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Understanding social network discontinuance through the lens of turnover theory

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Abstract

Users have reduced their time using Social Network Sites (SNS) or have abandoned them. Previous literature considers discontinuance a means of coping with a stressful situation. In contrast, this study proposes that it is immersed in a complex system of social interrelationships and competing platforms. Based on the Turnover Theory, the study explores: 1) SNS embeddedness, the force exerted by the strong network of relationships; 2) perceived SNS alternatives, the force derived from the competitive market; and 3) dissatisfaction. Data were collected from 369 Facebook users. The proposed model is fully supported. The results show that SNS embeddedness may be a significant inhibitor to avoiding abandonment, and perception of alternatives and dissatisfaction can push people to abandon the SNS. This study introduces the role of digital social links to retain users and the function of the market (represented by perceived alternatives) to encourage discontinuance. This richer spectrum of variables can help managers develop innovative strategies to avoid abandonment.

Keywords: discontinuance, facebook, turnover theory, abandonment

Introduction

In recent decades, the popularity of SNSs has risen to the point that they have become well-established in our everyday lives (Maier et al., 2015a). However, behind the success of the most popular SNSs, there are numerous stories of the rise and fall of other SNSs that have not endured the test of time, such as MySpace (Luqman et al., 2017). Facebook is undoubtedly the most prevalent SNS globally, with 2.6 billion active users (Statista, 2019a). Nevertheless, in a highly competitive context, this SNS also faces the challenge of discontinuance. According to the Pew Research Center (2018), by 2017, 26% of Facebook users had removed the application from their cell phones, and 42% had reduced their frequency of use. Moreover, according to Statista (2019b), 29% of US Facebook users have considered leaving it; indeed, this SNS is ranked first in user contemplation of abandonment. Hence, if they want to endure over time and not decay like their predecessors, SNS providers need to understand why users discontinue their use.

Previous literature on SNSs has predominantly viewed discontinuance as a response to cope with the burden derived from Facebook usage. This adaptive approach posits that system usage could generate perceptions of undesired imbalances, such as social overload or overuse. In turn, these stressors can trigger emotional strains in individuals, such as exhaustion or fatigue. Finally, these emotional strains may lead individuals to discontinue their Facebook use as a way to handle their stress (Luqman et al., 2017; Maier et al., 2015b; Zhang et al., 2016).

In sum, prior research emphasizes the driving role of stressful experiences in discontinuance (Zhang et al., 2016). However, this approach could be restricted because discontinuance is immersed in a broader social and competitive environment, which goes beyond the context of stressful situations. First, in the context of Facebook, people do not simply use the technology; instead, they are embedded in a social system of reciprocated links that connect individuals (Brooks et al., 2014; Xu et al., 2014). In this digital social environment, the intensity of users' relationships could trap them in a virtual "spider web" that could inhibit them from leaving Facebook (Gong et al., 2020; Lee & Kim, 2011; Mossholder et al., 2005). Second, the adaptive approach presumes a context with no competing SNSs; however, this assumption does not apply to the existing market (Xu et al., 2014). Several authors suggest that the intention to abandon the system may vary depending on whether the individual perceives useful or attractive alternatives (Hou & Shiau, 2019; Hwang et al., 2019). To the best of the authors' knowledge, no studies explain the phenomenon of discontinuance in a broader social and marketplace context.

This study adapts Turnover Theory (TOT) to the case of Facebook to address the gap mentioned. TOT, a well-established theory in Organizational Management, can be seen as a general framework to explain why an individual, a member of a social system (e.g., worker/factory, student/university, participant/social network), leaves that system. To that extent, TOT can be adapted to the Facebook context. TOT establishes three key constructs governing turnover in the organizational setting (Crossley et al., 2007). The first is job embeddedness, which describes how an individual is immersed in a larger community. This variable helps offset factors that might lead to turnover, as it reflects the tangle of ties in which the worker is embedded (Holtom et al., 2006). In this study, if users are trapped in a network of digital relationships, it will be difficult for them to leave Facebook. The second construct is the availability of work alternatives, which reflects the competitive context of the labor market in which the employee resides. TOT predicts that retaining employees will be more difficult if they have numerous other job options (Crossley et al., 2007; Lo, 2015). In the case of Facebook, if the users observe other useful and attractive alternatives available, they will tend to leave. The third is job dissatisfaction, which has been the primary reason for quitting jobs according to this literature (Crossley et al., 2007; Lo, 2015). For this SNS, this factor may be vital in shaping the intention to leave it.

