

# Enhancing Validity of Readiness to Change Measures: Experimental Manipulation of Cognitive Effort

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## Introduction

- ❖ Conceptual understanding of models like the Transtheoretical Model have perpetuated the idea that motivation to change should be assessed in an all-encompassing measure
- ❖ As providers notice more motivation for change from clients, this outward expression is taken at face value without deeper exploration of client perceptions
- ❖ Individuals who are attempting to change behavior may be prone to unrealistic expectations about change, regarding amount of effort, time, speed, ease of change, and effects on other aspects of their lives; referred to as false-hope syndrome (Polivy & Herman, 2002)
- ❖ We assert that standard assessments of RTC do not require sufficient cognitive effort to obtain an accurate assessment
- ❖ **Hypothesis:** We expected that RTC scores are inflated (i.e., overestimated) under standard self-report conditions

## Method

### PARTICIPANT AND PROCEDURES

- ❖ College students who use substances (n = 256) recruited from a large southwestern university (65.3% female)
- ❖ Participants were randomized to complete readiness/motivation to change measures under three conditions:

	<b>Low Effort: standard assessments</b>
	<b>Medium Effort: answered 3 multiple choice items about benefits and consequences of substance use and consequences of stopping or limiting substance use</b>
	<b>High Effort: in addition to the 3 multiple choice items above, answered 7 open-ended prompts related to stopping or limiting substance use</b>

