Manipulating the psychological climate of group exercise classes: The effects on social physique anxiety and self-presentation
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INTRODUCTION
• Group exercise classes have been identified as settings where body-related concerns might be present (Martin & Fox, 2001)
  • Social physique anxiety (SPA): perceptions of negative evaluation of one's physique (Hart et al., 1989)
  • Self-presentation efficacy (SPE): confidence to present oneself to others (Leary & Atherton, 1996)
• The group environment of these classes is important as manipulating leadership style and group interactions have elicited change in social anxiety (Martin & Fox, 2001)
• SPA and SPE have been related to psychological climate (PC) in exercise classes (Hamamoto, Desmond, & Wilson, 2016)
• PC reflects perceptions that an environment is both safe and meaningful (Brown & Leigh, 1996; Spink et al., 2013)
  • Safety: Supportive management, role clarity and self-expression
  • Meaningfulness: Contribution and challenge
• However, there is currently no research examining if the PC could be manipulated to elicit different experiences of body-related concerns

PURPOSE
To examine if psychological climate could be manipulated and in turn influence experiences of SPA and self-presentation in group exercise settings

METHODS
Participants:
• Undergraduate Kinesiology students (n=80; 55% female)
  • Age: 18 – 28 (M= 21.6 years old, SD = 0.2)
  • Ethnicity: Asian/Pacific Islander (n=26, 32.5%), Black (n=6, 7.5%), Hispanic (n=24, 30%), Caucasian (n=15, 18.8%), Multiracial (n=6, 7.5%), Other (n=3, 3.6%)
Procedure:
• Interested participants signed up for a self-selected class time
  • All classes were randomly assigned to an enriched climate (n=7) or a minimal climate (n=8)
  • Details on manipulation by leader and trained confederates are in Figure 1
• Commonalities across both conditions included:
  • Class size between 6-10 of mixed gender (half confederates)
  • Video recorded & mirrored room
  • Wore heart rate monitors
  • Same challenging exercise routine led by same leader
• All participants completed a questionnaire at the end of the class

Measures:
• PC was measured by a 21-item questionnaire (Spink et al., 2013)
  • 1 (Strongly Disagree) to 7 (Strongly Agree)
• SPA was measured by a 9-item questionnaire adapted from Martin-Ginis et al., (2011)
  • “I feel uptight about my physique/figure in this class.”
  • 1 (Not at all) to 7 (Strongly Agree)
• SPE was measured by a 5-item questionnaire (Gammage et al., 2004)
  • “How confident are you that...in this class other people will think that your body looks fit and toned?”
  • 0% (Not at all confident) to 100% (Completely confident)

RESULTS
• PC manipulation appeared to be successful with a significant difference for all the PC subscales (d = .47 - .64, p < .05) except for Challenge (d=.08, p=.77)
• There were no significant differences between the climate groups for SPA (d=.08, p=.359) and SPE (d=.36, p=.162)

DISCUSSION
• Similar to Martin and Fox (2001) manipulation of the exercise class environment, this study manipulated the PC of an exercise class
  • Safety subscales were all significantly different between groups; challenge did not emerge because both climates' tasks were equal in difficulty
• The effect of an acute manipulation of PC did not appear to translate immediately to differences in SPA or SPE
  • Although not significant, trends were in predicted direction
• Previous studies identified individuals who were high in SPA

Strengths
• Ethnically diverse population
• Use of confederates in manipulation

Limitations
• Kinesiology students be a unique population and may not have the same level of body-related concerns as less active populations, which may limit the generalizability of results
• Manipulation of the classes were not representative of “general” exercise classes and reflected a one-time experience

Future Directions
• Examine a long term PC manipulation
• Pre-screening for those who are exhibit high SPA and low SPE to participate