Would You Pay for a Facebook Account to Protect Your Privacy?

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This research's purpose is to determine whether Facebook users would pay for their accounts to protect their privacy and reduce the number of advertisements shown to them by Facebook. Facebook accountholders were recruited from Mechanical Turk to complete the survey. Choice-based conjoint (CBC) was used to estimate the utility consumers have for price, advertising, and privacy. Facebook users overwhelmingly prefer the no-cost option with the usual number of advertisements, and Facebook owning their data. Price is 50 percent more important than the next most important attribute: owning the data on Facebook. The number of advertisements shown on Facebook is about a third as important as price. User privacy concerns on Facebook are overshadowed by the cost of acquiring that privacy. The contribution of this research is making privacy and the number of advertisements shown a choice in the decision. Through tradeoff analysis, respondents must be explicit about what is important.

Keywords: Facebook, privacy, choice-based conjoint, Hierarchical Bayes, Mechanical Turk

T he world's population and access to technology appear to be the only limit to social media's growth. Virtual communities in social media connect the world by linking friends in private and creating public personas (Pikas & Sorrentino, 2014). This is a key motivator for using social media (Yan & Tan, 2014). Connecting means revealing personal information (Cho, Knijnenburg, Kobsa, & Li, 2009). Fundamental to creating relationships is self-disclosure (Cozby, 1973). There are consequences to posting: identify theft and unauthorized use of personal data; surveillance of online behavior; and unwelcome contact (Debatin, Lovejoy, Horn, & Hughes, 2009). These consequences extend to friends, as the Facebook-Cambridge Analytica debacle illustrates. There 52 hardware and software makers accessed Facebook data from users and their friends (Davidson, 2018; Granville, 2018).

Three studies confirm that the majority of American consumers are concerned about divulging information and losing privacy (Sun, 2018). They are uncomfortable: having brands buying and selling their data; social media sending them targeted ads; and with governments' inadequacy in addressing the issue. These concerns have not caused consumers to clamor to pay for social media and control their privacy on social media. Since the sites are free to users, they find advertising on the sites acceptable (Kelly, Kerr, & Drennan, 2010). Social media is free because, for example, advertising constitutes 98 percent of Facebook's revenue (Fortune, 2017). Advertisers covet these users because they self-select into segments with shared interests and goals (Hsu, 2012). U.S. social media advertising is expected to be $105.86 billion in 2020 and at an annual growth rate of almost 6 percent to $133.76 billion in 2024 (Statista.com, 2020a). Facebook is the largest social media network, with over 2.49 billion active monthly users (Statista.com, 2020b). Almost two-thirds of marketers believe Facebook is the most important social media website (Stelzner, 2017).

Facebook

Of Facebook's 2.49 billion monthly active users (i.e., used during the last month) (Statista.com, 2020b), 1.56 billion login daily (Zephoria.com, 2020). The average time spent on Facebook is 20 minutes (Zephoria, 2020). The volume of interactions is staggering: "Every 60 seconds on Facebook: 510,000 comments are posted, 293,000 statuses are updated, and 136,000 photos are uploaded" (Zephoria, 2020). Facebook users spend an average of 58 minutes daily on the site (Allcott et al., 2019). In an experiment comparing Facebook users who were paid not to use the site with those still using it found the former improved subjective well-being, less polarized, reduced their demand for the site after resumption, and made them less informed about current events (Allcott et al., 2019).

Facebook Advertising

Brand pages have proven to be strong indicators of consumer intent to purchase (Duffett, 2015). Facebook pages are most effective when coupled with firm-initiated promotional communication or boosted posts (Mochon, Johnson, Schwartz, & Ariely, 2017). Merely liking a page or customer-initiated social interaction may not influence offline behavior. Brand trust and community identification with the brand are positively

enhanced through Facebook likes or comments (Ho, 2014). The greater the interaction, the greater the relationship which enhances trust (Ho, 2014). A user's positive experience with a brand's Facebook content means he/she is more likely to share content, post, post positive comments, claim preference, and recommend a brand (Smith, 2013). Digital engagement volume (comments on a company's Facebook page) and valence (average tone of Facebook comments) have positive influences on revenue (Yoon, Li, Yi, Hong & Liu, 2019).