This study, considering these antecedents, aims to develop and evaluate a model that integrates the adaptive approach and the factors suggested by TOT (SNS embeddedness, perceived alternatives, and dissatisfaction with SNS). The contribution of this research to the information systems (IS) arena is twofold. This study adds to the adaptive approach new causal pathways that explain the phenomenon contextualized within a social and competitive environment. Also, for SNS providers, this work suggests a broader set of mechanisms to keep users from leaving. Vendors not only need to modulate the social burden to avoid exhausted users: they also need to maintain competitive superiority over the alternatives, create value to keep users satisfied and encourage users to develop a deeper web of relationships that hooks them into the SNS.

This paper is organized as follows. It starts by reviewing the theoretical background of discontinuance and TOT. The following section develops the research model. Then, the research method is shown. The last part includes a discussion of the results.

Theoretical Background

Discontinuance is users' change in behavioral patterns, either abandoning Facebook or significantly decreasing their use (Maier et al., 2015a). Discontinuance implies a previously established relationship between the user and the technology. Nevertheless, changes in the user's surroundings over time may alter

this relationship and lead to abandonment (Soliman & Rinta-Kahila, 2019). Other popular names given to this phenomenon are "leaving" and "abandoning" (Soliman & Rinta-Kahila, 2019; Turel, 2015). This paper uses discontinuance, leaving, and abandoning interchangeably. The predominant, adaptive approach has provided a valuable foundation for understanding discontinuance. However, it is also important to explore alternative approaches to provide a broader explanation of leaving. Leveraging theoretical tensions between different theoretical streams can stimulate the development of more comprehensive theories. This strategy requires identifying different influences and discovering ways of relating them to each other (Bhattacherjee & Lin, 2014). This strategy has contributed to developing more encompassing frameworks in the past (e.g., Bhattacherjee & Lin, 2014; Venkatesh et al., 2003). In the same line, this paper proposes a new explanation by relying on TOT, which complements the adaptive approach.

Turnover Theory

TOT explains employee departure through established proximal and distal predictors, with job satisfaction and perceived alternatives identified as most influential (Jiang et al., 2012), while Mitchell et al. (2001) added job embeddedness as a core concept. Satisfaction represents employees' overall affective job response (Mathieu et al., 2015; Tian-Foreman, 2009). Research consistently demonstrates that unsatisfied employees quit more frequently than satisfied workers, establishing satisfaction as one of turnover's strongest predictors (Mathieu et al., 2015; Tanova & Holtom, 2008; Tian-Foreman, 2009).

Perceived alternatives—the belief individuals can secure better employment (Crossley et al., 2007)—also influence departure intentions. Greater options favor quitting while limited alternatives discourage it (Singh, 2020), making job availability an external turnover predictor (Hom et al., 2012). Empirical evidence confirms perceived alternatives positively affect quitting decisions (Crossley et al., 2007; Jiang et al., 2012). Job embeddedness comprises stable forces preventing employee departure through two facets: links and sacrifice (Crossley et al., 2007; Huang et al., 2021; Peachey et al., 2014). Links encompass formal and informal workplace connections, while sacrifice involves perceived financial and social leaving costs (Halbesleben & Wheeler, 2008). Highly embedded individuals remain longer than less embedded counterparts (Peachey et al., 2014), as embeddedness creates a perceptual "web" that constrains departure (Mitchell et al., 2001). TOT's established organizational foundations provide a solid theoretical base for examining the phenomenon of interest, as explored in the following section.

Turnover Theory as an Approach to Explain Discontinuance

TOT demonstrates strong theoretical fit for explaining discontinuance behavior due to the analogous structures between organizational turnover and SNS discontinuance. Following Truex et al. (2006), the compatibility between TOT and discontinuance phenomena reveals notable parallels. Both contexts involve two parties establishing a relationship within social networks—employees and organizations in real social ties, users and technology in virtual connections—where contextual changes trigger relationship termination decisions. This structural similarity suggests TOT's postulates reasonably predict that individuals dissatisfied with incumbent technology, aware of alternatives, and weakly embedded in digital social networks will likely abandon platforms like Facebook. TOT's generalizability across diverse cultures (Ferreira et al., 2017; Huang et al., 2021; Tanova & Holtom, 2008) and organizational contexts (Ferreira et al., 2017; Tian-Foreman, 2009) reinforces its applicability as a framework for modeling relationship abandonment across employee/organization, student/university, or user/technology contexts.

