicom, the country's single telecom provider, shows that users are not protected from being irritated by unsolicited mobile marketing services (Müller *et al.*, 2018). Push and pull are the two main categories for marketing on wireless platforms. Pushing messages without authorization is known as pulling messages with permission (Morariu *et al.*, 2020). Currently, the push method is being widely used by Chinese mobile service providers (see Table 6 below).

**Table 6: Impact of Confidentiality on Mobile Marketing Attitude**

PRIVACY	Before sending mobile ads, get my permission		I think privacy laws protect consumers		Mobile ads can be obnoxious		Mobile marketing bothers me	
	Rate	Percent	Rate	Percent	Rate	Percent	Rate	Percent
SA	9	9.8%	2	2.0%	34	34.7%	28	28.6%
A	41	41.8%	15	15.3%	27	27.6%	32	32.7%
N		11.2%	36	36.7%	24	24.5%	15	15.3%
D	5	5.1%	25	25.5%	9	9.2%	15	15.3%
SD	2	2.0%	20	20.4%	4	4.1%	8	8.2%
Sum total	98	100.0%	98	100.0%	98	100.0%	98	100.0%
<b>Mean</b>	<b>4.12</b>		<b>2.53</b>		<b>3.80</b>		<b>3.58</b>	

Source: Statistics from a Survey in the field

**Risk**

Other characteristics that were discovered to be significant for the student customers' attitudes toward mobile marketing were informational and financial risks. Despite accepting (mean 3.13) to participate in promotions and mobile marketing offers, participants in the survey reported concerns about disclosing personal information to internet firms. On the other side, they feel that (mean 3.66) they are unable to receive reimbursement from mobile marketers when a financial error occurs. The results are in line with those of other research on risk-taking and information-sharing decisions found in (interactive) marketing and computer-based information systems (Soumelidou & Tsohou, 2021). A trade-off examination of the risks and advantages of disclosing particular data to others, the so-called privacy calculus is the focus of Wu, Vitak and Zimmer (2020) interdisciplinary assessment. The expenditures associated with a loss of privacy are the key expenses here. Thus, most earlier studies suggest that customer willingness to reveal personal information is negatively impacted by privacy concerns (see table 7 below).



**Table 7: Impact of Risk on Mobile Marketing Attitude**

Risk	I don't want to give web companies access to my personal information		I would be more than happy to participate in promotions and mobile marketing opportunities		I worry that mobile marketers won't offer me compensation if I make a financial mistake	
	Rate	Percent	Rate	Percent	Rate	Percent
SA	7	7.1%	4	4.1%	27	27.6%
A		32.7%	42	42.9%	33	33.7%
N		22.4%	18	18.4%	19	19.4%
D	27	27.6%	31	31.6%	16	16.3%
SD	10	10.2%	3	3.1%	3	3.1%
Total	98	100%	98	100%	98	100%
<b>Mea</b>	<b>2.99</b>		<b>3.13</b>		<b>3.66</b>	

Source: Statistics from a Survey in the field

**Relevance**

The research concludes that the value received by consumers from receiving and understanding permission marketing messages should outweigh any associated costs. Martins *et al.* (2019) claim that the effect of financial advantage on customers' benefit in the permission advertising programme decreases as message relevance increases. Although the respondents in this research agree that (mean 3.01) they find it useful to get marketing messages and campaigns on their mobile phone, they are adamant that (mean 3.99) such messages are annoying. There is a statistically significant decrease in confidence (mean = -2.7) that mobile marketing messages are relevant to the recipients' requirements. A major source of student frustration was the fact that the messages they were receiving had nothing to do with their coursework or their intended purchases (see below Table 8).

**Table 8: Relevance's Impact on how People Feel about Mobile Marketing**

Relevance	I despise receiving promotional texts on my phone		I like the idea of being able to get coupons and discounts sent straight to my phone		I discover mobile marketing content to be pertinent to my demands	
	Rate	Percent	Rate	Percent	Rate	Percent
SA		32.7%	12	12.2%	8	8.2%
A	39	39.8%	35	35.7%	21	21.4%
N	22	22.4%	10	10.2%	16	16.3%
D	4	4.1%	24	24.5%	40	40.8%
SD	1	1.0%	17	17.3%	13	13.3%
Total	98	100.0%	98	100.0%	98	100.0%
<b>Mean</b>	<b>3.99</b>		<b>3.01</b>		<b>2.70</b>	

Source: Statistics from a Survey in the field

**Shopping style**

Student perspective on mobile advertising is one of the variables considered. Respondents generally agree that mobile marketing does not mesh with their typical purchase process (mean = 3.53). The results are in line with those found by Cruz *et al.* (2019), who found that 30% of consumers were less

likely to make a purchase after viewing a mobile marketing advertisement. The responses students gave to a survey about mobile advertising showed how "personal" their phones were to them and how innovative the industry would have to be to win over this demographic. Mobile marketing posts have a negligible impact on helping students save time during their product searches (mean 2.81 minutes) or on their ability to make informed purchasing decisions. The results imply that students are not receiving mobile advertisements that are relevant to them and that save them time when making purchases.

