



Service with an e-smile: Employee authenticity and customer use of web-based support services

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ARTICLE INFO

Article history:

Received 1 August 2010

Received in revised form 1 February 2012

Accepted 9 February 2013

Available online 24 February 2013

Keywords:

Web-based support service

e-service

Service encounters

Emotions

Authenticity

Technology use

Post-adoption

ABSTRACT

Many companies work hard to ensure that service representatives are friendly when interacting with customers. Friendliness, however, is not always enough; customers must believe that service employees are not just acting out a friendly role. In our study, we extrapolated this idea to web-based support services. Integrating IS and marketing perspectives, we suggested that user judgment of human service representatives' authenticity operate through two mechanisms, system-, and service-representative assessments, to augment a visitor's continuance intention. Data collected from 86 users of a library web-based live-chat service supported this view. The perceived authenticity of the service representatives increased information satisfaction, which in turn increased perceptions of usefulness, and ultimately strengthened the customer's continuance intention. Authenticity assessments also increased the perceived friendliness of the service provider, which in turn increased the visitor's continuance intentions. Implications of this dual-path concept are discussed.

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1. Introduction

Many companies are now providing customer service and related support online, mostly through instant messaging or “live chat” interfaces. At their best, online support services are an efficient and cost-effective means of providing customer assistance, as they may bolster customer satisfaction by providing instantaneous, around-the-clock access to company products and personnel. Online support can also enhance website interactivity-synchronicity and two-way communication with customers, which are factors improving relationship building in online environments [17].

Although live-chat services have many potential advantages, their actual success depends on their use. Customers typically have several alternative channels through which to seek assistance, including telephone access to service representatives, “shopping” in a local service center or retail outlet, and sometimes by choosing not to act at all. Nevertheless, many customers prefer to use online

live-chat support for service-related questions, such as inquiries about order status, company promotional information, and shipping options. Because web-based support services are relatively inexpensive to provide, are easily accessible, and have the ability to enhance customer satisfaction and associated positive outcomes (e.g., continued use, positive word-of-mouth, brand loyalty) [14]; it is important to understand the factors that affect their use.

Thus, company platforms should act simultaneously as technology artifacts and service provision conduits with a complex array of factors that affect individuals' decisions to use them. We therefore integrated key aspects from the fields of service marketing, cognitive psychology and IS to help in understanding individual reactions to web-based support services. By combining perspectives, we suggest that the usage of web-based support services will be influenced by users' beliefs about the system, as well as by their assessments of the qualities of the human service provider with whom they interact. Though IS research studies have focused on system-referenced perceptions and considerations as determinants of the decision to use a system [12], we argued that when web-based support services combine technology and human elements, both aspects should be considered in order to develop a better understanding of users' decisions to employ the services.

One key factor of human service representatives in traditional face-to-face service encounters is their apparent authenticity [8];

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i.e., does the representative seem to be genuine? We extended this idea to web-based support services, and suggested that the authenticity of electronically-mediated friendliness displays affect user reactions to, and usage of, web-based support services.

The proposed model was tested and supported using SEM techniques applied to data collected from 86 users of a library web-based live-chat service. Most of the research on service encounters and emotional displays has been done in face-to-face service encounter settings. The recent proliferation of web-based support services, therefore, requires more attention.

2. Conceptual background

2.1. Web-based live-chat support services

Increased use of technology for service delivery has sparked interest in understanding its role in customizing and improving service offerings [2] such as live-chat web-based customer support. Such services typically involve a customer seeking service-related information from a company via web-based synchronous media, and a human service representative who provides answers. For example, Orbitz, the online travel company, provides customers with web-based tools to chat with customer representatives about a variety of issues, including billing, reservations, and seat assignments. A similar service is provided by Bank of America, allowing customers to chat with customer representatives on financial transactions and investments. However, research on web-based service provision is lacking [3]. Given that web-based communication technologies are inherently lower in media richness; their use will potentially be influenced by different factors than those used in offline settings. In general, lean media limit users to simultaneously transmitting and receiving multiple communication cues, potentially leading to erroneous perceptions, miscommunication and conflict escalation [1]. In light of the context in which online service encounters take place, some service delivery elements that affect customer satisfaction in face-to-face settings can be less relevant. As such, we felt a need to re-examine existing theories to fit the web-based support service environment [4].

