

Dual Drivers of Facebook Usage and Regret Experience in Networking versus Brand Page Usage

Full Paper

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Abstract

In this article, we draw on Uses and Gratifications Theory (UGT) to identify the dual drivers (positive and negative) of two Facebook usage types: online networking versus brand page usage; how they potentially induce regret experience; and by doing so, how they affect Facebook continuous intention. We also investigate the role played by perceived privacy concerns in these two mechanisms. Our findings indicate that exhibitionism, entertainment value and specific functional gratifications; i.e. interpersonal connectivity for social networking and information value for brand page usage; are significant drivers for both usage types. Whereas, regret experienced by users in these two contexts seem to follow divergent paths and affect differently Facebook continuance intention.

Keywords

Dark side of social networking sites, online social networking, brand page, privacy concerns, regret experience.

Introduction

Research on social networking sites (SNS) has extensively addressed the positive effects of these platforms. An increasing interest is now put on their negative effects, or what is known as the dark side of SNS usage (Fox & Moreland, 2015; Silic & Back, 2016). The major motivation of this research is to provide a multifaceted explanation of why people use SNS, the dual drivers (positive and negative) of that use over time (continuous use) and also its possible negative impacts, especially in terms of regret. By doing so, we contribute both to the theory and practice about the dark side of social media by mobilizing concepts that have seldom been used in this research area and by providing insights to social media marketing practitioners and more globally to social media services professionals. We argue in this article that it is important to investigate different types of SNS usages: the first is related to online social networking and the second is about the usage of brand pages (also called fan brand pages or brand online communities). Our assertion is also to consider jointly the dual psychological determinants of these usage types: positive and negative, while little literature has considered this multi-facet view, so far. Brand pages have emerged as a significant communication channel used by an increasing number of businesses all over the world to establish an online presence and build effective social media marketing campaigns (Habibi, Laroche, & Richard, 2014; Okazaki & Taylor, 2013). For instance, understanding users' continued interactions is crucial for businesses to enhance their performance through customers' continued interactions (Shi, Chen, & Chow, 2016), and also for SNS providers to enhance users' retention. For both of these usage types, dealing with regret experience among SNS users seems challenging because it potentially affects continuance intention (Kaur, Dhir, Chen, & Rajala, 2016).

Building on Uses and Gratifications Theory (UGT), our aim in this article is to explain that online networking and specific uses of brand pages could be driven by different psychological determinants (positive or negative), and that they could, under certain conditions, lead to experience regret and thereby jeopardize SNS continuance intention. Amidst these conditions, this article addresses privacy concerns

that could also be perceived differently with regard to the type of SNS usage in which people are engaging (Ku, Chen, & Zhang, 2013). The focus will be put on Facebook because of its unquestionable popularity (with over 1 billion and a half monthly active users) and also because it is the most plebiscite by businesses to build brand pages (Stelzner, 2013).

Background Theory and Research Hypotheses

Uses and Gratifications Theory

UGT is a sociological theory that helps explaining why and how individuals choose specific media outlets to satisfy specific needs. It has served as a backbone to a variety of studies on SNS use, including works on the positive (Limayem & Cheung, 2011) and also pervasive effects related to these platforms (Ifinedo, 2016; Mäntymäki & Islam, 2016). Originally used in studies on traditional media (TV, newspapers), then on computer-mediated communication, UGT links the use of media devices to the human needs that they could potentially satisfy via the gratifications, i.e. valued outcomes, they may offer. In the SNS use literature, many UGT categories have been identified, such as purposeful value, social enhancement and entertainment value (Cheung, Chiu, & Lee, 2011).

We argue here that drivers of SNS use are dual in nature because they are related to gratifications that stem from the individual's motivation and needs (Ryan & Deci, 2000), and also from his/her psychological traits. The need to belong for example can induce 'positive' (socially acceptable) gratifications like enhancing social ties and collaboration; or 'negative' or socially dysfunctional gratifications like voyeurism. Social enhancement could be reflected in terms of interpersonal connectivity (establishing and maintaining contact with other people in an online network) or exhibitionism. While functional value, entertainment value and interpersonal connectivity are deemed socially acceptable and belong to the light side of SNS use, exhibitionism and voyeurism are part of their dark side. For psychologists, exhibitionism is considered as a common behavioral manifestation of a narcissistic personality, characterized by an obsessive self-grandiosity concern and lack of empathy for others (Ong et al., 2011). It has been identified in recent research as a significant determinant of social networking (Fisher, Boland, & Lyytinen, 2016; Mäntymäki & Islam, 2016). Exhibitionism could also be part of the engagement mechanism toward a brand online by following a brand page for example (Matzler, Pichler, & Hemetsberger, 2007), i.e. an active extravert behavior related to the need to be 'the center of attention' of an online community. Following, we formulate our two first research hypotheses:

H1a: Exhibitionism positively affects social networking usage on Facebook.