**Table 9: Shopping Preferences and Attitudes Toward Mobile Marketing**

Shopping Style	Mobile marketing doesn't align with how I like to shop		My mobile phone's mobile messages assist in speeding up my search for goods and services		My mobile phone's marketing allows me to make more informed purchasing decisions	
	Rate	Percent	Rate	Percent	Rate	Percent
SA	14	14.3%	6	6.1%	4	4.1%
A	46	46.9%	15	15.3%	26	26.5%
N	21	21.4%	35	35.7%	29	29.6%
D	12	12.2%	38	38.8%	24	24.5%
SD	5	5.1%	4	4.1%	15	15.3%
Total	98	100.0%	98	100.0%	98	100.0%
<b>000000M</b>	<b>3.53</b>		<b>2.81</b>		<b>2.80</b>	

Source: Statistics from a Survey in the field

**Economic Modelling**

Table 10 displays the econometric conclusion that three of the hypothesised explanatory variables impact the uptake of mobile marketing among college students. The confidentiality, safety, and importance of students' online communications. Formulation of the regression equation was done following this logic:

$Y = \beta X + U$ , which is acknowledgement of mobile marketing = 1.11 + 0.173 (Privacy) + 0.506 (Relevance) – 0.168 (Risk) + disturbance term.

According to the critical variables, there is a negative 16.8% effect on acceptance rates when risk is correlated with mobile marketing among college students. As was already said, risks can be both financial and informational. Financial risk arises from their perception that there is no reimbursement policy for the wealth that has been taken from their cell balance, and informational risk arises from their concern over disclosing their personal information to internet companies. This can be taken to mean that students will embrace mobile marketing less favorably the more risk they sense. The adoption of mobile marketing is positively impacted by privacy and relevance, with relevance having a 50.6% impact on acceptance. According to the study's descriptive portion, students consider a text transmitted without their prior consent as a danger to their privacy. That individuals will be open to mobile advertising is what the economic analysis proved. The more rigorously they feel their consent to receive the SMS is verified, the more secure they feel their privacy to be. Trust and Shopping style are two factors that strongly affect college students' attitudes about mobile marketing, however the econometric model does not provide a significant sign for these variables.

**Table 10: The Key Elements Influencing College Students' Acceptance of Mobile Marketing**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.110	0.510		2.175	0.032		
	Trust	0.052	0.078	0.055	0.676	0.500	0.981	1.019
	Privacy	0.185	0.089	0.173	2.0076	0.041	0.941	1.062
	Risk	-0.170	0.090	-0.168	-1.875	0.064	0.817	1.224
	Relevance	0.493	0.082	0.506	60.040	0.000	0.930	1.075
	Shipping Style	0.072	0.095	0.068	0.759	0.450	0.821	1.218
<b>Model Summary<sup>b</sup></b>								
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate				
1	0.632 <sup>a</sup>	0.399	0.366	0.925				
a. Predictors: (Constant), Shipping Style, Trust, Privacy, Relevance, Risk								
b. Dependent Variable: Students Attitude Towards mobile marketing								

Source: Statistics from a Survey in the field

### Conclusion:

The study found that students view mobile advertising negatively due to a disconnect between their intent to buy and the products advertised to them. The findings also indicate that if students had the option to select the type of advertisement they would get and the timing at which they would receive it, their attitudes toward mobile advertising would be overwhelmingly favorable. From an educational standpoint, the students concur that SMS advertising has a detrimental effect on educational quality due to its disruption. The students identified several factors, such as trust, risk, relevance, and buying inclinations, that influence the level of comfort with mobile advertising. Customers are more receptive to mobile marketing when they have a preexisting relationship with the marketer, and they think that mobile marketing service providers should get permission from customers before sending any communications. Financial and informational dangers were also brought up, and when a financial mistake is made, students think they will not be compensated by mobile advertisers. The degree to which the students' demands and buying preferences were met by the mobile marketing communications was lower.

### Recommendations

Following actions were suggested considering the study's findings:

1. To deliver customized, pertinent, and necessary communications and guarantee mobile marketing acceptability, mobile marketers must properly segment their consumer base.
2. China Unicom should develop a permission marketing policy to safeguard its customers from being bothered by the advertising without their consent.

### Consequences of the study

This study could benefit a variety of interested parties. China Unicom is the primary stakeholder because it develops, disseminates, and puts into practice laws that safeguard the privacy of its customers. By opening the door for case studies to be studied in greater depth, this research has also made an important contribution to academia.

### Limitation/Recommendations for Additional Research

The data were only obtained from one university (Xiamen University), so it may be difficult to generalize the results across national boundaries and to other countries. Future research may consider additional college students or clients from various locations.

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**Conflict of Interest:**

The authors have not acknowledged any conflict of interests.

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