Because of the growing use and importance of live-chat support services (text-based, technology-mediated service provided by a human interface), and our limited understanding of such services, we decided to integrate key elements from the IS and marketing disciplines that can explain their continued use.

2.2. Potential predictors of web-based service use intentions

Service receivers form attitudes and behavioral intentions based on their encounters, which represent goal-oriented interactions between service personnel and service receivers. Given the importance of service encounters in determining future service-receiver actions, much research has been dedicated to understanding the constituents of good service. In addition to providing a high quality product and being technically proficient in service delivery, customers notice employees' affective demeanor and thus higher levels of encounter satisfaction are reported when positive emotions and friendliness are conveyed by service representatives (i.e., "service with a smile"). Interestingly, however, simply providing this is not sufficient. Customers can differentiate authentic from phony replies, and they respond positively only when an employee's expressed feelings are considered to be genuine. Nevertheless, the presentation of phony emotions and friendliness is not uncommon, as employers often demand that front-line employees be friendly during their interaction with service-receivers.

Unlike traditional face-to-face service encounters, web-based service encounters can be artificial and present challenges in

conveying non-verbal cues and authentic emotional displays. These factors may lead users to view web-based support service alternatives as inferior, and therefore as less attractive than more conventional service options. Although providing an authentic service experience may be one way in which web-based support service providers can establish that they are trustworthy, reliable, and responsive e-services, their evaluation cues are virtual and may be difficult to evaluate [6]. Lean media, while high in synchronicity, is limited in its ability to transmit multiple cues simultaneously. Indeed, cues used to evaluate employee authenticity in face-to-face exchanges are absent in many online communications. As a result, users may be influenced by a range of factors, some of which may be deemed less salient in offline contexts. An examination of these variables is therefore warranted. Presumably these factors can pertain to the qualities of the human service representative as well as to commonly examined aspects of the system. Both types of factors, though in different disciplines, have been shown to increase behavioral use intentions.

2.3. e-authenticity and e-friendliness

According to role-theory, users learn to expect and evaluate emotion and its authenticity in an online service encounter. They first learn the role of service-receivers in offline encounters via repeated experience and are likely to expect similar behavior in online encounters. Then they will be able to pinpoint important service norms and post-service reflections on which they focus. The authenticity of an emotional display is a service norm that individuals learn to expect and assess. It is therefore likely that users of web-based support services evaluate the authenticity and friendliness of the service representative, using online signals and cues, even when no meaningful cues exist. These evaluations are similar to other e-assessments that users have learnt about through extrapolations (role learning) from the offline environment. Thus trust is a key element in commerce, and people have learnt to expect it to be present in e-commerce even though they must use a limited set of cues, if any.

People rely on facial muscle movements to assess the authenticity of emotional displays in face-to-face interactions but can text provide similar cues? People tend to use the structural elements of language differently when interacting online, and they rely on text-based cues for deciphering the 'true' content of messages. Focusing on message content, for example, using "emoticons" (such as the;-) "wink" or a;-) "smile") can help to convey feeling, strengthen the intensity of verbal messages, and help individuals feel that an online interaction is personalized [10]. Moreover, it is possible that other aspects of communication, such as *wait time* between messages and message content revealing personal information, may be used to make the message seem authentic.

Extrapolating from service encounter theories, we expected that users of web-based support services contrast their web-based support service expectations with the actual service performance, using a mental schema which they developed from experience; i.e., they will evaluate the service representative and the service or company that he or she represents. Thus we concluded that users of web-based services assess key attributes of the service provider (friendliness and authenticity) based on the service-receiver role that they developed during many service-encounters they had experienced.