H1b: Exhibitionism positively affects brand page usage on Facebook.

Voyeurism is a problematic form of behavioral regulation that consists of engaging in SNS in response to the requirement to stay updated on what is happening in one's own social circle (Pempek, Yermolayeva, & Calvert, 2009; Lee, 2014), but with a significant (and sometimes increasing) psychological value attributed to the access to private details of others on SNS. Voyeurism (whereas it is deemed deviant) is part of social value gratifications attributed to SNS, and it is thereby considered as a determinant of general social networking on Facebook (Mäntymäki & Islam, 2016). In addition, because it is linked to social presence (Shi et al., 2016), voyeurism could also affect brand page usage. Based on the above, we propose:

H2a: Voyeurism positively affects social networking on Facebook.

H2b: Voyeurism positively affects brand page usage on Facebook.

Interpersonal connectivity is also part of social value gratifications attributed to SNS. It is about the motivation to build and maintain contact with other people on SNS and is therefore one of the most 'natural' determinants of online social networking (Tsai & Bagozzi, 2014). We argue, however, that interpersonal connectivity is much less likely a specific determinant of brand pages usage. Because the first reason why people follow these pages is not to create and maintain friendships, even though using these pages supposes inherently users' interactions with each other and with the brand (Dholakia, Bagozzi, & Pearo, 2004). Accordingly we formulate:

H3a: Interpersonal connectivity positively affects social networking usage on Facebook.

The literature on brand page usage has emphasized the functional value gratifications related to brand page adoption and usage, within which informational value about the product/brand plays an important role. Shi et al. (2016) for example have defined three brand page functional value categories: information quality, product-related learning and economic benefits. All are of an informational nature (information about the product specificities, performance, recommendations, promotions, etc.). We therefore propose:

H3b: Informational value positively affects brand page usage on Facebook.

Entertainment is part of the enjoyment users may experience when engaging with a SNS. It has been widely recognized as a determinant of social networking (Reinecke, Vorderer, & Knop, 2014). It is also part of the emotional value gratifications attributed to brand page usage. In these pages, information is posted as well as other entertaining activities like quizzes, contests, etc. Social media marketing literature emphasized that role (Hollebeek, Glynn, & Brodie, 2014; Muk & Chung, 2014). Based on the above, we propose:

H4a: Entertainment value positively affects social networking usage on Facebook

H4b: Entertainment value positively affects brand page usage on Facebook

SNS Usage

Recently, the SNS literature has distanced itself from classical research on IT usage (V. Venkatesh & Davis, 1996). SNS use is now considered as a complex construct composed of different components, depending upon the activities performed within the SNS and the functionalities that are put in practice. Amidst these functionalities, this article addresses social networking and following brand pages. Using the Delphi method and an online survey, (Chen, Lu, Chau, & Gupta, 2015) have identified four categories of SNS usage: content creation (mainly posting articles, blogs, status, photos, videos and other SNS resources); content transmission (sharing SNS resources); relationship building (sending/accepting invitations for friendship application, creating/joining groups and events); and relation maintenance (commenting/liking friends' posts and looking at personal information of friends). More generally, social networking usage is classified into two broad categories: passive behavior (lurking) and active behavior, depending upon the motivation to engage in SNS. Active behavior is particularly valued because it produces user generated content and fosters e-word –of-mouth especially on brand pages (Beukeboom, Kerkhof, & de Vries, 2015; Habibi et al., 2014). In this article, social networking usage and brand page usage will be each defined in terms of: content creation, content sharing and content consumption, and will be measured accordingly using scales adapted from previous studies.