Word-of-mouth is the largest portion of Facebook advertising (Williamson, 2009) and free sharing through likes, shares, and comments (Chu, 2011). Where Facebook advertisements are shown influences acceptance: News Feed is better than Timeline and Fan Page (Van den Broeck, Poels, & Walrave, 2017). Message stream was better for higher involved subjects and sidebar for low involved (Van den Broeck, Poels, & Walrave, 2017).

Facebook users' value of the site decreases with an overflow of advertising. Many users see targeted ads on Facebook as annoying, intrusive, insensitive, and secondary to their main interest (Beauchamp, 2013; Sashittal, Sriramachandramurthy, & Hodis' 2012). Ad relevance on Facebook increases privacy concerns, which enhances ad avoidance (Jung, 2017). Because of privacy concerns that social media networks are collecting personal information for marketing, users are more likely to avoid ads (i.e., no click on them, scroll down, or closing windows) (Jung, 2017). Facebook users have negative feelings about ads in their newsfeed because it is seen as intrusive and a threat to their freedom to use Facebook (Youn & Kim, 2019).

Forty-four percent of respondents in a global study claimed to have never clicked on a Facebook advertisement (Greenlight, 2012). A Korean study found that Facebook ads were not valued for their information (Jung, Shim, Jin, & Khang, 2016). Contradictory research does exist. Fifteen percent of Swedish Facebook users found advertisements on Facebook critical or very important for their general and purchase decision-making (Hansson, Wrango, & Soilen, 2013). Millennials in South African reported ads on Facebook had a positive influence on intention-to-purchase and purchasing (Duffett, 2015).

Privacy and Social Networks

Privacy is a primary factor inhibiting social network adoption (Cho et al., 2018). With good reason, control of personal information is lost when businesses such as Facebook obtain it (Guynn, 2018). Privacy is defined as autonomy over "when, how, and to what extent information about them is communicated to others" (Westin, 1967, p. 7) or more succinctly: the right to be left alone (Warren & Brandeis, 1890). It is the delineation between private and public or shared (Altman, 1975). Personality influences privacy on Facebook. Extroverts are less likely to interact with strangers, and subjects with low emotional stability are more likely to block apps that those with high emotional stability (Tsai, Chang, Chang, & Change 2017).

Complicating privacy in social networks is many consumers lack the awareness and technical sophistication to protect their data (Acquisti, Taylor, & Wagman, 2016). Users have imperfect or asymmetric information on data collection and use. The difficulty is many social media users do not know what site privacy statements are. Company privacy statements are written to thwart litigation, not consumer protection (Pollach, 2007). How they are provided influences understanding. Using more than text-only statements (i.e., audio and pictorial) "could more accurately describe what happens to consumers' personal information when they become members of social media sites" (Fox & Royne, 2018, p. 83).

With social networks, multiple parties control private information (e.g., individuals, friends, and sites). People with heightened privacy concerns prefer Facebook because of its flexibility in privacy settings (Shane-Simpson, Manago, Gaggi, & Gillespie-Lynch, 2018). Facebook users in a five-year study used more sophisticated privacy setting for public consumption while sharing more information within their network (Strutzman et al., 2012). Privacy within Facebook may be becoming more elusive. From its U.S. patent filings, Facebook wants to be more intrusive in its users' lives. For example, it wants to predict romantic relationships, personality, and major life events (Chinoy, 2018). Facebook wants to track users' weekly routine. It wants to determine a user's facial emotions when viewing Facebook. Facebook is facing a class-action lawsuit over facial recognition software that stores users' information (USA Today, 2018). Illinois' Biometric Information Privacy Act (2008) requires companies collecting biometric information to obtain consumers' prior consent (Marotti, 2018).

