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An Exploratory Analysis of the Relationships between Individual Personality Characteristics and the Perceptions of Virtual Merchandising

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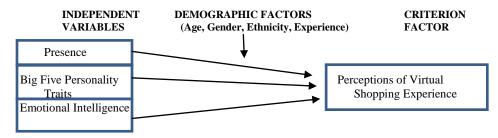
Virtual merchandising is the use of a simulated environment consisting of computergenerated images representing a realistic setting in which one would be emerged. The virtual presence would involve interaction with an environment visually merchandised with items using color, sounds, and lights along with other display techniques to attract and motivate the target consumer to make an online purchase.

Little empirical research exists to codify the relationships between individual personality characteristics and their experiences with the emergence of virtual shopping environments. This study will examine the influence that various psychological orientations have on an individual's perceptions of virtual merchandising.

The psychological factors consist of the following:

- 1. Individual perceptions of presence within the virtual shopping store. Presence definition is an individual's perception of the degree of realism, social richness and immersion that a person experiences within a virtual environment (Whitmer and Singer, 2010).
- 2. The Five-Factor Model of Personality traits consisting of openness, conscientiousness, extraversion, agreeableness, and neuroticism (Costas and McCrae, 1992). The study will investigate how each of these traits correlates with individual perceptions of the virtually merchandised store.
- 3. Emotional Intelligence: Emotional intelligence is defined as "The ability to perceive and express emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (Mayer, and Salovey, 1990). Emotional intelligence is comprised of four dimensions: self-awareness, emotional management, social skill and empathy. Shopping in a virtual environment is an emotional event. Subsequently, it is reasonable to investigate the extent to which the emotional intelligence of the shopper correlates with hers/his perceptions of the virtual shopping experience.

In addition to these psychological variables, we will examine the extent to which the demographic factors of age, gender, ethnicity and virtual shopping experiences moderate the correlations between the psychological variables and individuals' perceptions of their shopping experiences. The following is a model of the research investigation:



Page 1 of 2

Research Questions

- 1. What is the nature and strength of the relationship between an individual's perceptions of the level of presence in a virtual shopping environment and their virtual shopping experience?
- 2. What is the nature and strength of the relationship between each of the five dimensions of the big five personality traits and individuals perceptions of their virtual shopping experience?
- 3. What is the nature and strength of the relationship between each of the four dimensions of emotional intelligence and individuals perceptions of their virtual shopping experience?
- 4. To what extent do the demographic factors of age, gender, ethnicity, and virtual shopping experience moderate the above relationships?

Research Design

The design will consist of correlational research whereby individuals will be asked to navigate through a virtual merchandised store. The virtual store chosen for this study will be from a well-established online retailer. Upon completion, individuals will complete a questionnaire that will assess various aspects of their personality and their perceptions regarding the virtual merchandised experience as it compares to a traditional brick and mortar store.

Measurements

- 1. Individual perception of presence will be measured by 15 items taken from the Presence Scale developed by Whitmer and Singer (1990).
- 2. The Big Five Personality traits will be measured by 25 items selected from the personality inventory developed by Costa and McCrae (1992).
- 3. The Emotional Quotient Inventory (short form) developed by Reuven BarOn (2006) will be utilized to measure the emotional intelligence of the research participants.
- 4. Participants' perceptions of their virtual shopping experience will be compared to the traditional method of shopping.

Sample

Research subjects for this study will consist of 100 undergraduate and graduate students enrolled in the College of Technology at a large university in Southeastern Michigan.

Data Analysis

The research questions will be explored utilizing linear regression. Chronbach's alpha will be used to test the reliability of each of the scales used within the study.

References

- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). Psicothema, *18*, *supl.* 13-25.
- Costa, P.T., Jr. & McCrae, R.R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual. Odessa, FL: Psychological Assessment Resources.
- Mayer, J., & Salovey, P. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9, 185-211.
- Whitmer, B.G & Singer, M.J. (2010) Measuring presence in virtual environments: A presence questionnaire. U.S Army Research Institute for the Behavioral and Social Sciences.

Page 2 of 2