

The Importance of Considering Actualized Behaviors and Intentions of Small- and Medium-sized businesses.

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Abstract This presentation introduces the importance of considering behavioral intentions as well as actualized behaviors. The nature of natural disasters is such that there is typically not a pre-event snapshot of a given agent's behavioral intentions around mitigation and adaptation that in turn inform their resilience capacity towards a given disaster event that is comparable to data on interruption and recovery post-event. The Theory of Planned Behavior (TPB) (Ajzen, 1991) offers additional considerations that mediate across intended versus actualized behaviors. The TPB can be directly applied in the domain of business resilience planning – where a category of mitigation and adaptation behaviors are considered.

Keywords: business resilience, planning, mitigation, adaptation, planned behavior

1 Extended Abstract

In much of the resilience planning discourse, especially related to supply chains, the difference between intended and actualized behaviors towards mitigation and adaptation is not recognized nor studied—on both the individual firm and sectoral levels. The nature of natural disasters is such that there is typically not a pre-event snapshot of a given agent's behavioral intentions around mitigation and adaptation that in turn inform their resilience capacity towards a given disaster event that is comparable to data on interruption and recovery post-event. Furthermore, past research indicates that people do not always engage in disaster preparedness or mitigation – even when they have sufficient resources, preparedness training, or a history of disaster exposure (National Research Council, 2006; Kunreuther, Meyer, & Michel-Kerjan, 2013). A significant contributor to taking on supply chain disaster preparedness tends to be individual and institutional risk perceptions, however. The Theory of Planned Behavior (TPB) (Ajzen, 1991) offers additional considerations that mediate across intended versus actualized behaviors. The TPB can be directly applied in the domain of business resilience planning – where a category of mitigation and adaptation behaviors are considered. The authors review the very few papers to date that consider the TPB in disaster risk reduction (Dallenbach et al., 2018; Najafi et al., 2017).

A theoretical model for application of the TPB to resilience planning is introduced that discusses the importance of attitude, subjective norms, and perceived behavioral control in the prediction of intention for resilience planning, and the relative importance of intention and perceived behavioral control in the prediction of behavior. A series of best practice data collection questions are introduced that relate to businesses' willingness to mitigate.

The importance of this paper is that it is contextualized within a supply chain framework; it accounts for the need to plan ahead and recognizes recovery trajectory impacts after the occurrence of a disaster. Unlike individual behavior, empirical evidence says that private firms that have been exposed to previous disasters are more likely to be prepared for future disasters (Drabek, 1994; Dahlhamer and

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D'Souza, 1997); such an experience may lead business owners to reconsider the importance of developing business recovery or mitigation plans (Dahlhamer and Tierney, 1998). This has led in some cases to modeling the actual behavior of businesses towards mitigation in terms of their previous disaster experiences and estimating a relationship with their recovery. This connection has been found to be statistically non-significant (see e.g., Dahlhamer and Tierney, 1998; Webb, Tierney, and Dahlhamer, 2002). Additionally, it is unclear if preparing for the type of event that has occurred previously (e.g., natural hazard) translates to adequate/improved preparation for a future disaster of a different type (e.g., pandemic). This might occur because a variable representing intended behavior and not only actual behavior may be a better indicator of the firm's capabilities and constraints to engage in disaster preparedness or mitigation.

Some supply chain literature incorporates risk awareness as one of the primary capabilities for developing resilience (Christopher and Peck, 2004; Scholten et al., 2014). However, our research suggests that it is not only awareness, but also intentions arising from attitudes, subjective norms, perceived behavioral control, and actualized behavior (i.e., why or why not actual behavior is in concert with intention) that determines truly preparedness and in turn, the recovery of a business in the aftermath of a disaster.

The importance of this paper is that it is contextualized within a supply chain framework; it accounts for the need to plan ahead and recognizes recovery trajectory impacts after the individual's motivation to comply with the different referents or groups determine the prevailing subjective norm regarding disaster preparedness. Finally, perceived behavioral control is assumed to be determined by the perceived presence of factors that can facilitate or impede performance of a behavior (control beliefs, CB). It is assumed that the perceived power of each control factor to impede or facilitate preparing the business for disasters contributes to perceived control of this behavior in direct proportion to the person's subjective probability that the control factor is present (Davis et al., 2002).