The theory's relevance to IS contexts is established through prior applications explaining IS employee turnover (Lo, 2015), student college departure (Wangrow et al., 2021), and customer turnover using similar constructs (Revilla-Camacho et al., 2015). Given the theoretical fit between discontinuance and turnover phenomena, and TOT's demonstrated explanatory power for the behavior of interest, theoretical adaptation proceeds in the subsequent section.

Research Model

Figure 1 summarizes the previous approach (adaptive literature) and the new perspective (Turnover theory), and subsequent paragraphs develop such approaches. The dependent variable is the subjective probability that an individual will discontinue Facebook use (Fishbein & Ajzen, 2011; Maier et al., 2015a).

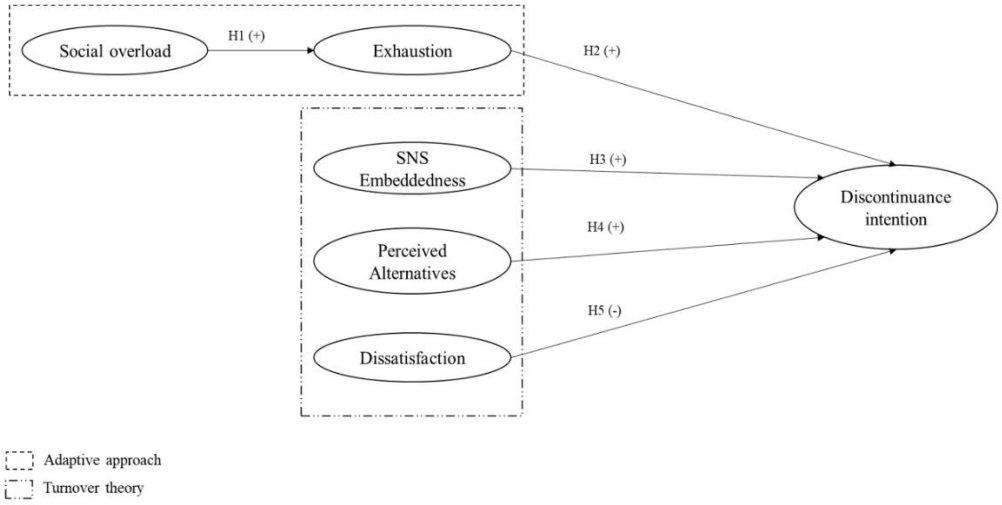

Figure 1. Research Model

Adaptive Approach and Discontinuance

In a broad sense, "overload" is the perception that the demands exceed the individual's ability to handle or control them (Maier et al., 2015a; Zhang et al., 2016). Human capacity can be surpassed in different aspects, including knowledge, interactions, or communications (Zhang et al., 2016). Specifically, "social overload" is defined as the perception of crowding in an online space (Maier et al., 2015a; Zhang et al., 2016). "Exhaustion" describes a user's feeling of being tired of activities related to SNS usage (Luqman et al., 2017; Maier et al., 2015a). When individuals' capacities and current social demands do not fit, individuals may experience negative feelings, such as emotional exhaustion (Zhang et al., 2016).

In turn, this SNS exhaustion can lead to discontinuance. According to Luqman et al. (2017), a user exhausted from doing something develops the intention to escape this strained state. In that way, discontinuance is a coping strategy through which users avoid stressful social overload, relieving the sensation of exhaustion (Maier et al., 2015b; Zhang et al., 2016). The empirical results support the impact of social overload on SNS exhaustion and the effect of the latter on SNS discontinuance (Cao et al., 2019; Fu et al., 2020; Luqman et al., 2017; Maier et al., 2012). Hence:

H1: *Social overload affects exhaustion positively.*
H2: *Exhaustion has a positive impact on SNS discontinuance intention.*

Turnover Theory and Discontinuance

SNS embeddedness synthesizes the effect of several dimensions—links and sacrifices—that are opposed to leaving and are derived from the network of relationships that the user has developed in the SNS (Crossley et al., 2007). Since its inception, Facebook has supported social interactions through user connections. The strength of ties and the size of this social network are expressions of these links (Lee & Kim, 2011). Solid bonds foster trust, closeness, intimacy, support, and association (Ma et al., 2021). From a TOT perspective, users with more relationships (qualitatively and quantitatively) and roles (e.g., member

of groups, group administrator) have a more complex web than those possessing fewer relationships and roles. The former individuals can be considered "more SNS embedded." The users with the more intricate web will experience more disruption in their social interactions if they leave the SNS. In contrast, isolated users will experience considerably less disturbance. Thus, discontinuance will depend on how connected the user is (Holtom et al., 2006).

