

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=? years, SD= years)

Procedure:

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

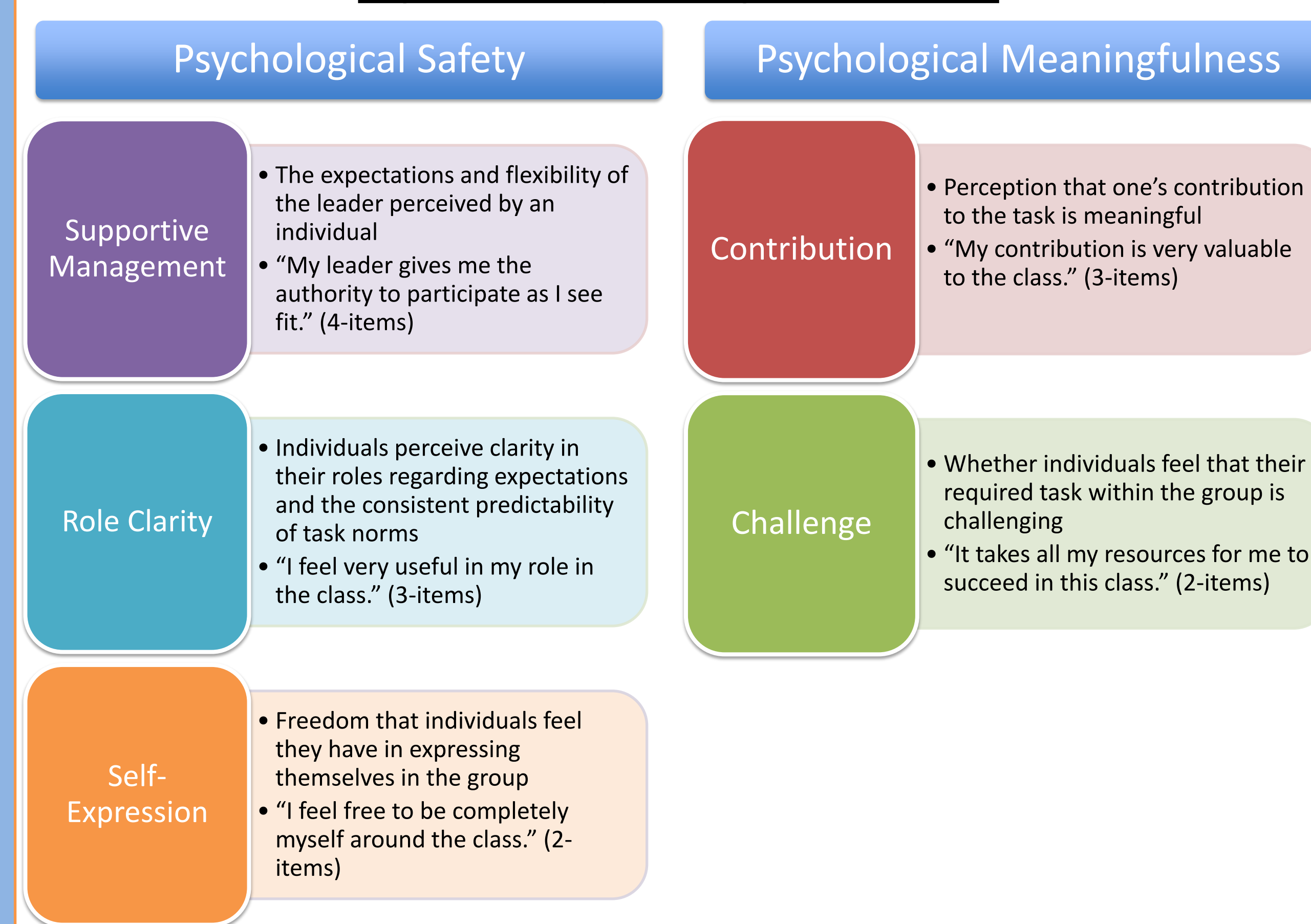
Measures:

- 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)
- Effort 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

