

The Moderating Role of Perceived Behavioral Control: The Literature Criticism and Methodological Considerations

Promotosh Barua

Umeå School of Business and Economics
Samhällsvetarhuset, Biblioteksgränd 6
SE-901 87 Umeå
Sweden

Abstract

This paper aims to understand conceptual and methodological ambiguities of perceived behavioral control (PBC). Theory of Planned Behavior has been much debated and criticized recently. PBC, the independent construct theory of planned behavior (TPB), is added to understand nonvolitional elements. However, role of PBC has been criticized due to the moderation effects of PBC and other variables. This discussion focuses the literature criticism on the moderating role of PBC and its methodological considerations for future research.

Keywords: moderation, perceived behavioral control, theory of planned behavior

1. Introduction

1.1 Background of the study

Theory of Planned Behavior (TPB) is the widely endorsed model to understand behavior in applied social psychology. It is one of the most influential and cited models for the predictions of human behavior (Ajzen, 2011, p. 1113). Since its introduction 26 years ago, the theory is widely used to understand behavior-specific cognitive determinants (Ajzen, 1991, 2005). Despite its much popularity, TPB has been much debated and criticized recently. Some researchers reveal that the theory does not explain human behavior adequately (Ajzen, 2011, p. 1113). For example, the study of Wegner & Wheatley (1999, p. 408) shows that consciousness is not responsible for the cause of the act. Conscious will is a function of priority, consistency and exclusivity of human thought process in experience. Their investigation shows that people are forced to perform the action even though they intentionally believe that they cause the action.

The central idea of TPB is to determine behavior from behavioral intentions, which are functions of independent TPB constructs *attitude*, *subjective norm*, and *perceived behavioral control*. The theory helps to understand many problems faced by modern societies such as sexual assaults, hate crimes, overconsumption, traffic congestion, and urban poverty (Oskamp, 1998). TPB is the improved version of theory of reasoned action which includes perceived behavioral control (PBC). PBC deals with situations when people may lack complete volitional control over the behavior of interest (Ajzen, 2002, p. 666).

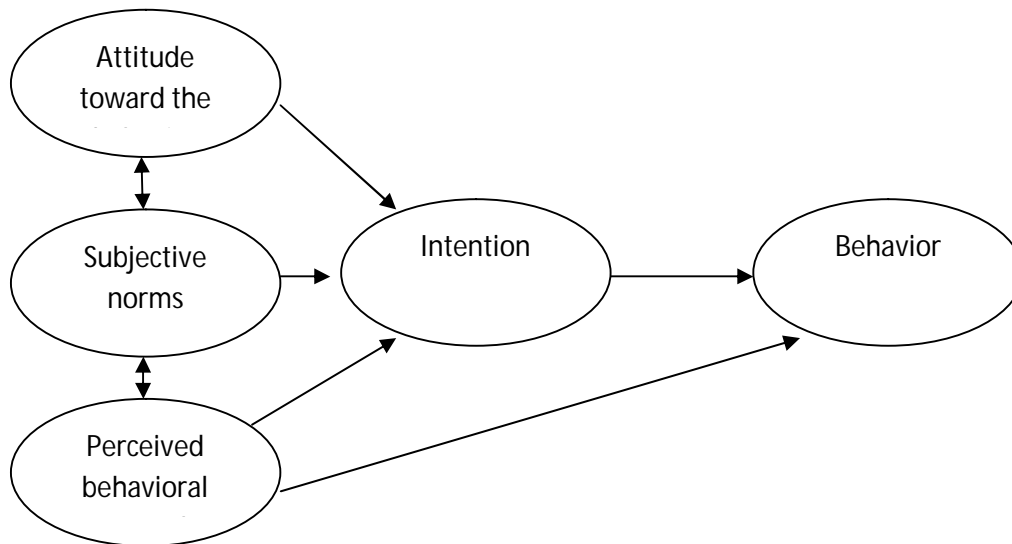
The first TPB construct is the *attitude toward the behavior* deals with an individual's favorable and unfavorable evaluations of the behavior. *Subjective norm* is the second construct of TPB referring the perceived social pressure from the society. The third construct *The perceived behavioral control* is the perceived ease or difficult of performing a behavior under different situations when the behavior may go beyond one's controllable aspects of predicting behavior directly or through intention (Ajzen, 1991, p. 186) According to Ajzen (1991, p. 183), the behavioral achievement depends on the availability of resources and opportunities. PBC has impact on intentions and actions as it deals with an individual's perception of the ease or difficult of performing the behavior. However, the actual role of PBC varies according to the situational factors.

