



Contextualizing Social Psychological Interventions

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INTRODUCTION

Background

- Interventions are often deployed in different contexts and populations with a “one size fits all” approach. However, without careful tweaks to interventions to fit particular contexts and populations, uncontextualized interventions may not be as successful (Yeager & Walton, 2011). We underline a methodology of mindfully adapt interventions for different contexts and populations.
- As a case study to illustrate this methodology, we consider two social psychological interventions deployed in the unique context and diverse population of Cal Poly Pomona in Southern California.
- Cal Poly Pomona is recognized by the U.S. Department of Education as a Hispanic-Serving Institution (HSI) with 45% (or 11,880) of the student population being Hispanic/Latinx. First-generation students make up 57% of Cal Poly’s student population. (Cal Poly Pomona, 2018).

Values Affirmation (Intervention 1)

Values Affirmation is a brief intervention that allows people the opportunity to write about and reflect on the importance of core values. The intervention is used in efforts to narrow the achievement gap between minority and non-minority students by reaffirming values and weakening psychological threat (Cohen & Sherman, 2014).

Social Belonging (Intervention 2)

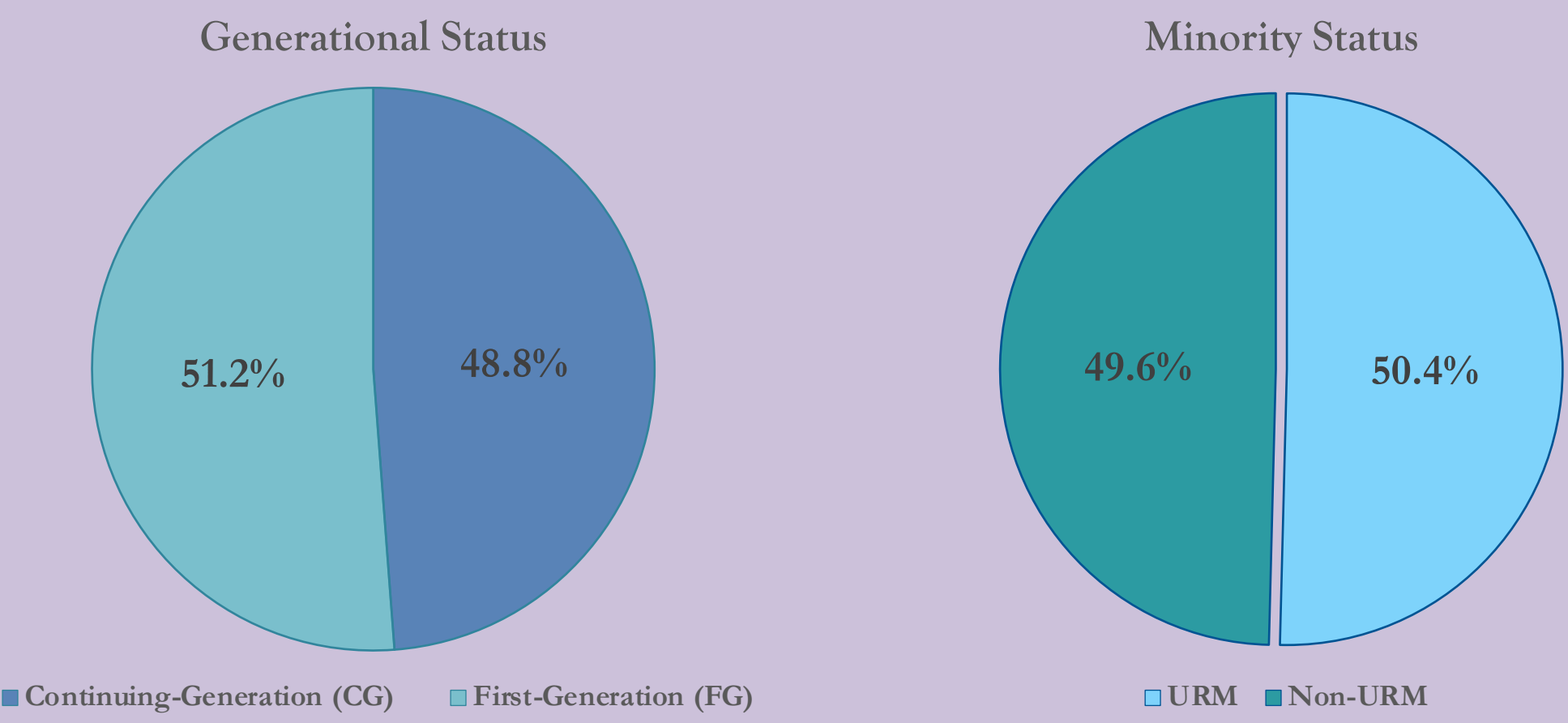
The Social Belonging Intervention is intended to lessen psychological perceptions of threat on campus by framing social adversity as common and transient (i.e., introductory physics course) and their concern that they might not belong due to stigma associated with their social group (Walton, Murphy, Logel, Yeager, & The College Transition Collaborative, 2017).