Legislation may curtail a company's use of data obtained through social media accounts. The California Consumer Privacy Act (CCPA) and the European Union's General Data Protection Regulation (GDPR) align in many ways to protect personal information (Piovesan, 2019). CCPA "authorize consumers to opt-out of having their personal information sold by a business while prohibiting that business from discriminating against the consumer for exercising this right; authorize businesses to offer financial incentives for the collection of personal information" (Piovesan, 2019). Some have predicted the laws will be the death knell of the free Internet (Golden, 2019). Facebook says it is already in compliance since it does not sell user data (Hautala, 2020); however, many have disagreed with that interpretation.

LITERATURE REVIEW

Three recent studies confirm the growing distrust Americans have about their data online (Sun, 2018). The first found 55 percent were very uncomfortable having brands buying and selling their data. Fifth-three percent (second study) did not want their data used for targeted advertisements. The last study found 55 percent did not believe the government would do enough to regulate tech companies. People are constantly balancing disclosure and concealment of personal information. Women have greater privacy protection behavior with Facebook than men (Saeri et al., 2014). Although many declare privacy paramount, their actions are incongruent. A chasm exists between privacy attitudes and behavior. The privacy paradox shows actions override intentions (Barnes, 2006; Marwick & Boyd, 2014). An experiment among tech-savvy users for an app downloaded on phones found privacy concerns were outweighed by functionality and design. Users choose among five different apps of varying degrees of privacy threats and received sufficient money to purchase the app. They downloaded the app for a week to provide a review (Barth et al., 2019). Privacy concerns on Facebook and posts were found to have a small relationship (Reynolds, Venkatanathan, Goncalves, & Kostakos, 2011). A meta-analysis of the privacy paradox found the discrepancy was not as pronounced as earlier thought (Baruh, Secinti, & Zeynep, 2017).

The following theories have been used to explain the privacy paradox. Privacy is categorized by territorial, personal, and informational (Rosenberg, 2004). The first deals

with the area around a person and the second with undue interference. The last is how personal data is collected, kept, processed, and disseminated. Acquisti (2004) argues that for personal privacy consumers are not rational agents. They are influenced by decision-making biases. The optimism bias is the belief that online privacy violations are more likely to happen to others (Baek, Kim, & Bae, 2014). Third-person theory shows that privacy concerns are diminished because people believe others are at risk, not them (Debatin et al., 2009). Individuals are usually overconfident about their knowledge and skills. A comparison of subjective and objective knowledge about privacy-enhancing technologies showed that less than 25 percent who claimed knowledge were knowledgeable (Jensen, Potts, & Jensen, 2005). People underestimate risk for things they like and overestimate for dislikes (Slovic, Finucane, Peters, & MacGregor, 2002). Hyperbolic discounting refers to discounting future benefits more than current ones (Acquisti & Grossklags, 2005). It relates to the immediate gratification bias (Acquisti, 2004).

According to the privacy calculus theory, individuals tradeoff between expected privacy loss and potential disclosure gain (Jiang, Cheng, & Choi, 2013). Rewards for social networks are intangible and harder to measure. These needs include entertainment, social relationships, and identity construction (Debatin et al., 2009). Ellison et al. (2011) elaborate on user needs and shows that social networks increase social capital or resources from relationships. Bounded rationality and incomplete information also are used to explain the privacy paradox (Acquisti & Grossklags, 2005). Information about risks and benefits is incomplete for individuals, and they are limited by cognitive capacity and knowledge. Research has shown that privacy calculus and dispositional privacy concerns (i.e., mental shortcuts) are independent concepts that affect privacy (Choi, Wu, Yu, & Land, 2018). "The impacts of perceived benefits (i.e., expected social capital gains) on behavioral responses are moderated by individuals' judgment of risks (i.e., privacy risks)" (p. 144).

Communication privacy boundary management has been used to explain privacy concerns. Individuals decide based on perceived benefits and costs of information disclosure (Petronio, 1991). Communication is evaluated from both the sender's and receiver's perspective, where both co-own and manage information. Privacy concerns are

affected by usage rate (Tsay-Vogel, Shanahan, & Signorielli, 2018). For heavy users, risk perception increased longitudinally, while they were steady for light users. Finally, users believe privacy violations are inevitable because of technology. Privacy is a collective effort of those connected to on social media (Hargittai & Marwick, 2016).