3. Hypotheses

3.1. The service representative assessment path

Service receivers like interacting with good-natured (e.g., smiling) employees. But good-natured *displays* are not equally

effective. If a service employee's positive demeanor seems "fake", it does not produce the desired results. Indeed, several studies have shown that only authentic positive emotional displays lead to higher ratings of service provider conduct [7], and, particularly, to higher ratings of service provider friendliness. By extension, we believed that the authenticity of positive displays over the Internet can strengthen the user's overall positive assessments of the service representative and his or her level of friendliness in particular.

H1. The perceived authenticity of treatment by the web-based support service representative will strengthen the users' assessments of his or her friendliness.

Assessments of friendliness are important, because they can influence users' behaviors towards both the employee and the company. First, there is an emotional contagion process. Service employees who are friendly and smiling are unconsciously mimicked by the service receivers. The strength of the smile of a service representative enhances the strength of service receiver smile, and this can lead to stronger behavioral usage intention [9].

Second, the emotional contagion process improves the service receiver's post-interaction mood, and leads to "affect infusion", and to more positive feeling about a service and the employees delivering it. The assessed friendliness is thus likely to affect post-encounter behavior. After users perceive that the web-based support service representative is friendly, emotive and cognitive processes will augment user intention to continue to use the service.

H2. The perceived friendliness of the web-based support service representative will increase users' intentions to use the web-based support service in the future.

3.2. The system assessment path

Information satisfaction is enhanced by cognitive consideration of information quality facets such as timeliness, accuracy, and relevancy. One of the key functionalities of web-based customer support services is to provide individuals with information on an issue of concern to them. Information is perceived to be of high quality, and thus yield high satisfaction, when it is clear, current, accurate, reliable, and complete [16]. Consequently, users should be most satisfied with information provided by an online service representative when communications are perceived to be genuine.

Furthermore, the presentation of authentic emotions is considered an "extra-role behavior" taken by the service provider

to satisfy or exceed the expectations of a service receiver. When a service representative does not seem to be exerting extra effort, a service receiver may feel that the service representative is just trying complete a sale, neglecting important details, or misrepresented something to quickly finish the encounter. Ultimately, users are likely to be less satisfied with such information. Thus:

H3. The perceived authenticity of positive emotional displays of the web-based support service representative will strengthen one's satisfaction with the information provided by him or her.

Information satisfaction is important because it can affect the formation of proximal behavioral beliefs, such as perceived usefulness, which encapsulates one's assessment of the ability of a system to cater to his or her needs. One of the key functionalities of web-based customer support services is to provide service receivers with quality and satisfying information on a specific issue of concern. Thus, a system that produces satisfactory information is expected to be perceived as more useful. Hence:

H4. Satisfaction with the provided information will strengthen the perceived usefulness of the web-based support service.

The usefulness attributed to a web-based service affects one's intentions to use it. A system that caters to a customer's needs is more likely to be used. We expected to see a similar relation in the current context. Users' behavioral intentions to use a web-based support service should be determined, in part, by the usefulness attributed to it.

H5. The perceived usefulness of the web-based support service will strengthen one's behavioral intentions to use it in the future.

We focused solely on perceived usefulness and not on perceived ease of use, for two reasons. First, in continued use situations ease of use becomes less and less important over time and usefulness is a much stronger predictor of usage intentions [15]. Second, ease of use is not naturally linked to authenticity, and thus it is not an integral part of our authenticity-effects model. For these parsimony reasons, we focused only on perceived usefulness. The resultant research model is shown in Fig. 1.

4. Method

Data for this study were collected from users of web-based live-chat support services associated with the libraries of two North American universities. These services allowed users to chat with a service representative (a librarian assigned to such services).