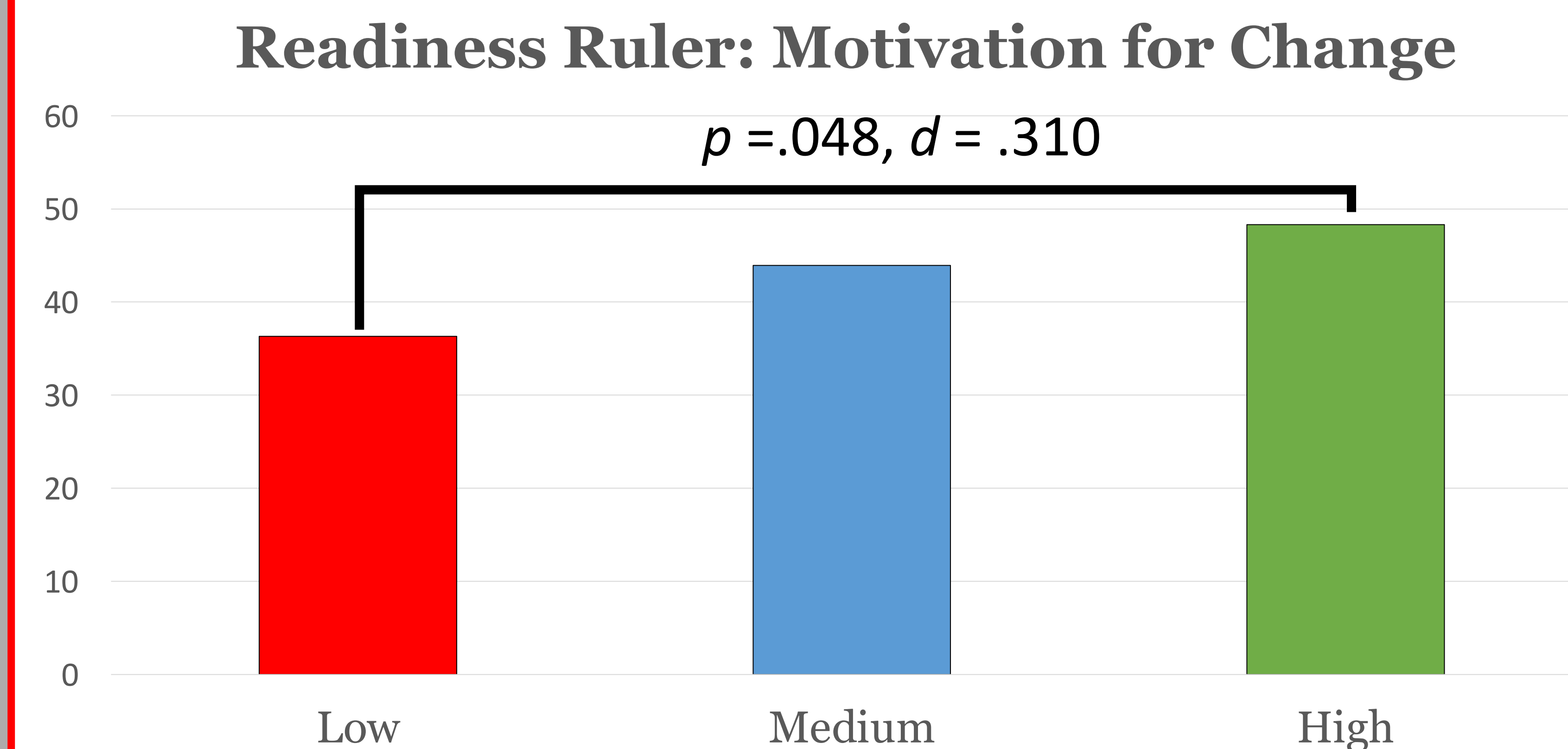
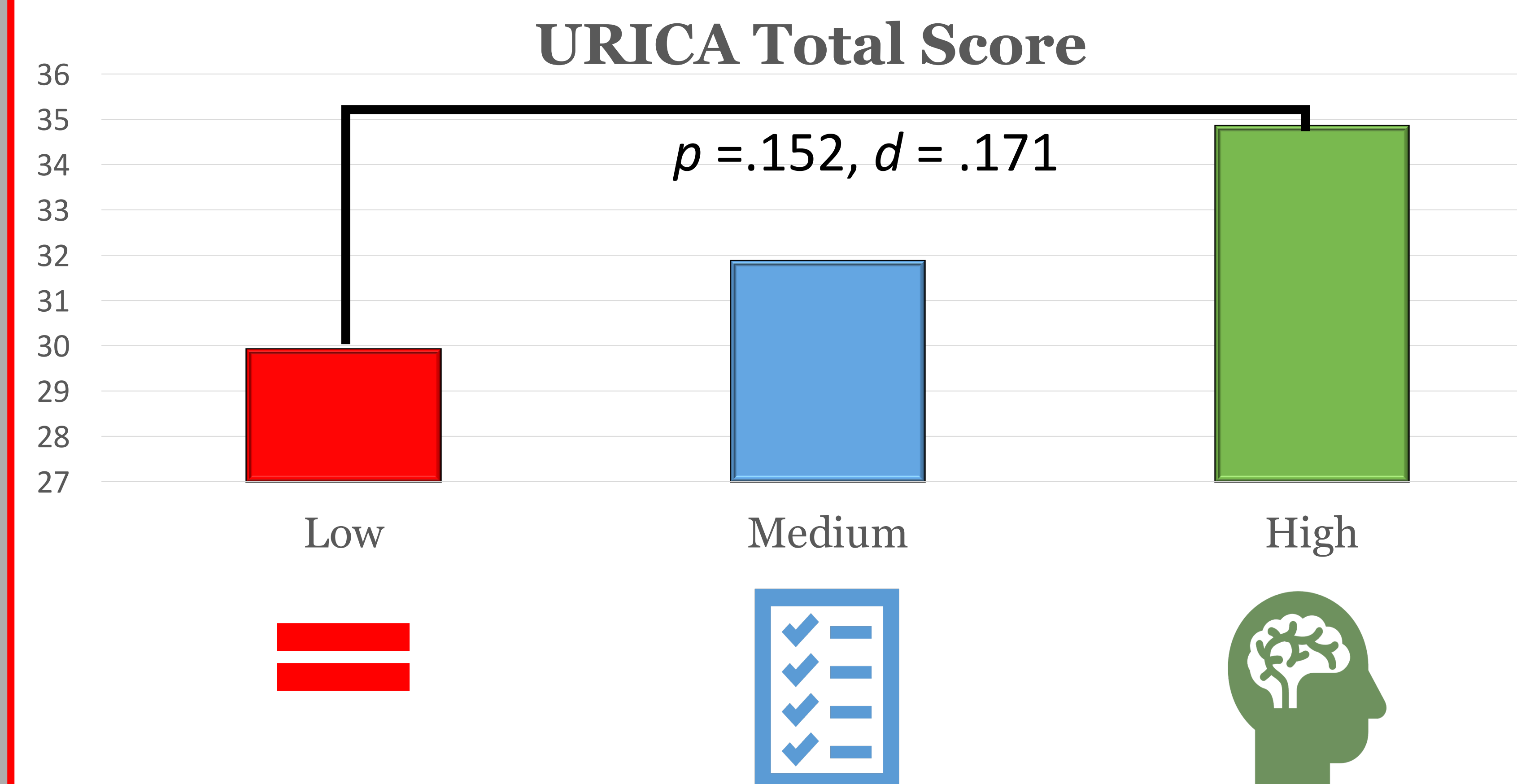
### MEASURES

- ❖ The University of Rhode Island Change Assessment (URICA) scale (DiClemente & Hughes, 1990)
- ❖ The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES, Miller & Tonigan, 1996)
- ❖ Readiness Ruler (Rollnick, Mason, & Butler, 1999)
- ❖ Change Heat Map ranging from “taking few steps” to “taking many steps” to change on x-axis, and “thinking very little” to “thinking a lot” on y-axis (fig on right)