Facebook and Subscriptions

Would consumers pay for more privacy on Facebook? Virtually all Facebook's revenue last year came from advertising ($39.94 billion out of $40.65 billion or 98%) (Borchers, 2018). To generate that revenue from annual subscriptions would mean $18.75 per user (Borchers, 2018). Another study confirms that estimate: Each Facebook user is worth about $20 to the company. In North America, it garners more, with one estimate at $82 (Fowler, 2018). Another estimate is that a monthly subscription fee of $7.63 would be required to recoup Facebook's lost ad revenue (Williamson, 2018).

Many content providers offer subscription services, Hulu, YouTube, HBO, Pandora, Spotify, the Wall Street Journal, etc. A Hubspot survey (Zantal-Wiener, 2018) found 64 percent of consumers would not pay for an ad-free Facebook subscription. The number was consistent across the U.S., U.K., and Canada. Another survey found that only 23 percent would pay for an ad-free Facebook (Williamson, 2018). Among the 23 percent that would pay, 25 percent would pay between $6 and $10; 22 percent would pay between $11 and $15, and 12 percent would pay more than $15.

A comparison of willingness to pay (subscription model) and willingness to accept (forgo service) in a nationally representative sample (U.S.) found mean values of $17.40 (WTP) and $75.16 (WTA) for Facebook users, respectively (Sunstein, 2018). The higher value for WTA is attributed to the endowment effect. People value what they own more than the cost to obtain initially (Thaler, 2015). You must pay more to entice a Facebook user to give up his/her account than the same user to start paying for the account. Finally, in a willingness-to-accept auction, consumers on average across three groups would have to be paid between $1,139 and $2,076 to give up Facebook for a year (Corrigan, 2018).

Zuckerberg said in his Congressional testimony that a free Facebook would always exist (Pierson & Lien, 2018). This reflects the company's mission. Internal Facebook studies indicate consumers would view a paid subscription as greedy (Frier, 2018).

Hypotheses

Our contribution to the literature is forcing respondents to be explicit about tradeoffs among three constructs: paying for Facebook, advertisements seen, and privacy. This choice-based conjoint model allows for different prices, whether advertisements are shown, and personal ownership of Facebook content.

As the largest social media platform domestically and internationally, Facebook's impact as a subscription service would siphon money from other subscription models. With rising security concerns and the imposition of more government regulations, a pay-version of Facebook may become inevitable if it restricts potential revenue from the free version. California's Consumer Privacy Act allows consumers to prevent businesses from selling their data to third parties or remove their data entirely (Stoltz, 2019). Facebook and other social media networks may be restricted in what data they may gather about users from websites and apps (Wong, 2020). Europe's General Data Protection Regulation also imposes restrictions, which caused Facebook to allow users to access, download, or delete their information (Wong, 2020).

To determine the price levels for choice-based conjoint, we examined eight existing services: Amazon Prime (includes streaming of movies and TV shows), Apple TV, Brit Box (BBC), CBS All Access, Disney, ESPN+, Hulu, and Netflix. The average monthly cost was $7.74, with a range of $4.99 (Apple TV and ESPN+) to $12.99 (Amazon Prime). Our second price was as close as possible to the mean and ending in $.99. With only one above $10 (Amazon Prime), we chose $9.99 as the highest value, which is the price of CBS All Access and close to Netflix's price of $8.99. This is in line with prior research indicating that a minimum price of almost $8 would have to be charged to replace Facebook's lost advertising review (Williamson, 2018).

Price research indicates that most Facebook users will not pay for the service (Molla, 2018; Williamson, 2018; Zantal-Wiener, 2018). There is no prior research that asks about price, privacy, and advertising simultaneously in tradeoff analysis. Choice-based conjoint allows the estimation of share of preference for different combinations of attribute levels via simulation (Orme & Chrzan, 2017).

> H1: Price will be more important than advertising and privacy in the selection of a Facebook subscription.