Study 1 UNCONTEXTUALIZED INTERVENTION METHODOLOGY

- The values affirmation intervention was not contextualized to the unique population of Cal Poly Pomona. The research team closely replicated (and extended) methods and procedure of previous research when creating and deploying intervention from previous research (Tibbets, Harackiewicz, Canning, Boston, Priniski, & Hyde, 2016).

Participant Characteristics

- Undergraduate students ($N = 242$) in physics at Cal Poly Pomona were recruited to participate in the study during co-requisite physics laboratory sections. Students’ age ranged between 18-37 years old with a gender composition of 49.1% male, 37.3% female, and 13.5% declined to state/missing. The following pie charts are a breakdown of students’ generational status and minority status.



Interventions

- Participants were randomized into one of four conditions: Independence ($n = 57$), Interdependence ($n = 57$), BOTH Interdependence & Independence ($n = 65$), or Control ($n = 63$).

Procedure

- Week 1:** students completed a baseline paper-based survey in class, containing psychological measures (i.e., perceived identification with major, wellbeing) and demographic information.
- Week 2 & 4:** students completed two values affirmation writing activities in class (week 2) and online (week 4).
- Week 9:** students completed a post-test paper-based survey containing similar psychological measures as the baseline survey. The survey also asked students’ permission to access their institutional data.

Measured Outcomes

- Course Grades:** Students ($n = 242$) granted the research team access to their end of term Physics course grades.
- Term GPA:** Students ($n = 242$) granted the research team access to their term GPA.

INTERVENTION 1 RESULTS

- Results did not reveal any significant effects of values affirmation interventions on physics course grade ($F(3, 226) = .71, p = .54$) and or term GPA ($F(3, 226) = .97, p = .40$). Similarly, minorities and first-generation students did not benefit significantly more from any of the intervention than their counterparts (non-significant F stats available upon request).

