Working Harder: The Relationship between Psychological Climate and Effort in Exercise
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Introduction
Effort is often perceived as a key element for success in sport and physical activity (Spink et al., 2013).

Effort in sport and exercise settings can be influenced by the team/group environmental properties such as cohesion (Prapavessis & Carron, 1997; Gammage, Carron, & Estabrooks, 2001) and teambuilding (Bruner & Spink, 2011). Psychological climate (PC; see Figure 1) is a multidimensional construct representing an individual's psychological interpretation of situational conditions.

PC has been shown to influence effort:
- In occupational settings (James et al., 1978)
- In male ice hockey teams (Spink et al., 2013)
- In female teams (McLaren et al., 2014)

There has been limited research exploring the effects the psychological climate has on effort in a group exercise setting.

Purpose
To examine the effects of psychological climate on effort in university students enrolled in group exercise classes.

Methods

Participants:
- CSUF Students enrolled in an graded group exercise course (n=79)
- Females, Males
- 18-? (M=7 years, SD= years)

Procedure:
- Participants were voluntarily recruited from group activity courses from the Kines department
- Near the end of the semester, participants completed a questionnaire during class time

Measures:
- PC was measured by a 21 questions (Brown & Leigh, 1996; Spink et al., 2013)
  - 5 subscales that emerged in sport setting (Spink et al., 2013)
    - 1 (strongly disagree) to 7 (strongly agree)
- Role clarity was measured using a 5 item measure adapted from Brown and Leigh (1996) and adapted by Spink et al. (2013)
  - e.g., “When exercising in class, I really exerted myself to the fullest”
    - 1 (strongly disagree) to 7 (strongly agree)

Analysis
- A multiple regression with 5 PC subscales predicting effort was used:
  - IV: Challenge, Role Clarity, Self Expression, Supportive Management, & Contribution

Results
- The overall regression model was significant (F(5,73)=5.16, p<0.001).
- The PC variables explained 26.1% of the variance in effort (R²=0.261).
- Role Clarity (p=.043) and Self-Expression (p=.003) significantly predicted effort

Discussion
- This study shows the importance of the psychological climate participants' effort in group exercise settings.
  - Extends previous research to the exercise setting.
- The current study both role clarity and self-expression were positively related to effort.
  - In males, role clarity and self-expression were positively related to effort in males (Spink et al., 2013).
  - In female, role clarity and contribution predicted effort (McLaren et al., 2014).
  - Perhaps emphasis on task in this exercise settings (course is graded) makes this setting most similar to elite hockey (Spink et al., 2013)
- Importance of psychological safety as both predictors belong to this factor
  - No fear of negative consequences (i.e., their grade)
  - Psychological meaningfulness did not emerge
    - It may be that the emphasis on Individual outcomes in the class may reduce importance of psychological meaningfulness

Strengths

- Extend previous research on PC in the sport setting to the activity setting
- Samples were collected from different group exercise class types: Aerobics and walking classes.

Limitations

- Limited ability to generalize due to the recruitment of only registered students in university activity classes.
  - Classes for credit
  - Mainly females
- Hierarchical nature of the data (participants nested within classes) not considered

Future Directions

- Understand how the psychological climate can impact other individualistic behaviors (ex: adherence, confidence, social anxiety levels).
- Gender differences in effort and the psychological climate as gender differences for effort have been identified (Bruner & Spink, 2011)