The second hypothesis deals with privacy. Consumer research indicates a concern for online privacy. The privacy paradox shows actions override intentions (Barnes, 2006; Marwick & Boyd, 2014). Although a meta-analysis found the gap between intentions and actions was not as pronounced as thought, it still existed (Baruh, Secinti, & Zeynep, 2017). Many may feel that privacy violations are inevitable because of technology (Hargittai & Marwick, 2016). Privacy is the second variable in our tradeoff analysis and has two levels: Facebook content is owned by the user or Facebook.

> H2: Privacy will be more important than advertising in the selection of a Facebook subscription.

Prior research indicates few consumers are willing to pay for Facebook. The privacy paradox indicates that although consumers will indicate privacy is important, their actions will conflict. In our example, that conflict would be the user's willingness to pay for the service. The third variable in our study is the number of ads shown. We have two levels: none or half the usual amount. Respondents are shown profiles (i.e., one level each of three attributes to evaluate) (Figure 1).

> H3: The proportion of consumers willing to forgo privacy protection, eliminate advertisements, and pay for the service will be low.

Figure 1: Choice Set Example

METHODS

The sample was obtained from Mechanical Turk (MTurk). MTurk offers the ability to recruit large and diverse samples, quick survey completion, cost efficiency, and better quality than undergraduate students (Miller, Crowe, Weiss, & Maples-Keller, 2017). Turkers (MTurk respondents) identities are verified by Amazon, reportedly from IRS

documents (Matsakis, 2016). One study compared MTurk to samples from: students, Qualtrics panel, and other panel providers (Kees, Berry, Burton, & Sheehan, 2017) and found MTurk superior to the panel surveys and comparable to the student samples. When compared to Craigslist, Facebook, and Google AdWords, MTurk and Craigslist were more cost-efficient, and respondents were more committed but less demographically diverse than Facebook and AdWords (Antoun Zhang, Conrad, & Schober, 2016). Another study found them "more demographically diverse than standard Internet samples and significantly more diverse than typical American college students" (Buhrmester, Kwang, & Gosling, 2011, p. 4). A criticism of MTurk is the same respondents are completing surveys for different topics. Using a "capture-recapture" technique, one study estimated that 26 percent of workers retired from the pool, and 36 percent completed a survey for one of seven laboratories recruiting respondents, and each lab can reach 7,300 workers (Stewart et al., 2015). MTurk has been shown to have good reliability and validity for self-reported data for socially unacceptable behavior (Kim & Hodgins, 2017). Reliability measures did not vary across different compensation levels (two, 10, and 50 cents) (Buhrmester, Kwang, & Gosling, 2011). Another U.S. study found a large proportion of imposters when using self-reported screeners (Wessling, Huber, & Netzer, 2017).

Respondents had to have a Facebook account, be 18-65 years of age, and live in the United States. The sample size was 186. Respondents were almost equally proportioned between married, single, and other categories (Table 1). Two-thirds were between 25-44 years of age (Table 2), and slightly more than half were female (Table 3). They spent more time on Facebook on weekdays versus weekends (Table 4).

Table 1: Demographics (n=186)

Question	Percentage
Marital Status [1]	
Married	38
Single	34
Separated	1
Divorced	7
Widow / widower	2
Long-term committed relationship, but not married	18
Prefer not to answer	1

[1] Because of rounding error may not sum to 100

Table 2: Age (n=186)

Question	Percentage
Age [1]	
18-24	10
25-34	40
35-44	22
45-54	15
55-64	9
65+	5
Prefer not to answer	0

[1] Because of rounding error may not sum to 100

Table 3: Gender (n=186)

Question	Percentage
Gender [1]	
Male	43
Female	57
Other	0
Prefer not to answer	0

[1] Because of rounding error may not sum to 100

Table 4: Time on Facebook (n=186)

Question	Minutes
Time on Facebook	
Monday to Friday	79.8
Saturday to Sunday	63.3

Choice-based conjoint (CBC) was used to estimate the utility consumers have for price, advertising, and privacy. CBC was used as it allows the modeling of the choice task facing consumers (Orme & Chrzan, 2017). CBC allows respondents to evaluate usually eight to 12 profiles to estimate utilities for many more product combinations (Howell, 2009). To accomplish this, CBC estimates how different a respondent's utility is from other respondents or sample averages. The sample variance and amount of profiles

evaluated by a respondent determine the optimal mix between sample averages and respondent data used in estimation.