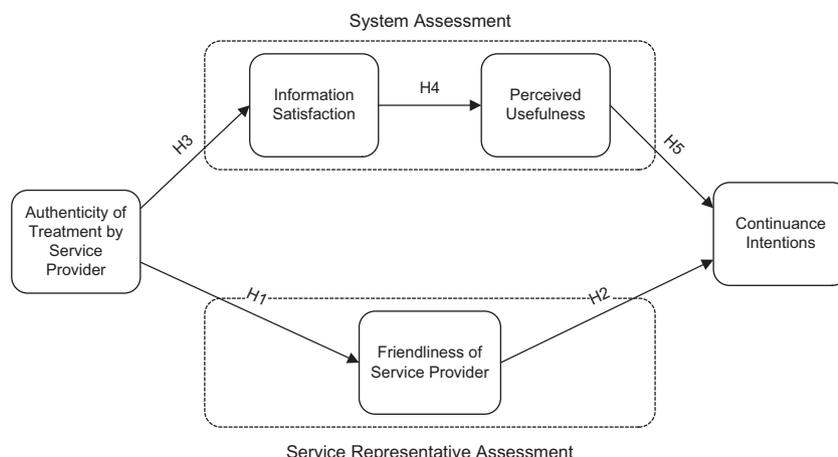


Fig. 1. The research model.

Table 1
Measures.

Construct	Source	Items
Perceived Friendliness	^a	The librarian provided the service in a friendly manner The librarian appeared enthusiastic about helping me The librarian treated me nicely
Perceived Service Provider's Authenticity	[13]	The librarian was faking how she feels in this interaction (Reversed) The librarian was pretending or putting on an act in this interaction (Reversed)
Information Satisfaction	[16]	Overall, the information I got from the library chat service met my expectations I am very satisfied with the information I received from the library chat
Perceived Usefulness		Using the library chat service improved my ability to complete the tasks I was working on when I contacted the library The library chat service allowed me to get my work done more quickly Using the library chat service enhanced my effectiveness with the tasks I was working on when I contacted the library
Behavioral Continuance Intentions		I intend to use the library chat service routinely over the next year, when necessary I intend to use the library chat service at every relevant opportunity over the next year I plan to increase my use of the library chat service over the next year

^a See Ref. [18].

The American Library Association (ALA) whose guidelines for web-based services recognize that online service is challenging and requires that librarians possess a unique set of knowledge, skills, and abilities in order to provide the same quality of service that would be provided in face-to-face encounters state that:

...Virtual reference requires of library staff many of the same communication and interpersonal skills necessary for other forms of reference. The absence of a physically present patron and the different modes of communication may call for additional skills, effort, or training to provide quality service on par with face-to-face reference services³

Library reference services represent one common type of web-based support services: the *intervenient* type. In such web-based support service, librarians estimate each user's needs to help them deliver a tailored service experience, all encounters occur in real time and are of short duration, and the platform requires higher levels of involvement from employees than from users. However, the services offered by the two universities differed slightly in their technology base. One library's service was designed to be compatible with common instant messaging applications (e.g., MSN Messenger, Google Talk, Skype) and users had to provide their own instant messaging (IM) account and add the library to their "buddy list." The second library's service was embedded in its own website and users did not have to have an IM account. Customer service representatives (librarians) in both locations received some training in instant messaging.

4.1. Procedures and the sample

Users were asked by the librarians who facilitated their electronic encounters to complete an online survey at the end of their chat session, over a period of 12 months. Eighty-six individuals provided valid survey responses, 67% of them were female. The response rate out of all live-chat sessions was 16%. The average age of respondents was approximately 30 years (range: 18–66). The majority of the sample (58%) indicated graduate student status, 32% were faculty, 5% were undergraduates, and the remainder were members of the local community. Participants reported using IM twice per week and face-to-face library services once a week. Although many participants reported having no experience with the online support service, 58% had used it at least

once before. Participants used the online support system primarily to address questions related to research (68%) or library information and services (32%). Finally, self-reported session length ranged from 1 to 50 min ($M = 9.25$).

4.2. Survey instrument

All scales used in our study were adapted from existing measures. All survey items were reported on a seven-point Likert-type scale from (1) *Strongly Disagree* to (7) *Strongly Agree*; they are shown in Table 1.