Likewise, sacrifices represent the perceived costs of forfeiting benefits when leaving the SNS (Crossley et al., 2007). SNSs offer multiple benefits; for example, they help people obtain information, maintain and develop relationships, and feel entertained (Hu et al., 2014). Facebook friends provide resources and support to help users achieve goals or fulfill needs. This social capital is valuable to users, and thus they are motivated to preserve it (Tseng et al., 2015). According to TOT, leaving Facebook entails making severe adjustments to one's social interaction regarding intimacy, support, and association. For example, users could lose contact with friends, reduce their sense of community or belonging and receive less emotional support and fewer opportunities for self-disclosure. The more users have to give up when leaving, the more difficult it will be to sever their relationship with the SNS (Cao et al., 2013; Holtom et al., 2006). As a whole, SNS embeddedness keeps the individual in the status quo (continued usage). Hence:

H3: *SNS embeddedness affects discontinuance intention negatively*.

In the context of SNSs, the perceived alternatives construct is the users' belief that they can find SNS options other than Facebook (Crossley et al., 2007). Despite the omnipresence of Facebook, other social platforms are perceived as suitable alternatives, especially among teenagers and young adults. One of Facebook's main competitors is Instagram, but also other SNSs have attracted large audiences in recent years (e.g., TikTok, Pinterest, Twitch) (Statista, 2021). TOT postulates that having many choices or high-quality options could convince individuals to change their status quo. If people perceive many alternatives available, they will reduce the uncertainty generated by any change, which will make it easier for them to leave Facebook (Felps et al., 2009; Maertz & Griffeth, 2004). By the same logic, users may be more willing to abandon Facebook to the extent that they are aware of other available options. Moreover, this willingness may be greater if these alternative platforms are more attractive to them (Chang et al., 2014). Therefore:

H4: *Perceived alternatives positively impact discontinuance intention*.

In the context of this study, dissatisfaction can be understood as the overall evaluative response to users' prior, first-hand experience with this technology (Bhattacherjee & Park, 2014). TOT suggests that negative feelings regarding a person's job (i.e., dissatisfaction) drive perceived desirability of movement (leaving). In contrast, positive feelings may prevent it (Holtom et al., 2008). Using the same line of reasoning, if an SNS user had a poor experience with technology, that individual would likely be dissatisfied and abandon it. Conversely, satisfied users will likely continue using the SNS and not leave the platform (Bhattacherjee & Park, 2014). Some recent empirical studies support the idea that dissatisfaction pushes users to abandon technologies in diverse contexts, including SNSs (Chang et al., 2014; Zhang et al., 2016). Hence:

H5: *Dissatisfaction affects discontinuance intention positively.*

Method

The proposed effects were evaluated using a questionnaire for data collection and the structural equation model for analysis.

Measurement
Measurement items from the literature were employed with minor modifications to ensure the content validity of the instruments (Straub et al., 2004). The wording of the scales was modified to fit the Facebook context. Appendix 1 shows the measurement items and their sources. The measure of embeddedness requires special mention, as it comprises several facets related to links and sacrifices, which discourage discontinuance. Instead of using a composite measure of this construct, this study adopts a global measure of embeddedness (Crossley et al., 2007).

According to literature recommendations, the following procedures were conducted in designing the questionnaire to mitigate the possible effects of common method bias (CMB) (Podsakoff et al., 2012). A separation between the measures of the predictor and independent variables was introduced. The design reduces the perception of similarity between measures by using several scale types (Likert, semantic differential), anchor labels (agree/disagree; frequency, to a small/large extent), and structures of polarity (unipolar, bipolar). Also, the questions were presented by interspersing items from the various independent variables. Also, attitude to YouTube use was introduced as a marker variable for ex-post statistical analysis. This marker variable is theoretically unrelated to the research variables.

Data Collection
Data were collected from adult US Facebook users through Amazon's Mechanical Turk platform (MTurk). This platform is advantageous for studies that need to target many people and do not require particular expertise from respondents (Lowry et al., 2016). Recent studies recommend introducing some practices to maintain trustworthy MTurk-based research (Aguinis et al., 2021; Chmielewski & Kucker, 2020).

In order to ensure the quality of the data and according to recent recommendations (Aguinis et al., 2021; Edwards, 2019; Lowry et al., 2016), MTurk options were set to obtain only respondents residing in the United States who had finished at least 98% successfully their previous tasks and who had carried out at least 500 tasks on the platform. SurveyMonkey options prevented more than one response from the same IP address. Likewise, the questionnaire's introduction explained the importance of paying attention and the scientific relevance of the study. Also, participants were informed that their responses would be analyzed anonymously to reduce social desirability bias and that responses would be scrutinized so invalid responses would be rejected. Moreover, the questionnaire included three attention check questions and one captcha verification to thwart "bots." The compensation was set according to US minimum wage laws for garnering ‘‘normal" respondents.