In the survey, consumers are shown three choice sets (Figure 1) in which each consists of descriptions of subscription alternatives and asked to select either one or none of those options (status quo or fourth option). Consumers were shown 12 choice sets, and their sequencing was rotated to control for order bias. The utility values for the attributes and their levels were estimated by the Hierarchical Bayes (HB) method (Rossi, Allenby, & McCulloch, 2005). The advantage of this method is it allows for the estimation of attribute utility values for each respondent. In addition, HB produces a measure of the fit of the model for each respondent. This allows for the identification of questionable individuals who may be responding randomly. HB also calculates McFadden's Pseudo R^2, a measure of overall model fit akin to R^2 (Menard, 2009).

The utility values (partworths) estimated by HB are used to construct a share of preference simulator. Assumptions about the attributes selected by respondents are used to compute preferences shares for a hypothetical combination of product attributes.

RESULTS

The goodness of fit of the model was measured by McFadden's Pseudo R^2 (Menard, 2009). The value was 81 percent, with an upper bound of 1. This indicated that the model had good predictive ability. Hypothesis One was supported. The partworths (Table 5) measure the importance of each of the three attributes. Price is evaluated as more important than privacy, which is more important than Facebook advertising. The 95 percent confidence intervals indicate that the three attributes are significantly different from each other. Hypothesis Two was supported (Table 5). Privacy is considered more important, almost twice as important, than the number of Facebook advertisements shown.

Table 5: Attribute Importance (n=186)

Attribute	Level	Relative Importance
Price (50%) [1]		
	$4.99	26%
	$7.99	-2%
	$9.99	-24%
Advertising Quantity (17%)		
	No ads	8%
	Half usual number	-8%
Advertising (33%)		
	Facebook owns data and posts	-16%
	User owns data and posts	16%

[1] McFadden's Pseudo R^2 = 81%

Hypothesis Three was tested by a preference share simulation (Table 6). The simulations operate under the assumption that respondents can choose any one of four alternatives. "None" is the status quo in which there is no charge for Facebook, the normal number of advertisements are shown, and Facebook owns the data and posts. The simulation assumes that each respondent will choose the alternative which offers the greatest utility. As Table 6 indicates, the bulk of consumers (67.6%) chose the status quo. It is the current offering of Facebook: free, limited privacy protection, and no limit on ads shown to users. Hypothesis Three is supported. Less than 16 percent of respondents would pay $9.99 for no advertisements shown on Facebook and ownership of all data and posts.

Table 6: Relative Share Simulation (n=186)

Concept	Price	Ads (quantity)	Privacy	Preference Share
1	$9.99	None	User owns data and posts	15.9%
2	$7.99	Half usual number	User owns data and posts	14.6%
3	$4.99	Half usual number	Facebook owns data and posts	1.9%
Status quo	Free	Usual number	Facebook owns data and posts	67.6%

DISCUSSION

This study indicates that price is more important than privacy and advertising in consumers' usage of Facebook. Price is more than 50 percent more important than privacy and almost three times more important than being shown advertisements. Among the three prices tested, $4.99 is overwhelmingly favored over $7.99 and $9.99. No ads is preferred to being shown half the usual number, and users' prefer to own their Facebook information. Intrusive, targeted ads are more acceptable than ownership of Facebook data.