5. Results

5.1. Preliminary analyses

To alleviate concern that the type of web-based support service technology may account for any observed results, a Multivariate Analysis of Variance (MANOVA) was conducted including service type (Library 1 versus Library 2) as a fixed factor and the model's measurement items as dependent variables. A Pillai's Trace value of 0.21, $p < 0.18$ indicated no omnibus differences in participant responses across the two universities, demonstrating that the dataset could be analyzed as a single set.

Scale reliabilities, descriptive statistics, and correlations for all study variables were reported in Table 2. All constructs were reliable with Cronbach alphas exceeding 0.9. Perceived authenticity was correlated with session length and user gender.

Given that all data in this study were self-reported, we tested for the potentially bias from common method variance (CMV). We first conducted Harman's single factor test. Study items loaded on more than one principal component, indicating no single dominant factor. We subsequently included items tapping an unrelated construct (Agreeableness, see Ref. [13]) in an un-rotated principal component analysis procedure. This loaded highly on a separate factor (>0.083) with low cross-loadings on other factors (<0.32), further indicating that CMV was not a significant concern in our study.

5.2. Model estimation

The model was tested using the SEM facilities of AMOS 18. This has been found to be adequate because SEM with sample sizes over 50 tends to generate reasonably high rates of proper solutions with acceptably low non-convergence rates. Although SEM on

³ See www.ala.org/ala/mgrps/divs/rusa/resources/guidelines/virtual-reference-se.pdf.

Table 2
Descriptive statistics, construct reliabilities, and correlations.^{a,b}

	M	SD	1	2	3	4	5	6	7	8	9	10
Perceived authenticity	6.02	1.53	(0.92)									
Perceived friendliness	5.99	1.41	0.42**	(0.92)								
Information satisfaction	5.76	1.76	0.29**	0.78**	(0.97)							
Perceived usefulness	5.70	1.78	0.28**	0.79**	0.90**	(0.97)						
Continuance intentions	5.67	1.63	0.26**	0.81**	0.85**	0.88**	(0.91)					
Age	29.47	11.84	0.11	0.00	-0.08	-0.12	-0.18					
Gender	-	-	-0.27**	-0.14	-0.07	-0.09	-0.08	0.02				
IM usage frequency	4.91	1.85	-0.13	0.08	0.16	0.17	0.15	-0.57**	0.13			
Library usage frequency	4.06	1.32	-0.05	-0.07	-0.06	-0.04	-0.14	0.20	0.01	0.04		
Live chat experience	2.91	1.99	-0.01	-0.04	-0.08	-0.01	0.00	0.21	0.03	-0.03	0.09	
Session length	9.25	7.70	-0.21*	-0.18	-0.05	-0.04	-0.18	-0.03	-0.01	0.02	0.11	-0.15

^a Cronbach's alphas are indicated on the diagonal in parentheses.
^b n = 86.
 * p < 0.05.
 ** p < 0.01.
 *** p < 0.001.

small-sample models may slightly over-estimate fit indices and yield low power to reject the null hypothesis, certain indices, such as the CFI and RMSEA are relatively insensitive to sample size (e.g., sample size explains less than 1% of the variation in these fit statistics [5]).

To further alleviate any potential concern with the sample size, a minimum sample size was calculated for obtaining power of 0.90 (with ε = 0.10) for RMSEA for a model with 59 degrees of freedom, using the critical non-centrality parameters and formulas specified by Kim [11]. Under these conditions, we would need a sample of about 69 to obtain the specified power, and be able to make correct decision using the RMSEA. The sample used in our study was larger, and thus SEM is an appropriate technique, although attention should be given mostly to the CFI and RMSEA fit indexes.

The structural model was assessed in two steps. We first conducted a CFA, in which all five constructs of the model were included and allowed to freely correlate with one another. The fit statistics for this model were good [$\chi^2(55) = 54.3, p < 0.50$; IFI = 1.00; TLI = 1.00; CFI = 1.00; SRMR = 0.027; RMSEA = 0.001 (p-close < 0.84)]. Specifically, the standardized RMS residual (SRMR) was considered simultaneously with the RMSEA, and their values were below 0.08 and 0.06, respectively. Furthermore, the CFI exceeded the common threshold of 0.95. Thus, we concluded that the CFA model fit the data well, and that the specification and estimation of the structural model were plausible.