Data Analysis and Results

After excluding incomplete and careless responses, 369 valid responses were included in the analysis. Most communalities are higher than 0.6, and most of the constructs were measured using three or more items; therefore, the sample size was sufficiently large (Hair et al., 2014; Westland, 2010).

Table 1 shows the sample characteristics. The sample was composed of 48.2% males and 51.8% females. The age group with the highest frequency was adults from 31 to 35 years old. Network size was almost uniformly distributed across the different categories provided.

Likewise, 36.3% of participants spent 10 to 30 minutes on Facebook, while 28.5% spent between 31 minutes and an hour on Facebook. Finally, more than 87.5% of the respondents had had a Facebook account for more than six years.

Table 1. Sample Characteristics

Respondents (n=369)		Frequency	Percent (%)
Age	21 - 25	20	5.4
	26 - 30	60	16.3
	31 - 35	83	22.5
	36 - 40	58	15.7
	41 - 45	45	12.2
	46 - 50	33	8.9
	51 - 55	18	4.9
	56 - 60	23	6.2
	More than 60 years old	29	7.9
Gender	Female	178	48.2
	Male	191	51.8
Number of Facebook Friends	50 or less	53	14.4
	51-100	55	14.9
	101-150	45	12.2
	151-200	53	14.4
	201-300	44	11.9
	301-400	39	10.6
	401-600	34	9.2
	More than 600	46	12.5
Time spent per day	Less than 10min	79	21.4
	10-30min	134	36.3
	31-60min	105	28.5
Respondents (n=369)		**Frequency**	**Percent (%)**
Time spent per day	2 hours	29	7.9
	3 hours	13	3.5
	4 hours	2	.5
	More than 4 hours	7	1.9
Membership time	1 year or less	1	.3
	2 years	8	2.2
	3 years	11	3.0
	4 years	9	2.4
	5 years	17	4.6
	6 years or more	323	87.5

Results

This study utilized structural equation modeling for data analysis. IBM's SPSS AMOS 23 was used. First, a confirmatory factor analysis (CFA) was conducted to evaluate the measurement model. Fit indicators show acceptable values ($\chi 2$ ratio= 2.067, CFI=0.972, TLI=0.967, and RMSEA=0.054), considering the sample size and the number of observed variables (Hair et al., 2014). Internal consistency was reached since composite reliability (CR) shows acceptable values over 0.7 (Table 2). Convergent validity was verified since the AVE is greater than 0.5 and standardized factor loadings are significant and close to or higher than 0.7 (Table 2).

Table 3 shows the Heterotrait-Monotrait Ratio of Correlations (HTMT) for the following variables PAS: Perceived Alternatives, DSAT: Dissatisfaction DINT: Discontinuance intention, SEMB: SNS Embeddedness, EXH: Exhaustion, SO: Social Overload. Discriminant validity was corroborated since all MSVs are less than AVE (Table 2), and all HTMT values are less than 0.85 (Table 3).

Table 2. Composite Reliability (CR), Maximum Shared Variance (MSV), Average Variance Extracted (AVE), And Range of Standardized Factor Loadings

Variable	CR	MSV	AVE	Range of standardized factor loadings
Perceived Alternatives (PAS)	0.758	0.075	0.613	0.687-0.869
Dissatisfaction (DSAT)	0.948	0.353	0.859	0.856-0.955
Discontinuance intention (DINT)	0.932	0.353	0.774	0.823-0.908
SNS Embeddedness (SEMB)	0.942	0.224	0.764	0.818.-0.906
Exhaustion (EXH)	0.968	0.219	0.884	0.909-0.972
Social Overload (SO)	0.851	0.219	0.588	0.733-0.761

Table 3. Heterotrait-Monotrait Ratio of Correlations (HTMT)

Variable	PAS	DSAT	DINT	SEMB	EXH	SO
PAS	-					
DSAT	0.054	-				
DINT	0.294	0.618	-			
SEMB	0.146	0.435	0.481	-		
EXH	0.065	0.384	0.362	0.082	-	
SO	0.068	0.125	0.001	0.441	0.471	-

CMB was evaluated through the marker variable technique. A second CFA model was constructed by adding a common latent factor. A chi-square difference test was conducted between the unconstrained and zero-constrained models, finding that the two models were invariant (chi-square difference = 20.419, df = 22, $p < 0.55$). The chi-square difference test between the unconstrained and equal-constrained models indicated that both were not significantly different from each other (chi-square difference = 14.768, df = 21, $p < 0.83$).