We also consider the intensity of attachment Facebook users are experiencing so far, using the Facebook intensity construct (FBI) developed by (Ellison, Steinfield, & Lampe, 2007). The FBI is very useful in this study because it evaluates Facebook previous use beyond simple measures of frequency and duration, incorporating emotional connectedness to the platform and its integration into individuals' daily activities. Faithful to the spirit of the technology acceptance theory, (Muk & Chung, 2014) proposed to integrate the perspectives of UGT with the theory of reasoned action (TRA) (Icek Ajzen et al., 1980) to study the behavioral intention to join brand pages. Whereas many studies have demonstrated that previous usage intensity had a positive impact on social networking actual usage (Mäntymäki & Islam, 2016; Steinfield, Ellison, & Lampe, 2008). Hence, we propose:

H5a: Facebook intensity positively affects social networking usage on Facebook

H5b: Facebook intensity positively affects brand page usage on Facebook

SNS Continuance Intention

For more than a decade now, it seems that there is an increasing interest toward SNS continuance studies, since it appears that businesses highly value the continued interaction of customers with their brand pages (Shi et al., 2016). Besides, SNS services providers are extensively interested on identifying the key factors that affect their users' 'stickiness' to their sites; Continued usage being necessary to the long-term sustainability of these platforms (Ku et al., 2013). SNS continuance is part of the IT post-adoptive stream of research developed within the Management Information Systems Field. Based on the Post-Adoptive Model (PAM) (Bhattacharjee, 2001), Continuance intention was assessed using a wide range of

determinants, amidst them we can find satisfaction, actual usage, social influence, gratifications, perceived privacy, etc. (Barnes & Böhringer, 2011; T.-H. Lin, Lu, Hsiao, & Hsu, 2014). In this study, we focus on actual usage and Facebook intensity and propose to test the following hypotheses:

H6a: Social Networking usage positively affects Facebook continuance intention

H6b: Brand page usage positively affects Facebook continuance intention

H7a: Facebook intensity positively affects Facebook continuance intention (in the context of SNS usage)

H7b: Facebook intensity positively affects Facebook continuance intention (in the context of Brand page usage).

Regret Experience on SNS

The popular press and many statistical reports are putting into light a persistent behavior within SNS users nowadays: regret. In 2015, it seems that more than half of Americans have experienced social media regrets (www.huffingtonpost.com). The most regretted posts are about commenting in the heat of the moment and disclosing contents such as embarrassing pictures (www.statistica.com).

Regret could be defined as a “negative, cognitively based emotion which people experience when they realize or imagine that their present situation or condition would have been better if they had acted differently” (Kaur et al., 2016; p.230). The majority of prior research in this field concerned offline contexts of behavioral decision making (Park, Ramesh, & Cao, 2016; Zeelenberg, 1999), especially in consumer decision making (Keinan & Kivetz, 2008; Tsiros & Mittal, 2000). An increasing interest is now observed within online contexts, opening the path to a new research avenue on what can be called online regret experience on SNS. A consensus emerges here: SNS regret is by nature a post-adoptive experience (Kang, Hong, & Lee, 2009) that results from actual and previous usage (especially when the subject is intensively using the SNS); and may affect negatively SNS continuance intention. Regret could be experienced through deleting content, removing people from friends’ lists and this could happen through general social networking or specific usage, like following brand pages (Dhir, Kaur, Chen, & Lonka, 2016; Kaur et al., 2016). Based on the above, we propose:

H8a: Social networking usage could induce social networking usage regret experience

H8b: Brand page usage could induce brand page usage regret experience

H9a: Facebook intensity could induce social networking usage regret experience

H9b: Facebook intensity could induce brand page usage regret experience

H10a: Social networking usage regret experience negatively affects Facebook continuance intention

H10b: Brand page usage regret experience negatively affects Facebook continuance intention

Perceived Privacy Concerns

Unlike ‘closed’ information systems that are used within organizational settings, SNS usage has raised concerns about privacy because these sites involve an open-ended community of users and a facilitated tendency to self-disclosure. Perceived privacy concerns could stem from three categories: perceived severity, self-efficacy and perceived vulnerability (Bélanger & Crossler, 2011). Privacy concerns effects have been studied in the e-commerce context (Dinev et al., 2006; Dinev & Hart, 2006) and have been identified as possible inhibitors of online sales. Many studies have also linked privacy concerns to reluctance in SNS usage (Ku et al., 2013). Hence, we propose the following hypotheses:

H11a: Perceived privacy concerns negatively affect social networking usage on Facebook

H11b: Perceived privacy concerns negatively affect brand page usage on Facebook

In addition, perceived privacy concerns have been identified as significant inhibitors of excessive self-disclosure. We advocate therefore that a possible positive link could exist between privacy concerns and regret experience for both of the Facebook usage types studied in this article. Accordingly:

H12a: Privacy concerns positively affect social networking usage regret experience

H12b: Privacy concerns positively brand page usage regret experience

And finally, due to its potential inhibiting power to interact sustainably within SNS spaces and as demonstrated in previous studies (Ku et al., 2013), the perceived privacy concerns construct will be modeled as a negative determinant of Facebook continuance intention for the two types of usage considered. Based on the above, we propose:

H13a: Privacy concerns negatively affect Facebook continuance intention (in the context of social networking usage)

H13b: Privacy concerns negatively affect Facebook continuance intention (in the context of brand page usage).

Research Model and Methodology

We have two variants of our research model: one related to social networking usage (model A), and the other to brand page usage (model B).

Measurement development

Measurement items for all the principal constructs except regret were adapted from existing studies to ensure content validity. Since regret as a research issue is relatively new in the literature, we found very few measures for this construct. The measures available relate to SNS use in ‘general’ and do not fit to specific types of usage. We used popular press to prepare a preliminary list of regret measures, concerning regret about three categories: content creation, content sharing and content consumption related to the two types of usage studied; and also concerning deleting activities related to their three related categories. Then we asked a group of ten post-graduate students and 10 researchers from the authors’ Facebook network to review that list. The measurement instrument was pretested by 45 Facebook users. We then have checked for psychometric properties and clarified the wording of the items, especially for the regret construct which includes after the pretest 5 measures of networking usage regret and 4 measures of brand page regret. Two regret measures were dropped. Following the literature, all our constructs are reflective. A majority of items are measured using a 5-point Likert scale, ranging from 1: strongly disagree to 5: strongly agree. Regret items are measured by a 5-point frequency scale.

Survey Administration

We collected responses using an online survey from a sample of 203 Facebook users living in France. The characteristics of the research sample are presented in table 1. Nearly 83% of our respondents are under 35 years old, which means that our sample corresponds in majority to the millennial generation which represents the largest portion of Facebook users according to a study published by www.statistica.com in 2016. In this study, it appears also that there are more females than males, as it is the case of the population of Facebook users in the United States according to the same study. Our sample is therefore appropriate for the current research.

Measure	N=203
Gender	
Male	76 (37.4%)
Female	127 (62.6%)
Age	
< 18	4 (2%)
18-35	164 (80.8%)
36-50	18 (8.9%)
51-69	15 (7.4%)
>70	2 (1%)

Table 1. Demographic Information for the research sample

Data Analyses and Results

Partial least squares (PLS) approach applied through structural equation modeling using with SmartPLS 3.0 software (C. Ringle, Wende, & Becker, 2015) has served to test the two models A and B. PLS is

recommended here because it is able to model latent variables without requiring strict normal distributions of data (Chin, 1998; C. Fornell & Cha, 1994). The approach is particularly appropriate in this study whose aim is to identify the key drivers of constructs and not for theory confirmation which is best handled by covariance-based structural modeling. A two-stage analytical procedure is followed: a confirmatory phase to assess the measurement model, then the structural model is examined (hypotheses testing).

Measurement Model

Table 2 shows descriptive statistics, reliability and convergent validity of the latent variables used in the two models. Cronbachs alpha and Composite Construct Reliability (CR) indicators exceed the threshold of 0,7 (Nunnally & Bernstein, 1994) for all the constructs, providing support for scale reliability. To evaluate convergent validity, factor loadings and the Average Variance Extracted (AVE) are examined. Table 2 indicates that both indicators exceed the thresholds of 0,7 and 0,5 respectively (Claes Fornell & Larcker, 1981) for all the scales. Convergent validity is therefore supported.