The estimated preference share includes the current Facebook version (i.e., price of zero). It is here that the stark realization of price's impact is manifest. More than two-thirds prefer the status quo. The next highest combination registered less than 16 percent. Here consumers will pay $9.99 for privacy and no ads. In spite of the amount of news in the media about consumers' privacy concerns, this study indicates that most Facebook users are generally not likely to purchase a paid option that offers privacy and either zero or a reduced amount of ads. Free is very attractive to most users and overshadows concerns about privacy and distractions from advertising. This supports prior research indicating a challenging transition for Facebook from free to paid (Molla, 2018; Williamson, 2018; Zantal-Wiener, 2018), and that privacy concerns on Facebook are small (Reynolds et al., 2011). It does contradict prior research showing American consumers are concerned about losing privacy (Sun, 2018). It does support the privacy paradox (Barth et al., 2019; Barnes, 2006; Marwick & Boyd, 2014). Consumers voice concern for privacy but here are unwilling to pay for protection. Many theories have been proposed to explain this paradox, but we can only offer speculation as to whether biases are to blame (Acquisti, 2004), a cost-benefit analysis conducted (Jiang, Cheng, & Choi, 2013), they believe it will happen to someone else (Debatin et al., 2009), or losses are inevitable because of technology (Hargittai & Marwick, 2016).

This offers a challenge to Facebook. A paid option with greater privacy and less advertising sufficient to cover lost revenue generated little interest overall. The cost of developing and offering a standalone option may not be justified. However, a tiered approach may work (Molla, 2018; Williamson, 2018). Most users would still receive the free version with ads and no individual ownership of content. Approximately, 32 percent

of respondents are willing to pay, although less than 16 percent would pay $9.99. Those 16 percent want no ads. To generate revenue lost from advertisers would require a subscription fee of between $7.63 to $82. Among cohorts examined, only one was will to pay above $9 for a Facebook subscription. Facebook could placate regulators by offering a subscription without ads (Hautala, 2020; Piovesan, 2019). This would mean losing approximately 16 percent of its users to advertising revenue. Even if a tiered approach reduces revenue over the current model, advantages may still occur. Implementation could forestall, mitigate, or eliminate the regulatory push requiring users to opt-out of targeted advertising. This tiered approach could be a public relations coup by seemingly jeopardizing its core revenue (advertising) while knowing few users would choose it. Over 84 percent would still receive targeted advertisements; however, about 17 percent would receive only half the usual amount of ads. A tiered approach allows Zuckerberg to adhere to his pledge of always having a free Facebook (Pierson & Lien, 2018).

FUTURE RESEARCH and LIMITATIONS

All respondents were required to have a Facebook account; however, prior research indicates a large proportion of imposters when using self-reported screeners (Wessling, Huber, & Netzer, 2017). Respondents could have completed the survey and not have a Facebook account. Given Facebook's market penetration, this is probably a small limitation. MTurk has been shown to have a large portion of respondents who lie about screeners (Wessling, Huber, & Netzer, 2017). Many Turkers complete many surveys (Stewart et al., 2015). Also, the privacy paradox is evident; our research does not identify why. Future research should include questions related to theories that explain the privacy paradox, for example, third-person theory, optimism bias, objective knowledge, hyperbolic discounting, privacy calculus, communication privacy boundary management, and dispositional privacy concerns (Acquisti & Grossklags, 2005; Baek, Kim, & Bae, 2014; Choi, Wu, Yu, & Land, 2018; Debatin et al., 2009; Jensen, Potts, & Jensen, 2005; Jiang, Cheng, & Choi, 2013; Petronio, 1991; Slovic et al., 2002).

Another limitation of this study is the sample size. It was not large enough to allow for demographic segmentation of the respondents, as any segments would be too small to offer reliable results.

There may be at least one segment of Facebook users with a distinct profile who would be open to a paid option with privacy protection and reduced advertising. If so, Facebook could offer a tiered approach: free ad-subsidized model and paid ad-free model. Would these results vary based upon usage rate on Facebook (Tsay-Vogel, Shanahan, & Signorielli, 2018)? If Facebook were to institute a paid option, users would have more than a hypothetical situation to choose from. Personality has been shown to differ for Facebook users. The Big Five Inventory could be used to segment users (John, Naumann, & Soto, 2008). Would the results hold for other social media platforms? This could establish external validity for the results. Does paying for a similar service (e.g., CBS All Access, ESPN+, Hulu, or Netflix) make you more likely to accept a paid version of Facebook? Finally, how valuable are those offering to pay for privacy and the elimination of ads to Facebook? An older cohort past the age of acquisition are not as valuable to advertisers.

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