Therefore, CMB is unlikely to be a significant issue. Then, the structural model was run. The assessment shows an acceptable adjustment for all indicators ($\chi 2$ ratio= 2.079, CFI=0.972, TLI=0.967, and RMSEA=0.054).

Figure 2 shows the standardized coefficients, the paths' significance, and the variance explained from latent variables. The model explained 47.8% of discontinuance intention variance.

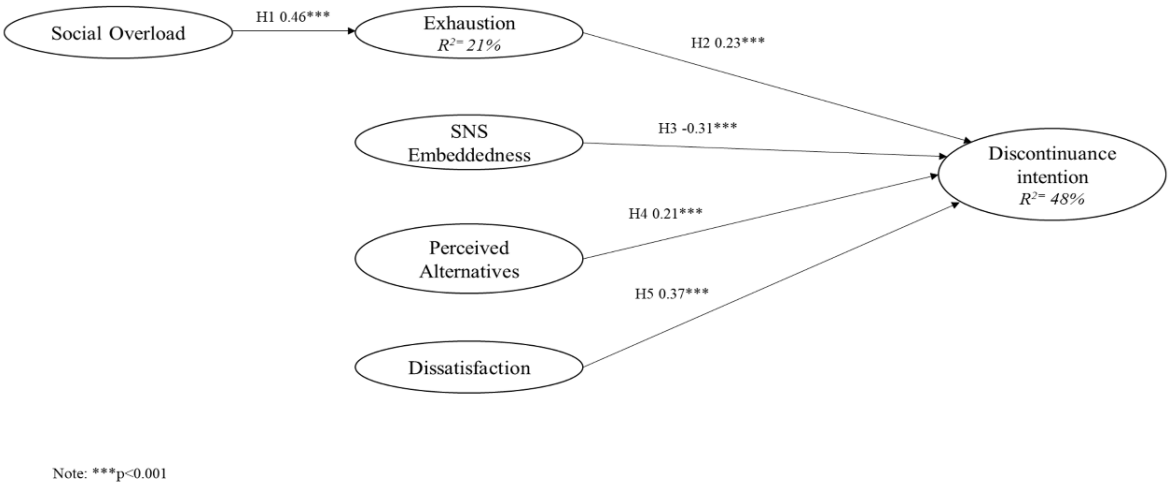

Figure 2. Results

Discussion

While Facebook remains the most popular social network, recent statistics point to a steady decline in usage time and the growing abandonment of its users. Previous literature has mainly explained the phenomenon of leaving as a response to help people cope with strains (e.g., exhaustion) and pressures (e.g., social overload). Although this adaptive approach has contributed to understanding the phenomenon, its scope may be restricted since it circumscribes discontinuance only due to a stressful situation. Other research streams suggest that leaving is immersed within a broader context: a social system (a user inserted in a network of relationships) and a competitive market (a user perceiving other alternatives). However, this broader scope has not been examined in discontinuance literature. Therefore, the objective of this study was to develop and evaluate a model, integrating the previous adaptive approach and these new theoretical lenses. For this purpose, in addition to the well-studied causal "overload-exhaustion" chain, this study introduced, grounded in Turnover Theory, SNS embeddedness, perceived alternatives, and dissatisfaction as proximal factors to explain SNS discontinuance.

The main finding is that the proposed model finds full empirical support. Therefore, this study evidences that beyond the fact that a stressful situation may trigger abandonment, the social context captured in SNS embeddedness may be a relevant inhibitor to avoid it. Likewise, this study reveals that market forces captured by the perception of alternatives and dissatisfaction can push people to abandon the SNS. Ultimately, this study is intended as a first step in a broader approach to the phenomenon under study, inviting researchers to develop richer causal chains based on the proximal factors shown in this work.

Specifically, factors derived from the adaptive approach impact users' intention to leave. Consistent with previous studies within this paradigm (Maier et al., 2015a; Zhang et al., 2016), the results show that an individual who feels exhausted by social overload will abandon Facebook. However, unlike prior studies, this study finds that exhaustion, while significant, weakens in the presence of the more influential TOT factors. Possibly, SNS embeddedness reflects a more permanent state built up gradually over time as relationships become more established. On the contrary, the feeling of being exhausted may be more episodic for most users (Ravindran et al., 2014; Zhang et al., 2016). Thus, individuals may perceive a more enduring construct as more salient than a more ephemeral one.