2. Literature criticism: the moderation of perceived behavioral control

In his work (Ajzen, 1991, 1985) the introduction of perceived behavioral control has been considered as a key component of TPB. The concept of PBC is to accommodate in TPB for understanding the nonvolitional elements. A high level of PBC should intensify an individual's intention to perform the behavior, and the low level PBC ought to be less motivated to perform the behavior.

PBC is useful in assessing an individual’s actual control for a specific situation. It is likely to affect intentions and change behavior indirectly. Therefore, it is considered to be an additional predictor of behavior (Ajzen, 2002, p. 667).

Figure 1: Theory of Planned Behavior (Ajzen, 1991)



The behavioral achievement of PBC depends upon confidence and accuracy of perceptions. For example, if an individual perceive low accuracy of perception, PBC may not be realistic with respect to little information (Ajzen, 1991, p. 185). Studies reveal that TPB behavior depends on the nature, formulation and adequacy of the PBC construct as it has been conceptualized and operationalized in a variety of ways (Ajzen & Madden, 1986; Beale & Manstead, 1991; McCaul, Sandgren, O’Neill, & Hinsz, 1993; Wankel & Mummery, 1993). Eagly & Chaiken (1993) examine that TPB constructs demand further scrutiny. They mention that people have strong or weak perceptions of behavioral control as they are more or less prone to perform the behavior. As a result, PBC is likely to moderate the effects of attitudes on behavior.

In his work Ajzen (1991) proposed that PBC may have direct effects on behavior. However, Yzer (2012, p. 103) argues that the empirical support against the moderation effects of PBC on behavior is not strong enough to justify that PBC is likely to affect the behavior directly. An individual’s actual control over his or her environment does not entail that the performance will occur in a specific situation. An individual cannot perform the behavior if he or she does not have the required skills to perform the behavior. Situational factors are likely to obstacle to enhancing the behavioral performance (Yzer, 2012).

Ajzen's (1991) study explores that perceived behavioral control improves intention in relation to positive attitudes and subjective norms. However, Eagly & Chaiken (1993) argue that PBC produces positive intention when an individual forms a positive attitude, but not when an individual form a negative attitude. For example, shouting in a library most people perceive PBC under control, but this does not mean that people produce positive attitudes about not shouting. Their investigation shows that people will not perform the behavior if they are confident to do so. Therefore, there is a possibility that PBC moderate attitudes and normative effects of intention. The study made by Umeh & Patel (2004) consists the results of moderation effects of subjective norms as to PBC is under high or low intensity to control the performance of the behavior. Another study made by Cheung, Chan, & Wong (1999, p. 589) shows that PBC moderates control beliefs to promote or hinder the performance of the behavior.

3. Methodological considerations

Few studies have been published on the moderation effects of PBC (Castanier, Deroche, & Woodman, 2013; Conner & McMillan, 1999; McMillan & Conner, 2003; Umeh & Patel, 2004), and the empirical support against PBC moderates attitudes and subjective norm is not strong enough to indentify the interaction effects on PBC thoroughly. The demonstration of PBC interaction is complicated due to the methodological difficulties in detecting interactions. However, it does mean that the hypothesis is flawed. The hypothesis is lack of empirical support for the moderation effects of perceived behavioral control (Yzer 2007, 2012).

