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## Mental Construal Priming as a Facilitator of Leisure Travel among People with Mobility Challenges

### Introduction

In order to encourage people with disabilities (PwMCs) to enjoy the significant travel benefits, tourism scholars, businesses, and policy makers have been dedicated to improving service settings for this potential tourist segment, in hopes of reducing the environmental travel barriers and consequently enhance their travel intention (Bi, Card, and Cole 2007, Israeli 2002). There have been nevertheless limited studies investigating psychological factors that determine their travel intention (Jeng and Fesenmaier 2002). Specifically, it has been well established in theory that the relationship between external environmental barriers and travel intention should indeed be conditioned by individual cognition of self and travel barriers (Lee, Agarwal, and Kim 2012). Therefore, Yau et al. (2004) indicated that travel for PwMCs is far more than just removing physical barriers, but also psychological issues need to be settled at the initial travel stage, e.g., establishing strong personal initiatives that overcome fears of travel risks. It is crucial to ensure that PwMCs are strongly motivated toward travel to accept risks and devote efforts to travel. Mental Construal Priming as a psychological intervention is thereby proposed in this study as a potentially effective approach to facilitate leisure travel intention among this population, through self-determined travel motivations. This study explores the mechanisms and effectiveness of this intervention approach in motivating PwMCs to travel.

### Conceptual Contribution

According to Self-Determination Theory (SDT), people behave out of their intrinsic interest and aspiration from life goals (Self-determined Motivations) are more successful at pursuing goal-accordance behaviors despite difficulties (Ryan and Deci 2000). Leisure travel participation by PwMCs is symbolized as a means of achieving self-actualization, a primary life goal for this population, therefore should be fostered regardless of difficulties if PwMCs are induced to travel out of intrinsic interest and ambition for achieving long-term goals. Such self-determined motivations can be enhanced with increased sense of autonomy and competence from taking a trip (Deci and Ryan 1980). *Autonomy* suggests that people pursue certain behaviors out of their interest and a sense of personal value (Ryan, Kuhl, and Deci, 1997). *Competence* refers to the perceived self-strength to negotiate the constraints and achieve the pursued goals (Deci and Ryan, 1980). This study bridges the SDT theory with another theory, Construal Level Theory (CLT), and proposes that the psychological intervention based on CLT could be an effective approach to interact with people's perceived autonomy and competence from taking a trip and enhance their self-determined travel motivations and intention.

Construal Level Theory (CLT), depicts how mental construals as cognitive representations of the world with different abstraction levels could result in an individual's asymmetric attention to goal-related and means-related features of an event (Trope and Liberman 2003). Abstract construals are usually mental representations that capture the abstract purpose of an event (i.e., to what degree a trip helps achieve individual life goals such as happiness and self-independence), whereas concrete construals represent the concrete approaches to achieving the event (i.e., to what degree the travel services are in place to make the trip accessible and convenient). Premised on the above rationale of CLT, this study proposes and tests that both the abstract and concrete mental construal, and particularly the abstract construal could enhance self-determined travel motivation among PwMCs through the following approaches. First of all, ***the abstract construal should directly enhance the perceived autonomy from taking a trip.*** Freitas et al. (2004) found that after inducing participants to think abstractly, people would identify the current event and a subsequent event as relevant with life goals. The perceived autonomy would be enhanced once such links are built between a trip purchase and

individual goals (Fujita and Carnevale 2012); secondly, *the abstract construal should enhance perceived competence*. Given that abstract construal is capable of inducing a sense of distance from a decision task, which then could further reduce the subjective sense of difficulty about the task (Thomas and Tsai 2012), and thus enhances the perceived competence to overcome the difficulties; lastly, *both the abstract and concrete construal should moderate the effects of perceived autonomy and competence*. CLT has demonstrated that with an abstract construal, people will more likely allocate emphases to desirability features (i.e., values fulfilled) of the decision task than its feasibility features (i.e., means to achieve the task), whereas the concrete construal would do the contrary (Trope and Liberman 2010). In the setting of travel for PwMCs, an abstract construal should lead to a dominant influence of perceived autonomy (value-oriented) over perceived competence (means-oriented) on PwMCs' travel motivations. The concrete construal, however, would lead to the dominant effect of the perceived competence.