2 Proposed Model

In combination, attitude toward the behavior (ATB), subjective norm (SN), and perception of behavioral control (PBC) lead to the formation of a behavioral intention. In the particular case of disaster preparedness, the more favorable the attitude and subjective norm with respect to preparing the business for disasters, and the greater the perceived behavioral control, the stronger an individual's intention to perform the behavior in question should be (i.e., preparing the business for disasters). The relative importance of ATB, SN, and PBC in the prediction of intention is expected to vary across individual decision makers.

These three major factors, however, are themselves predicted by corresponding sets of behavior-related beliefs consistent with an expectancy-value model approach (Fishbein, 1963, 1967; Fishbein & Ajzen, 1975). Attitude toward preparing the business for disasters is assumed to be determined by beliefs about the consequences of preparing the business for disasters (behavioral beliefs, BB), with each belief weighted by the subjective value of the outcome in question. Subjective norms that exert pressure on the individual to prepare or not to prepare the business for disasters is assumed to be determined by the perceived behavioral expectations of important referent individuals or groups influencing individual's decision such as family, friends, suppliers, customers and regulators (normative beliefs, NB). These beliefs in combination with the individual's motivation to comply with the different referents or groups determine the prevailing subjective norm regarding disaster preparedness.

Perceived behavioral control is assumed to be determined by the perceived presence of factors that can facilitate or impede performance of a behavior (control beliefs, CB). It is assumed that the perceived power of each control factor to impede or facilitate preparing the business for disasters contributes to perceived control of this behavior in direct proportion to the person's subjective probability

that the control factor is present (Davis et al., 2002). Finally, intention is assumed to be the immediate antecedent of disaster preparedness behavior. However, as it may be the case that difficulties or barriers emerge in implementing mitigation strategies or in building resilience capacity, which limit the possibility of a business to act. This is also considered an influence of PBC, on to intention. The basic schematic representation of the theory is shown in Figure 1, below.

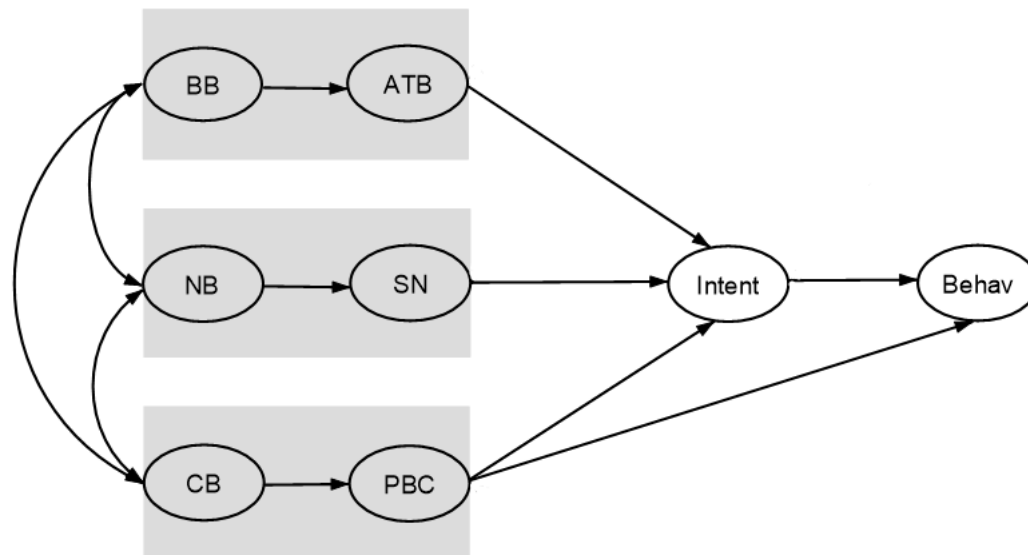


Fig. 1 Path analysis for the Theory of Planned Behavior.

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