## Results

### ANALYTIC APPROACH

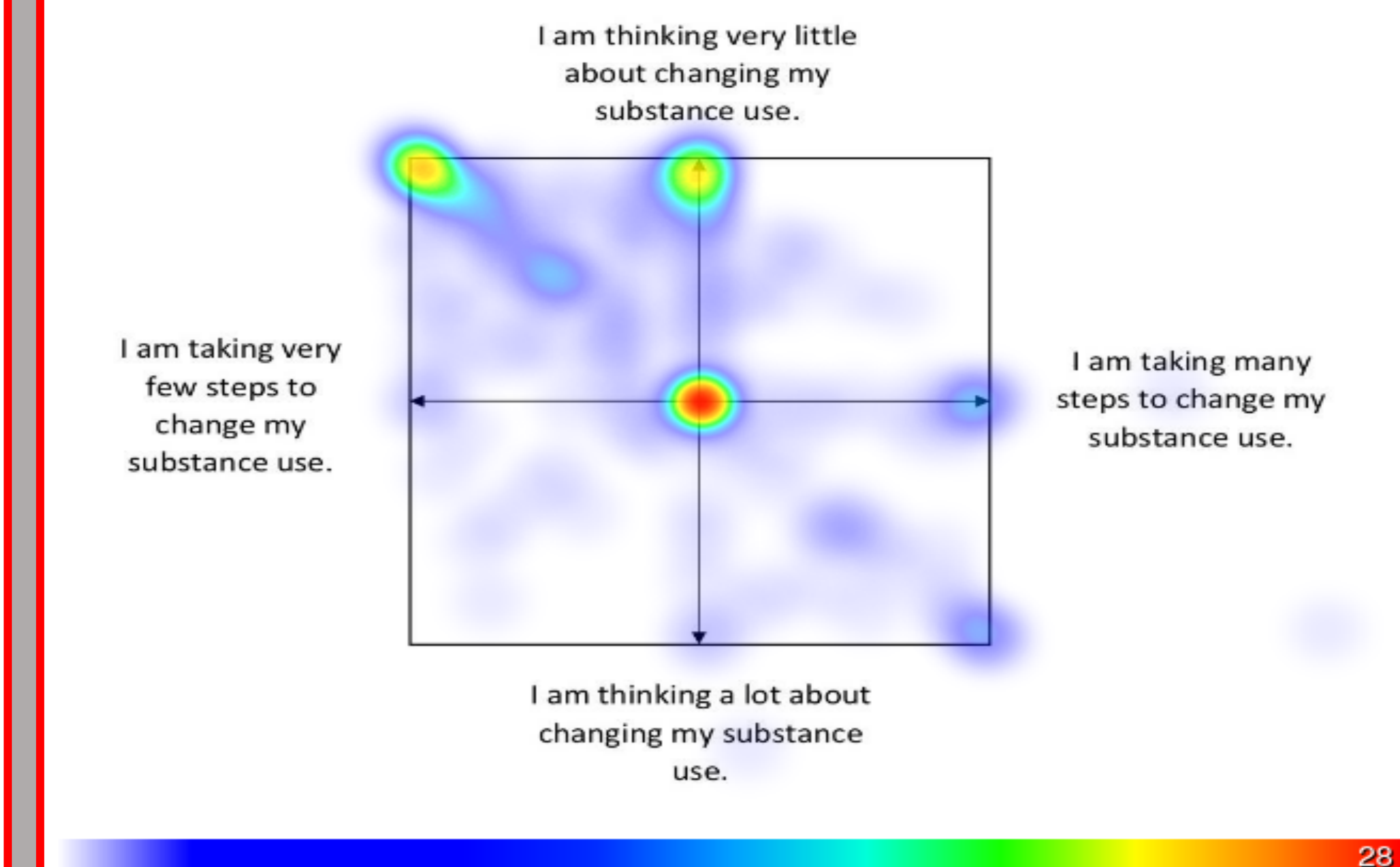
- ❖ To test our hypothesis, we conducted analyses of variance (ANOVAs) on our various RTC outcomes across three conditions: 1) low effort, 2) medium effort, and 3) high effort condition
- ❖ We examined Tukey post-hoc tests to identify differences across conditions, and used Cohen’s d as a measure of effect size



- ❖ Contrary to our hypothesis, the pattern was consistent across most outcomes that readiness/motivation to change was highest in the high effort condition and lowest in the low effort condition (as shown in the 2 graphs above)
- ❖ Across most measures, these differences did not reach statistical significance (effect sizes ranged from d = .01 to d = .31)
- ❖ Based on the readiness ruler, motivation for change was significantly higher in the high effort condition compared to the low effort condition (see graph above)

## Discussion

- ❖ Change is a complex process and a deeper assessment of the motivations for change along with explanations of what that change entails is needed
- ❖ Though we expected more cognitive effort would result in lower readiness/motivation to change, we found the opposite pattern among college students
- ❖ Most college students did not report thinking much about change or taking many steps to change their substance use, though there was some variability (see heat map below)



- ❖ Further understanding the relationship between cognitive effort and readiness to change could influence the way we think about assessing and intervening on these putative mechanisms of behavior change
- ❖ Given that many of these comparisons were not statistically significant, larger samples are needed to make firm conclusions, and to examine readiness to change across specific substances
- ❖ Additional research is ongoing to examine how these change metrics relate to actual behavior change over time among college students

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