Also, the factors adapted from TOT also contribute to the intention to discontinue. The results suggest that attachment to Facebook will inhibit leaving, and, likewise, the perception of having numerous SNS alternatives available will encourage leaving. These results are novel within SNS research and coherent with organizational studies' findings (Crossley et al., 2007; Jiang et al., 2012). In particular, embeddedness is a novel construct in the information systems literature, although it is closely related to other constructs used in this field, such as the strength of ties and costs (Chang et al., 2014; Gong et al., 2020). However, embeddedness must be viewed as an overarching construct representing all the forces opposing discontinuance, including those mentioned above.

Furthermore, the findings imply that a dissatisfied Facebook user will leave it. While the statistical results are similar to those obtained from the adaptive approach (Wirth et al., 2015; Zhang et al., 2016), the interpretation of the findings is different. The adaptive paradigm sees dissatisfaction as the result of being immersed in a stressful situation. On the contrary, this study, coupling the propositions of TOT (Crossley et al., 2007) and information systems continuance literature (Bhattacherjee & Lin, 2014), contends that dissatisfaction results from a global affective evaluation of using the system. For example, Bhattacherjee and Lin (2014) emphasize the importance of meeting users' expectations to keep them satisfied. Oliver (2014) adds that meeting customers' needs will increase their satisfaction. Admittedly, fulfilling expectations and needs seems to go beyond dealing with stressful situations.

Implication of Theory

The adaptive approach has primarily considered stressors and strains to explain Facebook discontinuance (e.g., Luqman et al., 2017; Maier et al., 2015b; Zhang et al., 2016). This study takes a step forward, adding constructs from TOT that have not been used before in the SNS context but that works well in organizational settings. The results show that this addition is empirically supported, thus increasing the model's explanatory power and understanding of the phenomenon.

Second, at a higher level of abstraction, each construct of the integrated model reveals mechanisms of a different nature. The overload-exhaustion path reflects the adaptive mechanism through which individuals constantly search their internal equilibrium (Edwards, 1992). To alleviate stressful imbalances, users engage in avoidance behavior, such as SNS discontinuance. In turn, perceived alternatives capture their rational problem-solving process to maximize benefits (Bagozzi, 1992). If users perceive that another SNS brings them more benefits than Facebook, they will be more willing to leave it (Chang et al., 2014; Crossley et al., 2007).

In contrast to rational reasons for leaving, dissatisfaction encapsulates the affective mechanism by inspiring users to seek an optimum level of pleasure (Oliver, 2014). Dissatisfactory experiences trigger evasion behaviors (i.e., discontinuance). Finally, SNS embeddedness represents inertia, an invisible force that drives people to stay in their current situation (Polites & Karahanna, 2012). The intricate social network created on Facebook causes users to become enmeshed in it.

Third, this study integrates the adaptive perspective and TOT so that the limitations of the one are covered by the other and vice versa. The adaptive approach emphasizes stressful situations as a trigger for leaving but neglects that the individual is immersed in a social system and a market with multiple SNS options (Zhang et al., 2016). On the other hand, TOT deals with these latter aspects well but does not consider stressful situations to trigger leaving. To that extent, the two approaches complement each other, providing a more comprehensive picture of the discontinuance phenomenon.

Implication for Practice

This study also has implications for SNS providers. First, while traffic is essential for SNSs, the results suggest that vendors must balance the social load (cognitive demand) and users' ability (cognitive resources) to avoid mental saturation. Over time, SNSs have developed functions to facilitate traffic (e.g., "likes," messages, and comments). Also, some features have been created to filter the social load (e.g., blocking messages). However, more could be done in this regard. For example, SNS providers could introduce algorithms to calibrate cognitive demand in real-time to help users avoid stressful episodes. Likewise, vendors could act upon the sources of overload (e.g., users' contacts). So, users need tools to filter new friendships (e.g. recommendation systems), remove connections based on interaction history or relevance, or classify contacts by the level of interest they take in them.

Second, providers can discourage leaving if they boost the development and strengthening of relationships. SNSs have several functions (birthday reminders, groups); however, additional actions could be considered. For example, communities within SNS help generate bonds. Platforms could introduce features to promote contests, voting, exchanging ideas, or counselling to help keep the community alive. Likewise, providers should ensure that users are aware of the enormous relational value that their membership in the social network generates to prevent them from leaving. In this regard, SNSs could better exploit the social capital of each user. For example, if a user needs to know who works in a company or has a particular hobby, the SNS should suggest alternatives based on their usage and interactions.

