Stuck Like Glue: The Relationship between Cohesion and Psychological Climate
Kathryn A. McLeland, Sarah K. Hamamoto, & Kathleen S. Wilson
California State University, Fullerton

Introduction

- Psychological climate (PC) reflects individuals’ cognitions about their work environment and has been examined in the organizational literature (Brown & Leigh, 1996; Kahn, 1990)
  - These perceptions are typically categorized into two types:
    - Psychological Safety – freedom to express oneself without fear of negative consequences
    - Psychological Meaningfulness – the value of ones work and/or contributions
  - PC has been related to a variety of outcomes in the work setting including attitudes, motivation, involvement and performance (Parker et al., 2003)

- PC has just recently been examined in the physical activity setting (Spink et al., 2013)
  - In that cross sectional study, PC was associated with perceived effort in male sports teams
  - This was subsequently replicated in a sample of female athletes (McLaren et al., 2014)
  - In activity classes, PC has also been related to effort exerted during class (Hamamoto et al., 2015)

- The focus in the activity literature has been on outcomes of PC. However, there is also a need to identify factors that may lead to the formation of PC
  - Possible factors that have been examined in the organizational literature include co-worker relationships and norms (May et al., 2004)
  - One construct that might lead to perceptions of PC climate in the exercise setting is cohesion
  - Cohesion is one of the most common group constructs in the exercise field (i.e., Dunlop et al., 2013) and has been related to constructs such as anxiety in sport settings (Eys et al., 2003)

Purpose

To explore cohesion and psychological climate in university group exercise classes.

Methodology

Participants
- 70 university students (75.4% female; Mean = 21.8yrs; 30.7% Asian/Pacific Islander, 31.0% Latino/Hispanic, 26.4% White/Caucasian)
- Recruited from activity classes taken for credit (Aerobic and jogging classes) that lasted for 16 weeks

Design
- During class time participants completed an informed consent followed by a questionnaire at two time points:
  - Cohesion was assessed during weeks 9 & 10
  - PC was assessed at week 15

Measures
- Cohesion was assessed with a modified Group Environment Questionnaires (GEQ; Carron et al., 1998)
  - Four subscales were used: attraction to-group-task, social (ATGT, ATGS) & group integration-task & social (GIT, GIS)
- PC was measured at the end of the semester through 21 item questionnaire used by Spink et al. (2013) that was modified to reflect the activity classes:
  - Supportive management (4 items; α = .77): “My leader is flexible about how I participate in the class”
  - Role clarity (3 items; α = .91): “The amount expected of me is clearly defined”
  - Self-expression (2 items; α = .73): “It is okay to express my true feelings around the class”
  - Contribution (3 items; α = .94): “My contribution is very valuable to the class”
  - Challenge (2 items; α = .78): “It takes all my resources for me to succeed in this class”

Analysis
- Multiple regressions were performed for each of the 5 PC Subscales with four dimensions of cohesion measured as predictors

Results

### Table 1: PC mediator of Cohesion Predictors

<table>
<thead>
<tr>
<th>Subscale</th>
<th>SUPPORT MANAGEMENT</th>
<th>ATGS</th>
<th>ATGT</th>
<th>GIS</th>
<th>GIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATGS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATGT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>p</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Discussion

- These findings suggest that cohesion especially the social dimensions appear to be positively associated with perceptions of PC
  - Those who were rated higher levels of social cohesion reported more positive psychological climate including perceptions of challenge, self-expression, more attracted to the group around the social aspect
  - When examining exercise classes, it is often the task aspect that has emerged in relation to individual outcomes such as adherence (Spink & Carron, 1992) although social has emerged with older adults (Estabrooks & Carron, 2000)
  - Extends previous research in the organizational setting by showing cohesion being linked to both constructs of psychological safety (self-expression, supportive management and role clarity) and psychological meaningfulness (challenge & contribution)
  - Previous work in the organizational literature showed that co-worker relationships were associated with psychological safety but not meaningfulness (May et al., 2004)

Strengths
- Prospective design was used with cohesion assessed prior to PC

Limitations
- The majority of subjects were females, and involved students registered in an activity class for credit
  - May not generalize to other populations or settings where the classes are not for credit
  - Hierarchical nature of the data (i.e., students nested in classes) was not assessed

Future Directions
- Explore other factors that might be associated perceptions of PC such as leadership behaviors
- Examine PC as mediator between the relationship cohesion effort as other work shows PC is also related to effort (Hamamoto et al., 2015)