Construct	Alpha	CR	AVE	Item	Mean	S.D.	Loading Model A	Loading Model B
Exhibitionism	0.74	0.85	0.66	EXHIB1	1.91	1.13	0.85	0.81
				EXHIB2	1.81	1.07	0.81	0.85
				EXHIB3	2.29	1.23	0.77	0.77
Voyeurism	0.80	0.87	0.69	VOY1	3.17	1.12	0.86	0.77
				VOY2	2.53	1.37	0.87	0.91
				VOY3	2.08	1.26	0.77	0.86
Interpersonal Connectivity	0.72	0.84	0.64	INTCV1	3.99	1.11	0.76	
				INTCV2	3.61	1.08	0.88	
				INCV3	3.70	1.10	0.77	
Entertainment (A) Entertainment_Networking (ENT_NW)	0.7	0.85	0.75	ENT_NW1	3.59	1.09	0.85	
				ENT_NW2	3.37	1.04	0.88	
(B) Enter_Brand page (ENT_BP)	1	1	1	ENT_BP1	2.49	1.22		1
Informational Value	0.78	0.8	0.82	INFV1	2.60	1.29		0.89
				INFV2	2.45	1.27		0.92
Facebook Intensity	0.84	0.89	0.62	FB11	3.98	1.19	0.88	0.86
				FB12	3.89	1.19	0.90	0.89
				FB13	2.03	1.22	0.60	0.63
				FB14	2.70	1.20	0.75	0.75
				FB15	2.37	1.01	0.79	0.79
Networking Usage	0.87	0.81	0.68	NWU1	3.76	1.11	0.76	
				NWU2	3.52	1.08	0.75	
				NWU3	2.17	1.21	0.50	
				NWU4	2.69	1.38	0.69	
				NUW5	3.93	1.06	0.82	
				NUW6	3.43	1.18	0.78	
Brand Page Usage	0.84	0.89	0.67	BPU1	2.51	1.31		0.80
				BPU2	1.69	1.14		0.79
				BPU3	2.35	1.34		0.85
				BPU4	1.76	1.15		0.83
Networking Regret (A)Networking (REG_NW)	0.87	0.81	0.68	REG_NW1	2.14	1.01	0.562	
				REG_NW2	1.81	1.11	0.924	
				REG_NW3	1.84	1.16	0.883	
				REG_NW4	1.74	1.08	0.841	
				REG_NW5	1.57	0.99	0.864	
(B)Brand page Regret (REG_BP)	0.72	0.83	0.56	REG_BP1	2.06	1.21		0.83
				REG_BP2	2.01	1.06		0.85
				REG_BP3	2.07	1.07		0.78
				REG_BP4	2.44	1.17		0.48
Privacy Concerns Perceptions	0.78	0.85	0.65	PRIV1	3.57	1.33	0.94	0.91
				PRIV2	3.75	1.21	0.62	0.71
				PRIV3	3.53	1.38	0.82	0.84
Facebook Continuance Intentions	0.9	0.94	0.84	FBCONTI1	4.47	0.89	0.94	0.94
				FBCONTI2	4.31	1.01	0.92	0.92
				FBCONTI3	4.27	1.03	0.88	0.89

Table 2. Descriptive Statistics, reliability and convergent validity

Discriminant validity for our two models has been proved with respect to two conditions: (1) measurement items load more strongly to their respected constructs than to the other ones; and (2) the square root of the AVE of each construct-placed on the diagonals of the constructs correlation matrix- is higher than its correlations with the other constructs (Claes Fornell & Larcker, 1981). Due to space limitations they are not presented in this paper¹. Results show satisfactory levels of psychometric validity for the two variants A and B can now be tested.

Structural Model Evaluation

The path coefficients, significance and explained variances (R^2) of structural modeling are shown in figure 1 for model A and figure 2 for model B. Model A explained 39% of the variance of Facebook continuance intention, 7% of the variance of networking usage regret and 53% of the variance of networking usage. The most significant drivers of networking usage are (by order of importance): interpersonal connectivity, Facebook intensity, networking entertainment and exhibitionism (dark side factor). Networking usage regret seems to be only derived from Facebook intensity, while it negatively affects Facebook continuance intention, as expected. Facebook continuance is in addition and more saliently positively affected by Facebook intensity and networking actual usage. Privacy concerns seem to play no significant role in the mechanism depicted in model A related to networking usage drivers and effects.

