

# Perceived Control as a Moderator of Stress Reactivity and Well-Being

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## BACKGROUND

- Individual differences and variations in feelings of mastery and constraint influence reactivity to stress. Mastery relates to feeling in control of the events in one's life, while constraint refers to feeling that other, external forces have a strong influence over one's situations.
- Recent studies have reported the following:
  - High mastery buffered negative effects of reactivity to stressors, while high constraint lead to greater reactivity in response to interpersonal, network and work-related stressors (Neupert, et al., 2007).
  - Individuals that believe events are out of their control experience greater levels of stress, which contributes to an increased prevalence of illness in these individuals (Roddenberry, & Renk, 2010).
  - Individuals with higher mastery and lower constraints had higher life-satisfaction, greater perceived health, and lower depression (Lachman, & Weaver, 1998).

### Objectives

Evaluate how reactivity to stressors is moderated by daily variation in mastery and constraint, as well as how these measures influence well-being.

## METHOD

- Participants completed an online survey at the end of each day, for 7 days. They reported any stressors that they had encountered, indicating how stressful they appraised each to be, in addition to completing other measures of well-being.
- Below are some questions that participants were asked to respond to on a Likert scale:
  - "Today, I felt helpless when attempting to deal with any problems that arose," (1-7)
  - "Today, I felt I could do just about anything I really set my mind to," (1-7)
  - "Did you have an argument or disagreement with anyone? (If yes) how stressful was this experience for you?" (1-4)
- A series of multi-level modeling analyses were conducted in Mplus to evaluate between-person and within-person effects of mastery, constraint, and stress on well-being.

## RESULTS

**Table 1. Within-person and between-person effects of constraint, mastery, and stress on well-being.**

	Positive Affect		Negative Affect		Psychological Well-being	
	WP	BP	WP	BP	WP	BP
<b>Constraint</b>	-0.146***	-0.272**	0.225***	0.254***	-0.285***	-0.491***
<b>Mastery</b>	0.319***	0.585***	-0.119***	-0.073	0.663***	0.848***
<b>Total # of Stressors</b>	-0.089*	-0.248	0.111***	0.202*	-0.191**	-0.257
<b>Average Stress Severity</b>	-0.085	0.026	0.284***	0.311***	-0.272*	-0.269

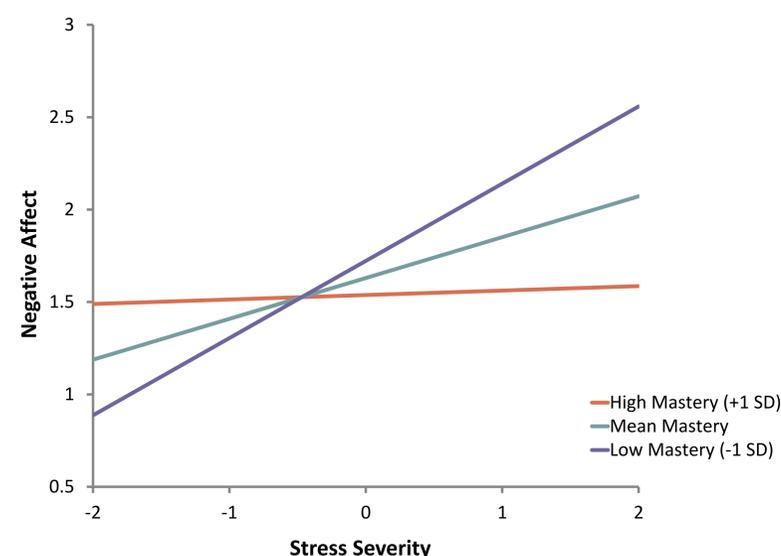
Note. WP=within-person, BP=between-person. \*p < 0.05, \*\* p < 0.01, \*\*\*p < 0.001

**Table 2. Within-person and between-person effects of constraint and mastery on stress.**

	Total # of Stressors		Average Stress Severity	
	WP	BP	WP	BP
<b>Constraint</b>	0.262***	0.110	0.243***	0.157*
<b>Mastery</b>	-0.194**	-0.073	-0.150*	-0.040

Note. WP=within-person, BP=between-person. \*p < 0.05, \*\* p < 0.01, \*\*\*p < 0.001

**Figure 1. Significant interactions between feelings of mastery and perceived stress severity on negative affect.**



## DISCUSSION

### Mastery, Constraint, Stress and Well-being

- Daily variations among mastery, constraint, number of stressors reported, and the severity of stress encountered produced significant variations among measures of well-being (Table 1).
  - PA increased and NA decreased significantly on days when individuals felt greater mastery compared to their daily average (**WP effect**). Individuals feeling more mastery than others on average experienced significantly more PA compared to those lower in mastery (**BP effect**).
  - Higher than average individual levels of constraint was associated with higher PA and lower NA (**WP effect**). Individuals higher than others in feelings of constraint experienced significantly more NA and less PA on average (**BP effect**).
  - Psychological well-being varied significantly, at both the WP and BP levels, demonstrating that higher levels of mastery was related to higher well-being, while higher levels of constraint was related to lower levels of well-being.
  - As the number of stressful events increased, NA increased. This was seen as the total stressors reported varied according to individuals' own means, as well as among those with greater reported stressors on average compared to those that reported less exposure to stressors.

### Mastery, Constraint, and Stress

- The number of stressors reported was higher with greater feelings of constraint, and lower with greater feelings of mastery.
- Higher constraint was associated with higher perceived severity of reported stressors at both the WP and BP levels.

### Mastery as a Daily Moderator of Stress & Well-being

- A significant interaction was observed among daily mastery and stress severity. Individuals scoring higher in mastery, relative to their own mean, showed less reactivity to stress relative to days where they scored lower in mastery.
  - High feelings of mastery acted as a buffer when individuals encountered stress, which allowed for NA to be uninfluenced rather than to increase as stress severity increased. Lower scores in mastery produced greater levels of negative affect when reporting greater stress severity.
- There were no significant interactions among mastery, constraint and any other variables.

**These results demonstrate that greater perceived mastery is beneficial, as it related to less stress reactivity and greater positive well-being. The results of this study found that both feelings of mastery and constraint significantly influence how individuals experience and respond to daily stressful events.**