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Measuring the Effects of Pressure on Consumer Impulse Buying Intention in Online Group Buying

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ABSTRACT

Group buying organizations (GBO) have recently stepped up their well-established practice of employing super-low prices combined with limited product and service supply in a short transaction time span as a means of exerting pressure on consumers. The purpose of this research is to 1) identify and define three types of pressure that are triggered by online group-buying (OGB) promotions, 2) examine the effects of these three types of pressure on consumers' impulse buying behavior, and 3) investigate and produce knowledge about the mediating role of emotion in the relationship between pressure and impulse buying intention (IBI) of consumers. By integrating stimulus-organism-response (SOR) model and consumer impulse buying literature seen from the perspectives of marketing and enterprise information systems respectively, this research has identified three types of pressure (i.e., time pressure, quantity pressure, and price pressure) that influence the impulse buying behavior (IBB) of consumers regarding OGB. The research then examines the mediating role of emotion with reference to pleasure and arousal level. The results of a large-scale online survey combined with an analysis of a structural equation model demonstrate that the above-mentioned three types of pressure have different effects on IBI of consumers. Moreover, the research finds that this is achieved through different mediating mechanisms. Based on the results of the analysis, the authors have made some suggestions that marketers can utilize in developing effective OGB strategies. This research also provides the basis for enterprise information systems (EIS) to develop technologies that will allow organizations to better serve the needs of their OGB customers.

KEYWORDS

China, GBO, IBI, Market, Mediation, Role, OGB, Pressure, SOR

1. INTRODUCTION

Online group buying (OGB) has witnessed rapid growth since Groupon first introduced it to the global marketplace in 2008 as a business model where consumers join together as a group via the internet to seek lower prices on goods and services. For example, China's largest group buying company,

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Pinduoduo, announced its gross merchandise volume (GMV) of 2,441 billion RMB in 2021 which represented an increase of 46% on the year before. And the GMV of its overseas subsidiary TEMU in Q1 2023 rapidly exceeded 1 billion RMB after opening for business in 2022. Pinduoduo's success has been attributed to its effective use of promotional tactics which include special offers at incredibly low prices with limited supply quantity in a short time span. According to Wu et al (2020) these incentives have largely been very successful in inducing consumers' pressure and urge leading to a favorable respond to group buying initiatives.

Previous studies saw OGB as a rational purchase behavior in which consumers joined together as a group with the specific purpose of securing volume discount for a product at the lowest price (Chen et al, 2002) while, at the same time, maximizing its utility (Jing & Xie, 2010). Moreover, displaying real-time, updated information with respect to the cumulative number of deals sold to other consumers contributed to lowering the uncertainty level regarding the product which, in turn, contributed to enhancing its awareness in the marketplace (Li and Wu, 2018) and signaled the value of the deal (Luo et al., 2014).

Current pressure-inducing tools in OGB have, however, the potential to lead to impulse buying intention (IBI) and the emotional aspect of OGB has not yet been well researched. A good number of studies in marketing and enterprise information systems have distinguished two information processing modes for consumers - i.e., analytical mode and emotional mode. By analytical mode, consumers focus on the costs and benefits and use more piecemeal assessments (Matias, J. B, 2021); whereas by emotional mode, consumers focus more on pleasure and arousal levels and use more holistic assessments (Epstein 1994; Kahneman & Frederick, 2002; Lee et al., 2015; Weng-Lung Shaiu, Puxi Shi, Ye Yuan, 2021). For example, according to the classical theory of reasoned action (TRA) proposed by Fishbein & Ajzen (1975), individuals form their behavioral intentions based on cognitive appraisal of the beliefs and weights of object attributes (Wen-Lung Shiau et al 2021). By contrast, the Classical Stimulus-Organism-Response (SOR) model describes individuals' perceptions of environments as a stimulus-response process by the mediation of pleasure and arousal emotions (Mehrabian & Russell, 1974; Chen Peng & Yeong Gug Kim, 2014; Kaur, S. et al, 2017; Kühn, S.W. & Petzer, D.J., 2018; Malafe, N.S.A., et al, 2023). Individuals experience disharmony when the stimuli exhibit different degrees of order and variation and consequently feel "unpleasant/pleasant", "dull/alert" (Bakker et al., 2014). The SOR model postulates that stimuli of the environment trigger emotional states and subsequently bring about behavioral responses. Two dimensions of emotion are at the center of the model, identified as: pleasure and arousal. Pleasure refers to the degree to which consumers feel "good", "joyful", "happy", "satisfied" and so on; whereas arousal refers to the degree to which consumers feel "excited", "stimulated", "alert", or "active". These two dimensions of emotional states will result in irrational approach and avoidance behavior such as, for example, impulsive buying.

Research into customer relationship management, consumer loyalty, and online buyer behavior (including impulse purchasing) and related motivational factors has been well documented in both marketing and enterprise information systems (EIS) literature (Svenson & Maule, 1993; Dhar & Nowlis, 1999; Tykocinski & Pittman, 2001; Pan, S.L., 2005; Shea, T. et al, 2006; Jain, V. et al, 2007; Kanungo, S. & Vikas Jain, 2012; Ree Ho & Doug Vogel, 2014; Mohammadhossein, N. et al, 2014; Elias, N. F., et al, 2015; Khodadadi, P. et al, 2016; Punyatoya, P. et al, 2018; King & Krishnan, 2019; Bilal, M. et al, 2020; Mosa, M. et al, 2020; Li Liu et al, 2020; Nhuong Bui et al, 2020; Weng-Lung Shiau et al, 2021; Matias, J.B.,2021; Salem, M. et al, 2022; Hwang, Y. et al, 2023).

Previous research has investigated the impact of different factors (e.g. marketing stimuli such as online merchandise attractiveness and promotion techniques, a person's impulsivity trait such as conscientiousness and action orientation, situational factors such as ease of use and communication style of a website, the influence of vendor cues (Kaur, S. et al, 2017), gender differences and education (Alam, M. S-A et al 2019), and emerging social factors such as goal commitment (Yujong Hwang et al, 2023), product recommendations and celebrities' posts, among others on IBI (Xu & Huang 2014;