The second step, given the good fit of the CFA model, involved the specification of a structural model based on the hypothesized relationships. First, a model that included age and gender as

potential control variables (as predictors of all endogenous factors) was estimated, and produced adequate fit statistics [$\chi^2(78) = 97.5, p < 0.07$; IFI = 0.99; TLI = 0.98; CFI = 0.99; SRMR = 0.059; RMSEA = 0.054 (p-close < 0.40)]. Gender had no significant effects, and age had only a significant effect on continuance intentions (p < 0.05). To improve the model's parsimony, gender was removed, and age was modeled as a predictor of only continuance intentions. This model was estimated (see Fig. 2 for path coefficients and explained variance), and produced good fit statistics [$\chi^2(71) = 73.6, p < 0.39$; IFI = 0.99; TLI = 0.99; CFI = 0.99; SRMR = 0.047; RMSEA = 0.021 (p-close < 0.81)]. The results indicated that all the hypothesized relationships were supported. The authenticity attributed to web-based support service representatives increased one's information satisfaction ($\beta = 0.39, p < 0.01$), which in turn increased a person's perceived usefulness ($\gamma = 0.90, p < 0.001$). It also increased assessments of employee friendliness ($\beta = 0.41, p < 0.001$). Perceived usefulness and service provider friendliness increased one's behavioral continuance intentions ($\gamma = 0.50$ and $\gamma = 0.56$ correspondingly, both with p < 0.001), ultimately explaining a major portion of its variance. Age was a significant control variable ($\beta = -0.013, p < 0.05$); younger users, regardless of other factors, were more likely to continue using the web-bases support service.

5.3. Which path is more important? A post hoc analysis

Web-based support service intended use is influenced by both system and service representative assessments. From a

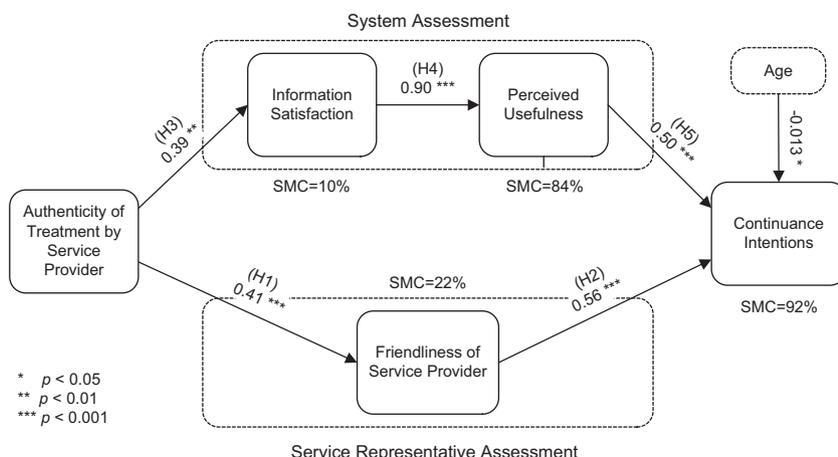


Fig. 2. The structural model.

practical perspective, it is useful to understand which path is more likely to influence the users to continue to use the website. We therefore constructed a test and conducted a post hoc assessment of a model using a Chi-square difference test, in which the beta coefficient of the system-assessment path (the effect of system usefulness) on continuance intentions was constrained to be equal to the beta coefficient of the service representative assessment path (effect of employee friendliness) on continuance intentions, again using AMOS 18. The model had a Chi-square fit index of 74, with 72 degrees of freedom. The difference between this constrained-model's Chi-square and the Chi-square index of the structural model was 0.2 ($df = 1$, ns). This non-significant Chi-square difference score implied that there were no statistically significant differences in the strength associated with both mediated paths (i.e., constraining the model did not statistically significantly worsened the model fit). Thus participants in our study relied on system and service representative considerations equally to determine their future usage intent.

