How do Size Recommendation Service and Size Concerns affect e-Shopping Satisfaction?

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*Introduction* As the COVID-19 continues to impact local, state, national, and global businesses, as well as human health and well-being (Rosenbaum & Russell-Bennett, 2020), e-commerce has become more important than ever before. Especially the pandemic is changing how consumers shop mainly shifting towards online shopping. In response to changing shopping behaviors, retailers strive to adopt new ways to reach and engage customers who are shopping from their homes (Roggeveen & Sethuraman, 2020). Among many, technological applications such as Virtual Try-Ons, Size Recommendation Service (SRS), and augmented tools support customers to shop online. Of focus in this study is SRS which is technical support to assist customers to make size decisions based on data about the customer’s body information (e.g., height, weight, and age) and their purchase history. By providing size information, SRS is designed to help customers overcome size concerns which are considered as major problems in online shopping (Kim & Damhorst, 2013). Yet, little is known about how consumers evaluate SRS in the multichannel e-commerce environment. This study aims to identify SRS quality and examine how it affects customer satisfaction with e-shopping via processing fluency. Besides, given that SRS intends to handle customer’s size concerns, we examine how size concerns, as a moderator, work with SRS quality in determining e-shopping satisfaction.

*Literature Review and Hypotheses* This study builds on the concepts of SERVQUAL model, processing fluency, and size concerns. The SERVQUAL model is most widely used to explain the effect of service quality (Pitt et al., 1997) that service quality influences value, satisfaction, and consumption decisions (Yang & Jun, 2002). A number of studies have adapted the model to identify service quality relevant to digital shopping environments and developed various scales such as SITEQUAL, e-SERVQUAL, eTailQ, and E-S-QUAL. These scales capture a comprehensive quality of e-retail services rather than (a) specific service function(s). This study adopts scales from previous studies to identify core quality specific to SRS and expects the SRS quality would have an impact on customer satisfaction.

*H1: SRS (Size Recommendation Service) quality has a positive effect on consumer satisfaction.*

This study further posits that SRS quality influences consumer satisfaction through processing fluency. Processing fluency is defined as the subjective experience of the ease or difficulty with which information consumers process (Schwarz, 2004). Fluent processing indicates a high degree of mental activity, which is assumed to generate positive attitudes toward the target subject (Tang et al., 2014). Therefore, as quality of SRS increases, consumers find their shopping process easy and smooth thereby enhancing their shopping satisfaction.

*H2: The effect of SRS quality on consumer satisfaction is mediated by processing fluency.*

 Concerns with apparel fit and size, referring to individual-level expectations and anticipated risks in relation to the fit and size of clothing (Kim, 2008), are one of the important criteria that can affect apparel shopping decisions (Hsu & Burns, 2002). Particularly size/fit concerns are the main deterrent of online apparel purchasing due to the lack of experiential information (inability to try on and assess the fit) which increases risks of shopping (Kim, 2008). Since SRS is designed to support customers make the size decision by reducing size concerns, individual differences in size concerns are expected to interact with SRS quality in developing processing fluency of SRS.

*H3: The effect of SRS quality on processing fluency is moderated by size concerns such that such effect becomes stronger for consumers with strong concerns with size than others.*

*Methodology* The survey method was used to collect data from Amazon MTurk with U.S. females, aged between 18 and 65. Participants were guided to explore an online fashion retailer's website (https://www.jcrew.com) to select their size using the SRS system available and add an item to the cart as if they were shopping. After experiencing SRS, they answered the survey questionnaire. Measures of research variables were adopted from previous research and modified to fit the SRS context (Kim, 2008; Lee et al., 2018; Raza et al., 2020). Processing fluency and SRS quality were recorded on a 7-point Likert scale and consumer satisfaction is recoded on a 5-point Likert scale. A total of 219 eligible responses were gathered (mean age = 36.8).

