Second-Order Constructs in Structural Equations: Perceived Value and Trust

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ABSTRACT

Structural equations are extensively used in studies dealing with abstract variables. The authors can choose between first and higher-order constructs but some researchers omit to pursue a rigorous method. Therefore, it is important to know: when is the higher-order construct preferred to the first-order one? In this study, the authors have illustrated this procedure for perceived value and trust. They collected data with students, inviting them to navigate in a website and to fill-in a questionnaire. Results show the superiority of the second-order reflective model for perceived value and trust. The decision is taken relying on theoretical and empirical justifications. The authors have also proven the predictive ability of their variables by confirming their positive relationship with commitment. The latter predicts behavioral intentions. Second-order reflective constructs invite managers to pay attention to all the first-order factors because a negative perception of one of the factors contributes to the deterioration of the second-order construct.

Keywords: Commitment, Perceived Value, Second-Order Construct, Structural Equations, Trust

INTRODUCTION

Even though multidimensional constructs are proven useful in the conception of abstract variables, their complexity is a handicap for their adoption (Edwards, 2001; Leroi-Werelds & Streukens, 2011). Therefore, higher-order hierarchies may simplify the understandability of these constructs and their integration in conceptual models. Roy and Shekhar (2010, p. 56) define a higher-order factor model as “consisting of one, or more than one, higher order factors modeled as causally impacting a number of first-order factors.” Second-order constructs are employed by many researchers (Chang & Chen, 2008; Chi & Kilduff, 2011; Lankton & McKnight, 2011; Roy & Shekhar, 2010; Serva et al., 2005). The use of second-order constructs in structural equation modeling is a decision to be taken on the basis of theoretical and empirical justifications.

To illustrate this procedure, we have chosen two constructs largely studied in marketing. These are perceived value and trust. They are studied in an e-commerce context. Perceived value is conceived according to Holbrook (1999, p. 5) as: “an interactive relativistic preference experience.” And we adopt McKnight and Chervany’s (1996, p. 33) definition of trusting beliefs as: “the extent to which one believes (and feels confident in believing) that the
other person is trustworthy in the situation.” After examining psychometric properties of our variables and running confirmatory factor analyses, we compare nested first and second-order models to determine which one is superior. Finally, we assess the predictive ability of these constructs by integrating them in a structural model aiming to explain commitment which predicts behavioral intentions.

**PERCEIVED VALUE**

Perceived value is chosen because of its importance in marketing and the magnitude of the debate regarding its dimensionality. The conception of perceived value according to the PxOxS paradigm considers that the experience of consumption is an interaction between a ‘Person,’ an ‘Object,’ and a ‘Situation’ or a context of consumption. This is in concordance with the experiential approach. In this vein, Holbrook (1999, p. 5) defines perceived value as: “an interactive relativistic preference experience.” Hirschman and Holbrook (1982) have promoted the multidimensional view of perceived value coupling the utilitarian and hedonic dimensions. Holbrook (1999) has proposed a typology of consumer value by considering three axes: extrinsic vs. intrinsic, active vs. reactive and self-oriented vs. other oriented. This is the conception to be adopted in this research. But it was not subject of many operationalizations. The work of Mathwick et al. (2001) is considered as the first step in the development of a measurement scale. However, this scale considers only the first two axes of Holbrook’s typology (extrinsic vs. intrinsic and active vs. reactive). In spite of the importance of the social dimension in shopping, we accept in the context of this study to restrict the dimensions of perceived value to self-oriented ones.

**TRUST**

The second concept studied is trust. Trust has soon existed in the history of human beings; theories multiplied in various disciplines and conceptions differed across researchers. Here, we adopt McKnight and Chervany’s (1996, p. 33) definition of trusting beliefs: “the extent to which one believes (and feels confident in believing) that the other person is trustworthy in the situation.” Our focus is on the perspective that considers trust as tri-dimensional composed of three facets: ability, integrity and benevolence. These are the most agreed upon dimensions (Chen & Dhillon, 2003). Ability is defined as “group of skills, competencies and characteristics that enable a party to have influence within some specific domain” (Mayer et al., 1995, p. 717). Benevolence means “a trustee is believed to do good to the trustor aside from an egocentric profit motive” (Mayer et al., 1995, p. 718) or “the extent to which the trusting party believes that the trusted party wants to do good things rather than just maximize profit” (Lee & Turba, 2001, p. 78). Integrity refers to “the trustor perception that the trustee adheres to a set of principles that the trustor finds acceptable” (Mayer et al., 1995, p. 719) or to the fact of acting “in a consistent, reliable and honest manner” (Chen & Dhillon, 2003, p. 305). To measure trust, we use the scale developed by McKnight et al. (2002) which has proven its internal consistency, convergent and discriminant validity.

**DATA COLLECTION**

Measurement scales are conceived or tested in an e-commerce context. Therefore, in this study we collect data related to a commercial website. The website chosen is http://www.somewhere.fr. It is chosen because it is in French, a language easily understood by our participants. Moreover, it allows as testing the hedonic as well as the utilitarian facets of perceived value. To ensure internal validity, a filter question is included in the beginning of the questionnaire: “do you know the somewhere.fr website?” Only participants that do not have past experiences with the website are accepted. Our sample is composed of students. It is claimed that the use of student samples may
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www.igi-global.com/chapter/self-driving-cars/90397?camid=4v1a