6. Discussion

Scholars have called for a better understanding of web-based support services, and suggested a need to further examine the factors influencing their usage. We therefore sought to explain how the perceived authenticity of web-based interactions influenced user reactions to the support service. Our empirical study of 86 library live-chat support users suggested that the perceived authenticity of interactions with service representatives predicted cognitions about both the system and the service representative. Although the importance of employee authenticity has been demonstrated in traditional face-to-face service encounters, we were among the first to suggest that authenticity may also play an important role in online, technologically-mediated exchanges. Our study also broadened the scope of technology use models to include human-service encounter considerations: users of our web-based support service gave almost equal weight to system and human service representative assessments.

The implications of our results are both interesting and significant. Previous research examined web-based support services as either a technology artifact *or* as a conduit to service provision without integrating them. Our study suggested that the technological and humanistic aspects of web-based support service provision were inextricably linked, anchored by users' perceptions of encounter authenticity. Our post hoc comparison of a dual-path mediated model suggested that system and humanistic variables are weighted equally in users' decision processes. Given the growth and increasing importance of web-based support service innovations, such as web 2.0 technologies, it is imperative that scholars further integrate IS, psychological, and marketing models to better understand how users respond to these and other types of electronically-mediated service encounters.

In our study, the perceived authenticity of a service employee drove user reactions to a live-chat service (i.e., customer support). Although body language and eye contact have been described as the strategies by which authenticity is conveyed and evaluated in the social domain, our research suggested that physical cues are not essential for deciphering, correctly or not, the genuineness of an interaction partner. Our research suggested that individuals form perceptions of authenticity in relatively brief interactions that take place over lean media (e.g., instant messaging). Moreover, results suggest that the authenticity of service representatives may be salient in web-based settings, because it influences not only service representative

assessments but also assessments of the system as a whole. Authenticity of service providers should therefore be better integrated with IS use models, when the system is employed for communicating with human service providers.

In addition to driving both service representative and system assessments, our study indicated that user perceptions of employee authenticity were correlated with encounter length (shorter sessions were associated with higher authenticity). Indeed, in lengthy service encounters, there is a greater likelihood that employees experience dissonance between felt and displayed emotions and, as a result, actively regulate their emotions making them seem to lack authenticity.

Finally, younger users are more likely to continue using web-based services, regardless of system and service representative assessments. Moreover, male users perceived, on average, lower authenticity in the e-transactions than did women (male users were more "suspicious"). Our results suggest that gender-based distinctions may account for differences in the way that men and women decode the authenticity of emotive content in online communications.

6.1. Practical implications

In addition to requiring that service providers be knowledgeable about products or services being offered, organizations providing web-based support should make certain that service employees are technologically proficient and thus have been provided with training about how to communicate in ways that are convincing and seem authentic. Many corporate policies prohibit certain forms of e-communication (e.g., the use of ALL CAPS, emoticons, etc.), but our results suggest that there may be advantages to allowing employees to behave in an authentically friendly fashion when communicating via lean media.

Our correlation matrix also indicated that short encounters, on average, are seen as more authentic and thus service representatives may be encouraged to keep online sessions as brief as possible. One way would be to encourage the use "canned" responses to frequently asked questions, though this may unintentionally reduce the perceived authenticity of the ensuing interaction.

6.2. Limitations

Several limitations should be acknowledged. First, our study was based on a specific type of web-based support service: instant-messaging-based live-chat library reference services that was offered in a North American context. Second, the type of service was a specific type of service encounter that (a) catered to relatively non-emotional and impersonal queries and (b) was of moderately brief duration (approximately 9 min, on average). Third, our research indicated that though users decide on a web-based support service provider's authenticity, it did not show how individuals reached their conclusion, or whether the results were accurate.