*Results* First, Exploratory Factor Analysis revealed two dimensions of SRS service quality: ease of use (% of variance = 23.47%) and reliability (% of variance = 23.09%). Second, all variables showed adequate reliabilities (Cronbach’s alphas > .82). With each dimension of SRS quality as an independent variable, a regression-based moderated mediation analysis was performed using the Process Macro (Model 6, 5000 bootstrapping sample) written by Hayes (2013). Ease of use had no significant effect on processing fluency directly. However, the interaction between size concerns and ease of use occurred and affected processing fluency (β = .09, *p* < .05). The conditional effect strengthens as size concerns increase (-1 SD from the mean: effect = 0.58, LLCI = 0.44, ULCI = 0.72 / +1 SD from the mean: effect = 0.75, LLCI = 0.64, ULCI = 0.87), confirming the moderating effect of size concerns. Further, ease of use (β = .34, *p* < .001) and processing fluency (β = .18, *p* < .001) had an effect on customer satisfaction. Therefore, the effect of ease of use moderated by size concerns influenced consumer satisfaction through processing fluency. Thirds, reliability neither affected processing fluency nor interacted with size concerns on processing fluency. Instead, reliability (β = .33, *p* < .001) had a significant impact on satisfaction directly. In all, H1 was supported while H2 and H3 were partially supported.

*Conclusions* This study makes contributions to the fashion business literature by demonstrating the effect of SRS, a newly introduced retailing technology on consumer satisfaction from the viewpoint of service quality. It also enriches the current knowledge by confirming that size concerns moderate the relationship between ease of use and processing fluency. Our findings can enlighten online fashion retailers as to how SRS applications can be designed and implemented. Managing easy and accessible SRS can assist customers especially those with size concerns to overcome such concerns and thus enhancing satisfaction with online shopping while reliable SRS can cultivate satisfaction directly.

*Reference*

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: Methodology in the social sciences*. The Guilford Press.

Hsu, H. J., & Burns, L. D. (2002). Clothing evaluative criteria: A cross-national comparison of Taiwanese and United States consumers. *Clothing and Textiles Research Journal*, *20*(4), 246–252. https://doi.org/10.1177/0887302X0202000408

Kim, H. (2008). *Image self-discrepancy on body dissatisfaction, fashion involvement, concerns with fit and size of garments, and loyalty intentions in online apparel shopping* [Iowa State University]. http://www.itaaonline.org/downloads/CB-Kim, H-The\_Impact\_of\_Body\_Iamge.pdf

Kim, H., & Damhorst, M. L. (2013). Gauging concerns with fit and size of garments among young consumers in online shopping. *Journal of Textile and Apparel, Technology and Management*, *8*(3), 1–14.

Lee, H. K., Yoon, N., & Jang, S. (2018). Consumers’ usage intentions on online product recommendation service - Focusing on the mediating roles of trust-commitment-. *Journal of the Korean Society of Clothing and Textiles*, *42*(5), 871–883. https://doi.org/10.5850/JKSCT.2018.42.5.871

Pitt, L. F., Watson, R. T., & Kavan, C. B. (1997). Measuring information systems service quality: Concerns for a complete canvas. *MIS Quarterly*, *21*(2), 209–221.

Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: The modified e-SERVQUAL model. *TQM Journal*, *32*(6), 1443–1466. https://doi.org/10.1108/TQM-02-2020-0019

Roggeveen, A. L., & Sethuraman, R. (2020). How the COVID-19 pandemic may change the world of retailing. *Journal of Retailing*, *96*(2), 169–171. https://doi.org/10.1016/j.jretai.2020.04.002

Rosenbaum, M. S., & Russell-Bennett, R. (2020). Editorial: Service research in the new (post-COVID) marketplace. *Journal of Services Marketing*, *34*(5), I–V. https://doi.org/10.1108/JSM-06-2020-0220

Schwarz, N. (2004). Meta-cognitive experiences in consumer judgment and decision making. *Journal of Consumer Psychology*, *14*(4), 332–348. https://doi.org/10.1207/s15327663jcp1404\_2

Tang, L. R., Jang, S. S., & Chiang, L. L. (2014). Website processing fluency: Its impacts on information trust, satisfaction, and destination attitude. *Tourism Analysis*, *19*(1), 111–116. https://doi.org/10.3727/108354214X13927625340398

Yang, Z., & Jun, M. (2002). Consumer perception of e-service quality: From internet purchaser and non-purchaser perspectives. *Journal of Business Strategies*, *19*(1), 19–41