Third, vendors must confront the potential perception that other sites are superior in a more competitive market. SNSs should continually generate competitive advantages through innovation, keeping user preference at the forefront. Also, providers could generate differential value by introducing lock-in strategies, such as launching loyalty programs, enhancing credibility with users, customizing content, or encouraging virtual communities.

Finally, many authors have written about the role of satisfaction in continuous usage and practical recommendations focused on expectation management and system performance in meeting needs. While these recommendations may apply to the context of discontinuance, notoriously, usage goes through different stages: adoption, continued use and discontinuance, and, at each stage, there is a different frame for evaluating the user-technology relationship (Soliman & Tuunainen, 2021). For example, in the early stages of use, the user seeks to satisfy specific needs (and therefore forms particular expectations). However, possibly in later stages, the individual has changed those initial needs, finding that the system is no longer helpful, even if the system remains the same in terms of functionality. On that basis, providers should be careful to introduce mechanisms to identify changes in users' needs to meet those needs on an ongoing basis.

Some limitations and an agenda for future research agenda are mentioned. First, the collected data correspond to one SNS (Facebook), limiting the results' generalizability. Future studies could use this model with another SNS (e.g., Instagram) since user-profiles differ. Second, some authors have found that usage patterns may vary according to the culture of the users (Lee et al., 2016). Since the respondents in the present study are exclusively US residents, assessing the model in different contexts would be valuable. Third, adolescent and adult usage patterns differ because maintaining interpersonal connections is a more intense task in teenagers (Espinoza & Juvonen, 2011). Future research may examine the fit of this model across age groups. Finally, this study focused on proximal factors to explain discontinuance; however, discontinuance is far from completely understood. Researchers could explore the distal antecedents of this phenomenon, as well, in particular the factors that explain embeddedness in the context of SNSs.

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Appendix

Appendix 1 – Measurement Items

Discontinuance intention – *(Bhattacherjee, 2001; Zhang et al., 2016)* [1]	
DINT01	I intend to discontinue using Facebook in the next months.
DINT02	If I could, I would like to discontinue using Facebook in the next months.
DINT03	My intention is to discontinue using Facebook in the next months.
DINT04	In the next months, I will use Facebook far less than today.
Social overload – *(Maier, Laumer, Weinert, et al., 2015)* [1]	
SO01	I take too much care of my friends' well-being on Facebook.
SO02	I deal too much with my friends' problems on Facebook.
SO03	My sense of being responsible for how much fun my friends have on Facebook is too strong.
SO04	I pay too much attention to the posts of my friends on Facebook.
Exhaustion SNE – *(Maier, Laumer, Eckhardt, et al., 2015)* [2]	
EXH01	How drained do you feel from your Facebook activities?
EXH02	How tired do you feel from your Facebook activities?
EXH03	How strained out do you feel from your Facebook activities?
EXH04	How burned out do you feel from your Facebook activities?
Dissatisfaction SAT – *(Bhattacherjee, 2001)*	
DSAT01	How do you feel (satisfied/dissatisfied) about your experience of Facebook usage?
DSAT02	How do you feel (pleased - displeased) about your experience of Facebook usage?
DSAT03	How do you feel (contented - frustrated) about your experience of Facebook usage?
DSAT04	How do you feel (delighted - terrible) about your experience of Facebook usage?
SNS Embeddedness – *(Crossley et al., 2007)*[1]	
SEMB02	It would be difficult for me to leave my social network on Facebook.
SEMB03	I'm too caught up in my Facebook network to leave.
SEMB04	I feel tied to my Facebook network.
SEMB05	I simply could not leave my Facebook network.
SEMB06	It would be easy for me to leave my Facebook network.
SEMB07	I am tightly connected to my Facebook network.
Perceived alternatives – *(Crossley et al., 2007)*[1]	
PAS01	I know of some social network site alternatives (different from Facebook) that I could use.
PAS02	I have a concrete social network site alternative different from Facebook in hand.

Perceived risks – *(Chang & Heo, 2014)* [1]

PR01	I'm worried that I may encounter damaging gossip on Facebook.
PR02	I'm worried that I may encounter stalking on Facebook.
PR04	I'm worried that I may find malicious rumors on Facebook.

Trust – *(Chang & Heo, 2014)* [1]

FTR01	Facebook is a trustworthy social network.
FTR02	I can count on Facebook to protect my privacy.
FTR03	I can count on Facebook to protect my personal information from unauthorised use.
FTR04	Facebook can be relied on to keep its promises.

[1] Scale: Strongly disagree… strongly agree
[2] Scale: To an Extremely Small Extent… To an Extremely Large Extent