### Methods

The study adopted a pre-test/post-test abstract vs. concrete construal priming two-group experimental design (Field and Hole 2003). The experiment was implemented among 80 wheelchair users through two Qualtrics surveys. The data produced from the pretest and posttest surveys both first introduce a faked travel package with a lack of accessibility yet full with activities to enhance individual wellness and strengths. After reading the package description they rated scales of perceived autonomy and competence from taking this trip (Sheldon and Filak 2008) and self-determined travel motivations for the trip (including external, introjected, identified, and intrinsic motivations, ranging by the extent of intrinsic stimulation of demands) (Gagne 2003). Then they evaluated the package and answered questions about their travel propensity about this trip (including measure of trip preference, purchase willingness, effort investment into planning the trip). The control variables were measured such as previous travel experiences (frequency, destination preference, and how often travel with company), level of functional abilities (SF-6D form), length of impairment period, and socio-demographic information. The posttest survey was sent to the respondents two weeks after their completion of the pretest surveys. Respondents who answered the pretest surveys were randomly assigned to either the abstract construal priming group or the concrete group. The pre- and post-surveys are the same except that at the beginning of the posttest surveys there are the construal priming program, in which participants were asked to finish a rumination exercise about how an ordinary event irrelevant to travel (i.e., doing housework) can be related to their ultimate life goals after steps of thinking (abstract priming sub-group) or about the steps taken to achieve that event (concrete priming sub-group), depending on the random group assignments (details in Freitas et al. 2004). ANCOVA, paired-samples t-test, and multiple hierarchical regression analyses were then adopted to examine the direct and indirect facilitating effects of priming programs.

### Key Findings

The effectiveness of construal manipulation was checked with the coding of each respondent's after-priming construal, based on the abstractness of the respondent's free answers to the manipulation exercise and its consistence with the assigned priming group. A total number of 56 respondents showed the success of manipulation. In order to explore whether the abstract/concrete construal manipulation directly influences the perceived autonomy/competence, paired-samples t-tests have been conducted within each priming group, respectively. The only direct effects were found among the concrete group, within which both the perceived autonomy (M diff. = -.64,  $t(28) = -3.06$ ,  $p < .01$ ) and perceived competence (M diff. = -.53,  $t(28) = -2.26$ ,  $p < .05$ ) were significantly reduced after priming. As the concrete construal reduces the perceived autonomy and competence, the assumed direct effects from abstract construal were not found.

ANCOVA tests were further conducted to compare the effects of abstract vs. concrete

priming in facilitating the perceived autonomy/competence, self-determined travel motivations, and travel intention. Covariates were controlled to reduce error variances, including the DV measures before the priming manipulation, previous travel experiences and preferences, individual evaluation of the trip features, length of impairment period, and travel planning efforts after the pre-survey. The results showed no statistically significant differences in perceived autonomy/competence satisfaction and travel motivations between the two priming groups. Therefore, the assumption of construal priming enhances travel intention through perceived autonomy/competence and self-determined motivations failed to be verified with the current sample. However, the results revealed a significant difference in *the travel intention* between the two priming groups, with covariates controlled ( $F(1, 55) = 4.314, p < .05, R^2 = .52$ ). As expected, the abstract construal priming enhances the trip intention ( $M = 4.22$ ) more than the concrete construal priming could ( $M = 3.86$ ). Also, *the effort investment in planning the trip* also varied significantly between the two priming groups with covariates controlled ( $F(1, 35) = 4.568, p = .041, R^2 = .74$ ). However, the concrete construal priming nevertheless enhances trip-planning efforts ( $M = 4.25$ ) more than the abstract construal priming does ( $M = 4$ ), maybe because people were brought down to the earth by the concrete construal and thereby more tend to make real moves than the abstract construal group to overcome difficulties. This is informative as it shows the unique hidden benefits of concrete construal in encouraging barrier negotiation behaviors.

To test the hypotheses that the construal priming moderates the relationship between perceived autonomy/competence satisfaction and travel motivations, hierarchical multiple regressions were conducted. In accordance with the assumption, the abstract construal priming was found as enhancing the facilitation of *intrinsic travel motivation* by *perceived autonomy* ( $b = .23, t(50) = 2.119, p = .039$ ), given the statistical significance of the overall model ( $R^2 = .435, F(5, 50) = 7.708, p < .001$ ) and the statistically significant interaction term between abstract construal priming and perceived autonomy ( $b = .38, t(50) = 1.909, p = .062$ ). On the other hand, the concrete construal priming was found as enhancing the facilitation of *external travel motivation* by *perceived competence* ( $R^2 = .496, F(5, 50) = .9.835, p < .001$ ), with the statistically significant interaction term between the concrete construal priming and perceived competence ( $b = .70, t(50) = 3.044, p = .004$ ). This result also echoes the prior assumption that the concrete priming enhances the effects of perceived competence on travel motivations.

### **Implications and Practical Applications**

The current study revealed that the abstract construal priming directly facilitates travel intention whereas the concrete construal priming directly enhances the travel planning efforts. It also confirmed an indirect travel facilitating effects from both abstract and concrete construal priming, through moderating the relationships between perceived autonomy/competence and self-determined travel motivations. With the effectiveness of the priming programs confirmed, this study introduces an easily applicable approach to enhance travel intention for PwMCs, maybe through a plug-in for web browser that can be activated when PwMCs search travel products to encourage their travel decision-making subconsciously. A simpler form is adding its procedure to repeated ads, which also subconsciously change PwMCs' mental construal and further affect their purchase intention. A future study with larger sample size will be conducted to receive greater power and potentially more useful results of statistical significances.

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