7. Conclusion

Although web-based customer support systems offer potential benefits, it is still important for organizations to consider the factors affecting service delivery and continued use. Our study addressed this issue, and by so doing it: (1) extended the traditional view of IS post-adoption processes to include human service employee assessments, (2) examined the relative importance of such assessments, and (3) extended existing research on employee authenticity to a novel context. Our

findings suggested that organizations should try to provide service with an “e-smile” that is perceived to be authentic, leading to positive user evaluations of friendliness, information satisfaction, and system usefulness assessments, and ultimately to continued use.

References

- [1] K. Byron, Carrying too heavy a load? The communication and miscommunication of emotion by email *Academy of Management Review* 33 (2), 2008, pp. 309–327.
- [2] R.T. Cenfelletti, I. Benbasat, S. Al-Natour, Addressing the what and how of online services: positioning supporting-services functionality and service quality for business-to-consumer success, *Information Systems Research* 19 (2), 2008, pp. 161–181.
- [3] Y.K. Cho, L.J. Menor, Toward a provider-based view on the design and delivery of quality e-service encounters, *Journal of Service Research* 13 (1), 2010, pp. 83–95.
- [4] W.K. Darley, Guest editorial: the interaction of online technology on the consumer shopping experience, *Psychology & Marketing* 27 (2), 2010, pp. 91–93.
- [5] X. Fan, B. Thompson, L. Wang, Effects of sample size estimation methods, and model specification on structural equation modeling fit indexes, *Structural Equation Modeling: A Multidisciplinary Journal* 6 (1), 1999, pp. 56–83.
- [6] M.S. Featherman, J.S. Valacich, J.D. Wells, Is that authentic or artificial? Understanding consumer perceptions of risk in e-service encounters *Information Systems Journal* 16 (2), 2006, pp. 107–134.
- [7] A.A. Grandey, When “the show must go on”: surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery, *Academy of Management Journal* 46 (1), 2003, pp. 86–96.
- [8] A.A. Grandey, G.M. Fisk, A.S. Mattila, K.J. Jansen, L.A. Sideman, Is “service with a smile” enough? – authenticity of positive displays during service encounters *Organizational Behavior and Human Decision Processes* 96 (1), 2005, pp. 38–55.
- [9] T. Hennig-Thurau, M. Groth, M. Paul, D.D. Gremler, Are all smiles created equal? How emotional contagion and emotional labor affect service relationships *Journal of Marketing* 70 (3), 2006, pp. 58–73.
- [10] A.H. Huang, D.C. Yen, X.N. Zhang, Exploring the potential effects of emotions, *Information & Management* 45 (7), 2008, pp. 466–473.
- [11] K.H. Kim, The relation among fit indexes, power, and sample size in structural equation modeling, *Structural Equation Modeling – A Multidisciplinary Journal* 12 (3), 2005, pp. 368–390.
- [12] W.R. King, J. He, A meta-analysis of the technology acceptance model, *Information & Management* 43 (6), 2006, pp. 740–755.
- [13] J.C. Mowen, S. Park, A. Zablah, Toward a theory of motivation and personality with application to word-of-mouth communications, *Journal of Business Research* 60 (6), 2007, pp. 590–596.
- [14] S. Negash, T. Ryan, M. Igbaria, Quality and effectiveness in Web-based customer support systems, *Information & Management* 40 (8), 2003, pp. 757–768.
- [15] O. Turel, A. Serenko, P. Giles, Integrating technology addiction and use: An empirical investigation of online auction users, *MIS Quarterly* 35 (4), 2011, pp. 1043–1061.
- [16] O. Turel, Y.F. Yuan, C.E. Connelly, In justice we trust: Predicting user acceptance of e-customer services, *Journal of Management Information Systems* 24 (4), 2008, pp. 123–151.
- [17] D. Yoon, S.M. Choi, D. Sohn, Building customer relationships in an electronic age: the role of interactivity of e-commerce websites, *Psychology & Marketing* 25 (7), 2008, pp. 602–618.
- [18] W.C. Tsai, Y.M. Huang, Mechanisms linking employee affective delivery and customer behavioral intentions, *Journal of Applied Psychology* 87 (5), 2002, pp. 1001–1008.



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