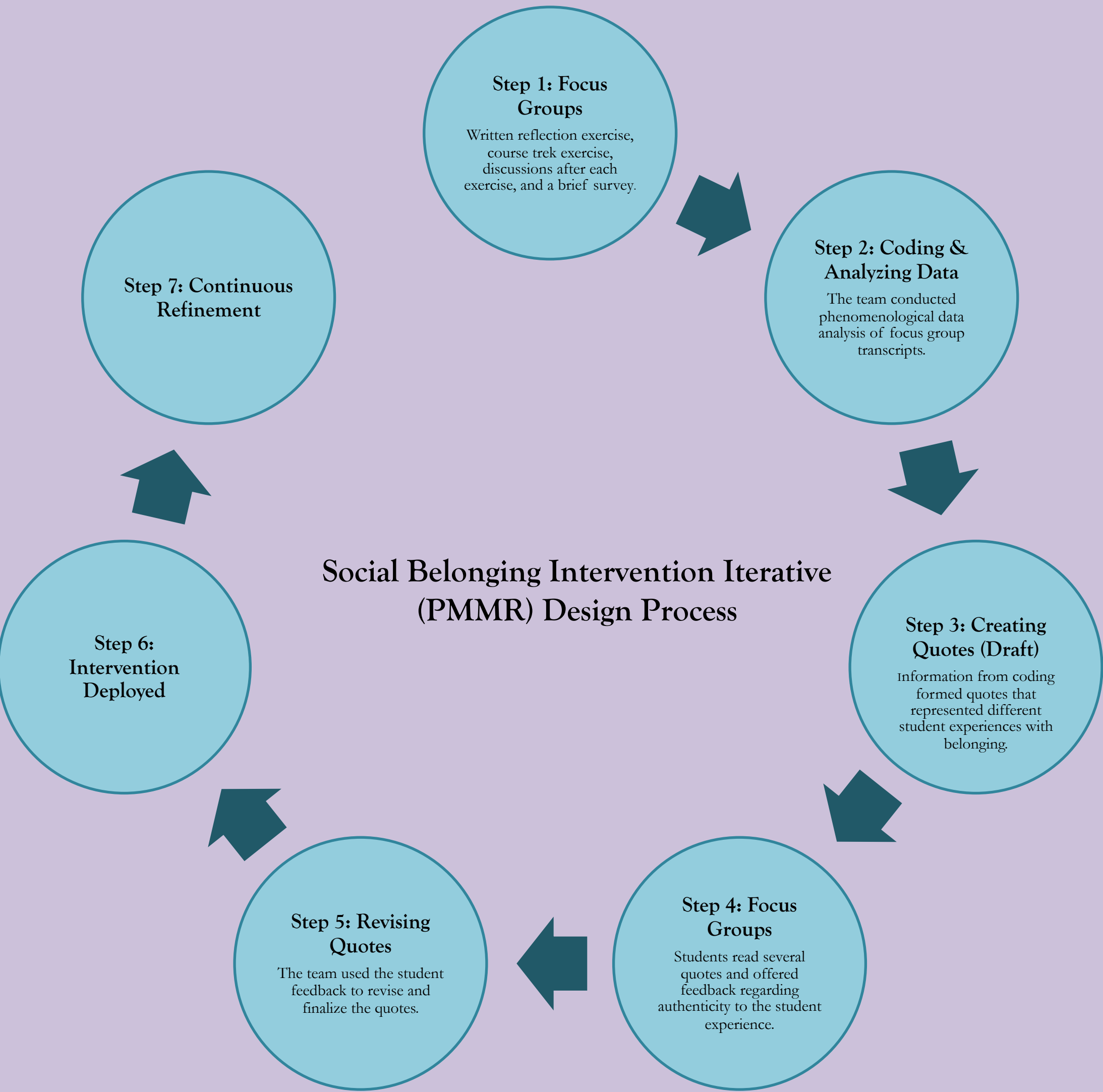
Study 2 CONTEXTUALIZED INTERVENTION METHODOLOGY

Rationale for Contextualizing

- Successful iterations of interventions have often occurred at universities where the population is predominantly white (Harackiewicz, Canning, Tibbets, Giffen, Blair, Rouse, & Hyde, 2014; Jordt, Eddy, Brazil, Lau, Mann, Brownell, King, & Freeman, 2017).
- Cal Poly Pomona’s population is predominantly Hispanic and Latinx students, and the interventions may not have resonated with specific subgroups (e.g., Latinx) of the diverse population.

Methods Used to Contextualize

- Using the Participatory Mixed Methods Research (PMMR) approach, the research team collaborated with Cal Poly Pomona students to develop and refine the current version of the intervention to best address the unique social and cultural experiences of Cal Poly’s population.
- PMMR emphasizes the value of tapping into community member knowledge throughout the research process and actionable outcomes that lead to change. Feedback from members of the population under study allows researchers to understand the lived experiences of the population it intends to help (Olson & Leonard, 2016).



LESSONS LEARNED

- Understand your population.** Students may have commonalities like being undergraduate students in an introductory Physics course, but there are many factors (i.e., URM or first-generation status) that can impact outcomes. Explore what these are and what they mean for intervention efficacy.
- Contextualizing an intervention is a multifaceted process.** Researchers deploying interventions should collect data and input from all stakeholders to ensure that the intervention is contextually valid and useful.
- An intervention is a living document.** Once interventions are drafted, continue to seek feedback prior to and after deploying a randomized controlled trial (RCT) or PMMR.

DISCUSSION & FUTURE INTERVENTION RESEARCH

- The PMMR method utilizes an iterative intervention design process to contextualize an intervention to maximize its potential impact for a targeted population and context.
- The process of contextualizing an intervention is time-consuming, resource intensive, and expensive. Its highly contextualized nature means the specific intervention may not fit exactly in other other contexts.
- However, employing the PMMR approach may augment intervention efficacy at a particular site and similar contexts. Also, eliciting stakeholder participation in the intervention design and research process may increase buy-in and the use of the intervention down the line.

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