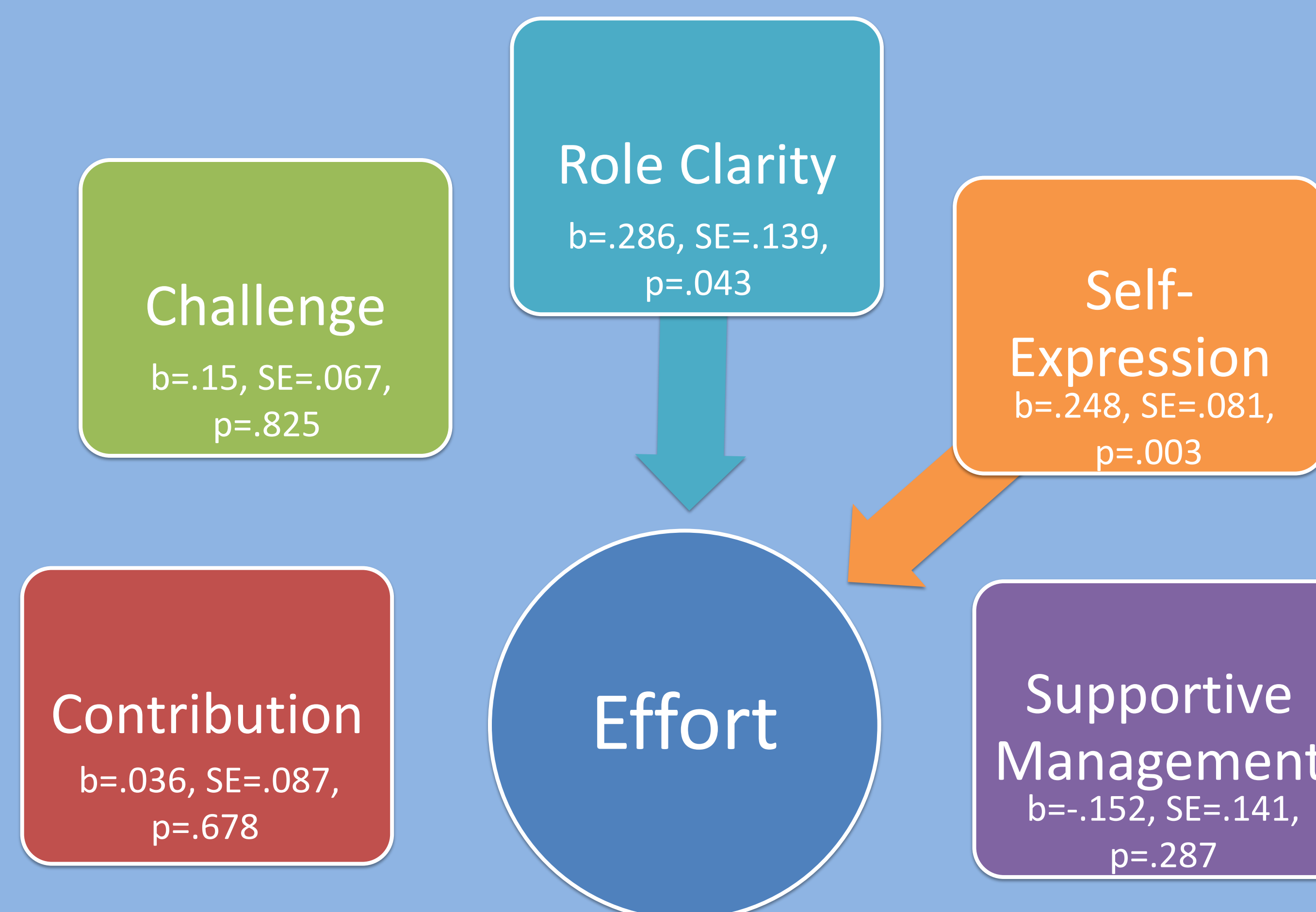
- A multiple regression with 5 PC subscales predicting effort was used:
IV: Challenge, Role Clarity, Self Expression, Supportive Management, & Contribution

Figure 1. Psychological Climate



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 ($R^2=0.261$).
- 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)