The theoretical arguments for the moderation of perceived behavioral control is still intact due to inadequate power of detecting interaction effects of PBC. In his study Maxwell (2003) reveals that researchers should not overlook the small effect on the population as PBC is under high or low intensity in relation to positive attitudes. For example, Yzer (2007) mentions that condom use intention is at greater risk of HIV infection as people form positive attitudes for the condom use, but they have low perceived behavioral control in reality. The small effects of intention of condom use are critically important to perceive the greater risk of HIV infection. Thus, the future study expects a search for moderator variables, which can explain the variation of PBC and other variables.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50, 179–211.
- Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. *Psychology & Health*, 26(9), 1113–1127.
- Ajzen, Icek. (1985). *From intentions to actions: A theory of planned behavior*. Springer.
- Ajzen, Icek. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior1. *Journal of Applied Social Psychology*, 32(4), 665–683. doi:10.1111/j.1559-1816.2002.tb00236.x
- Ajzen, Icek. (2005). *Attitudes, Personality and Behavior 2e*. McGraw-Hill International.
- Ajzen, Icek, & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of experimental social psychology*, 22(5), 453–474.
- Beale, D. A., & Manstead, A. S. (1991). Predicting Mothers' Intentions to Limit Frequency of Infants' Sugar Intake: Testing the Theory of Planned Behavior1. *Journal of Applied Social Psychology*, 21(5), 409–431.
- Castanier, C., Deroche, T., & Woodman, T. (2013). Theory of planned behaviour and road violations: The moderating influence of perceived behavioural control. *Transportation Research: Part F*, 18, 148–158. doi:10.1016/j.trf.2012.12.014
- Cheung, S. F., Chan, D. K.-S., & Wong, Z. S.-Y. (1999). Reexamining the theory of planned behavior in understanding wastepaper recycling. *Environment and behavior*, 31(5), 587–612.
- Conner, M., & McMillan, B. (1999). Interaction effects in the theory of planned behaviour: Studying cannabis use. *British Journal of Social Psychology*, 38(2), 195–222.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, Tex.: Harcourt.
- Maxwell, S. E. (2003). The persistence of underpowered studies in psychological research: Causes, consequences, and remedies. *Psychological methods*, 9(2), 147–163.
- McCaul, K. D., Sandgren, A. K., O'Neill, H. K., & Hinsz, V. B. (1993). The value of the theory of planned behavior, perceived control, and self-efficacy expectations for predicting health-protective behaviors. *Basic and Applied Social Psychology*, 14(2), 231–252.
- McMillan, B., & Conner, M. (2003). Applying an Extended Version of the Theory of Planned Behavior to Illicit Drug Use Among Students1. *Journal of Applied Social Psychology*, 33(8), 1662–1683.
- Oskamp, S. (1998). *Applied social psychology / Stuart Oskamp, P. Wesley Schultz* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Umeh, K., & Patel, R. (2004). Theory of planned behaviour and ecstasy use: An analysis of moderator-interactions. *British journal of health psychology*, 9(1), 25–38.
- Wankel, L. M., & Mummery, W. K. (1993). Using national survey data incorporating the theory of planned behavior: Implications for social marketing strategies in physical activity. *Journal of Applied Sport Psychology*, 5(2), 158–177.
- Wegner, D. M., & Wheatley, T. (1999). Apparent mental causation: Sources of the experience of will. *American Psychologist*, 54(7), 480.
- Yzer, M. (2007). Does perceived control moderate attitudinal and normative effects on intention? A review of conceptual and methodological issues. *Prediction and change of health behavior: Applying the reasoned action approach*, 107–23.
- Yzer, M. (2012). Perceived Behavioral Control in Reasoned Action Theory A Dual-Aspect Interpretation. *The ANNALS of the American Academy of Political and Social Science*, 640(1), 101–117.