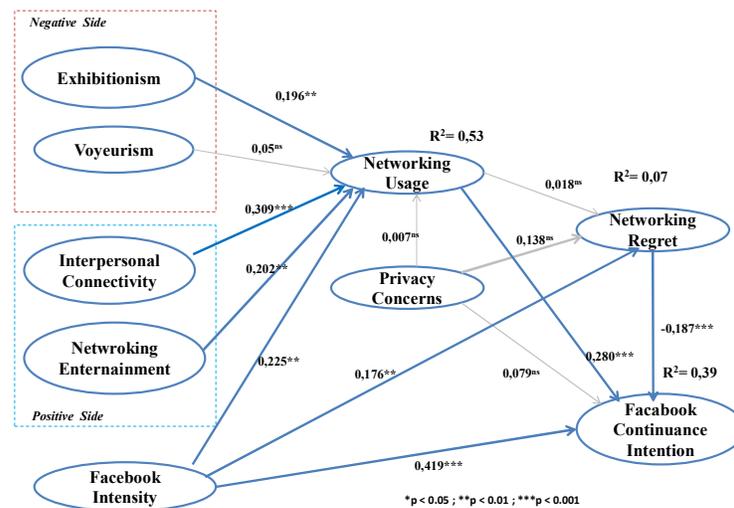


Figure 1. Research Findings (Model A)

As shown in table 4, Model B explained 33% of the variance of Facebook continuance intention, 23% of brand page usage regret and 48% of brand page usage. The most significant drivers of brand page usage are (also by order of importance): informational value, entertainment and exhibitionism. Facebook intensity seems to play no significant role. Brand page usage regret is explained jointly by Facebook intensity, brand page actual usage and perceived privacy concerns. Facebook continuance intention is positively affected by Facebook intensity and brand page usage regret and not by brand page actual usage, neither by privacy concerns.

¹The detailed measures used in the online survey and their references; and the full data analyses are available under request from the authors.

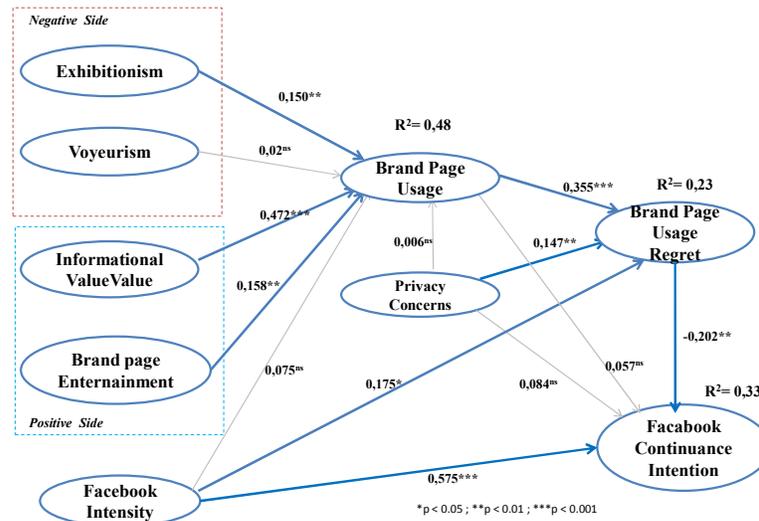


Figure 2. Research Findings (Model B)

Discussion

This study aimed to identify the formation mechanisms of networking usage versus brand page usage on Facebook, their determinants and their effects in terms of regret experience and Facebook continuance intention. Within these mechanisms, we investigate the role of perceived privacy concerns. First, our results show that drivers of these two types of usage are dual: positive and negative and that it is important to consider these both sides when studying the determinants of SNS usage types. Our results concerning this point are congruent with the literature. The most significant 'dark side' determinant of usage (for social networking and brand page) is exhibitionism (Mäntymäki & Islam, 2016). For the 'positive side', Brand page usage is most saliently affected by informational value and entertainment (Shi et al., 2016). While networking usage is also derived by functional value (in this case personal interconnectivity) and entertainment. Perceived privacy concerns do not play the same role in the two mechanisms under study. Surprisingly, privacy concerns do not seem to inhibit usage and has no significant effect on Facebook continuance intention. They are however positively and significantly affecting brand page usage regret, but not social networking regret which is in addition weakly explained in this model (R^2 low). This means that other factors have to be taken into consideration. Several other precautions have to be taken before generalizing the results, due to the exiguity of our sample and its location (in France). Other studies have to be carried out in other contexts and within other populations.

This study contributes to the literature in many ways. From a theoretical perspective, building on UGT we considered the dual drivers of SNS different types of usages, addressed the construct of experience regret and developed a new scale to measure it in different usage contexts. From a practical perspective, our findings indicate that social media marketing practitioners may allow brand page users to customize their privacy settings in order to overcome the impacts of privacy concerns on brand page usage regret. They may also take care of the entertaining and functional value gratifications of their brand pages, while allowing for more self-promotion activities that could result in a higher engagement within their users.

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