

Understanding Emergent Team States and Wellness in Small Groups: A Systematic Review

Simran Dhaliwal

Supervisors: Dr. M. Blair Evans and Dr. Hayden Woodley
The University of Western Ontario, Department of Psychology

Introduction

- Team emergent states are a broad category of properties that develop during team interactions and often reflect group members' perceptions and feelings of the team
- Teams are described as groups formed of two or more individuals with several distinct features. These features include active socialization; varying expertise among group members; shared goals; and defined responsibilities and roles (Salas et al., 2007)
- For this review, a small group is defined as a group of two or more individuals (with a max of fifteen) performing a task to complete a mutual goal
- Evidence suggests that completing tasks in groups achieves higher productivity, encourages creativity, fosters a sense of belonging, and provides a richer learning environment than working independently
- Wellbeing is a broad term, which has been operationalized for this project: to be psychologically, socially, and emotionally comfortable, healthy and happy, as measured through questionnaires, reports, and other tools (i.e., mental health reports and subjective reflections/evaluations of one's life, etc.).

Objectives

- Understand the relationship between the emergent states within small task-performing groups and their effects on individual wellbeing
- Assist with the development of a common operationalization of emergent team states
- Contribute to a deeper understanding of how teams and group experiences influence wellbeing
- Contribute to wellbeing-informed team building strategies within the workplace, organized sport and other team environments

Methods

- Systematic review using standard methods and Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) criteria
- PsycINFO, PubMed and ERIC were searched, with no date range applied
- Search strategy designed to include relevant keywords encompassing emergent team states, wellbeing, and small task-performing groups
- Articles were searched by authors independently and in duplicate with discrepancies resolved through discussion

Keywords

- Created criteria to use to determine which emergent states to be included in article search query
- Compiled a list of emergent states using the emergent state taxonomy by Rapp and colleagues (2020)
- Created four tables: (a) cognitive, (b) affective, (c) motivational and (d) combination of dimensions to organize emergent states based on eligibility criteria

Category defined by Rapp and colleagues (2020) alongside example constructs	Inclusion or exclusion decision	Terms included in search term list
Cognitive		
Team climate <i>Abusive supervision climate, psychological safety climate, team diversity climate</i>	Not included. Climate measures do not necessarily feature member interactions as the referent.	
Team cognition <i>Cross understanding, transactive memory, shared mental model, situational awareness</i>	Inclusion criteria distinguishes between measures involving member perceptions (included) versus behavioral or compositional measures (excluded)	<i>Transactive memory, mental model, mental models, situational awareness</i>
Team trust <i>Competence-based trust, intra-team trust</i>	Included	<i>Team trust, group trust</i>
Other cognitive states <i>Autonomy, team justice, mindfulness</i>	Not included	

Table 1. Emergent state terms included and excluded from article and search query based on categorization by Rapp and colleagues (2020)

Inclusion/Exclusion Criteria

Component	Inclusion criteria	Exclusion criteria
1. Date range	All dates included.	—
2. Language	English language articles only	—
3. Wellbeing construct: to be psychologically, socially, and emotionally comfortable, healthy and happy, as measured through questionnaires, reports, and other tools (i.e., mental health reports and subjective reflections/evaluations of one's life, etc.).	Self- or other reports of wellbeing	Articles that report exclusively on preferences/views/attitudes toward group emergent states and wellbeing
4. Emergent state construct: Beliefs of team members regarding team goals, members' abilities, and interpersonal relationships that begin soon after team formation and continue to evolve in tandem with their team experience. It refers to the cognitive, emotive, and motivational states or characteristic levels of feelings/thoughts among team members. Emergent states differ from group processes (actions taken by team members to combine individual resources).	Measures should be self-reported construct from individual members and analyzed at an individual or aggregated level	Measures of group states that are behavioral/member interaction that are better conceptualized as team processes) Measures where the referent for perceptions is a specific member (leader) or one's role in the group Measure reflects group climates that are simply the aggregation of individual states with no group referent (e.g., aggregated autonomy)
5. Group context	Small task-performing groups: a collection of at least three individuals who can interact with all members of the group and who must collaborate/depend on one another relating to a shared objective. Group memberships may span workplaces, recreation/sport settings, military environments, volunteer groups	Groups where members do not share a clear objective and/or do not rely on one-another in a substantive way (i.e., social peer groups among youth) Groups where all members do not have opportunities to interact in person or virtually, directly with one another
6. Study design	Original empirical studies with human participants, reporting on cross-sectional or longitudinal association between emergent state (predictor) and wellbeing (outcome)	Secondary literature sources (e.g., commentaries, editorials, letters to the editor, expert reviews, narrative reviews, meta-analyses, and systematic reviews)*
7. Target population	Adolescent and adult group members	
8. Detail about study	—	Limited details regarding protocol

Table 2. Inclusion and exclusion criteria for articles. Criteria used during title/abstract and full-text screening to determine eligibility of article for systematic review.

Learning Reflection

Working as a summer intern has been a valuable experience. I had the opportunity to design my own systematic review project based on my interests in I/O psychology and mental health/wellness. I enjoyed attending the PD sessions (the systematic/scoping review, EDI, developing your CV, etc.) and networking with my peers. I look forward to presenting my work at the poster competition and continuing my research with my supervisors in the fall.

Acknowledgements

I would like to express gratitude to my faculty mentors, Dr. Blair Evans and Dr. Hayden Woodley, for supervising this summer. I sincerely appreciate the valuable guidance and support that Dr. Evans and Dr. Woodley have provided me with over the course of this project. I am also grateful to Western Research for the opportunity to partake in an engaged research experience and attend professional development workshops.

Literature Cited

- Boston, 677 Huntington Avenue, & Ma 02115 +1495-1000. (2017, March 30). Well-Being Measurement. *Lee Kum Sheung Center for Health and Happiness*. <https://www.hsph.harvard.edu/health-happiness/research-new/positive-health/measurements-of-well-being/>
- E. Salas, M. A. Rosen & H. King (2007) Managing teams managing crises: principles of teamwork to improve patient safety in the Emergency Room and beyond, *Theoretical Issues in Ergonomics Science*, 8:5, 381-394, DOI: 10.1080/14639220701317764
- Fyhri, B., Schei, V., & Sverdrup, T. E. (2022). Taking the emergent in team emergent states seriously: A review and preview. *Human Resource Management Review*, 100928. <https://doi.org/10.1016/j.hrmmr.2022.100928>
- Ogbonnaya, C., Tillman, C. J., & Gonzalez, K. (2018). Perceived Organizational Support in Health Care: The Importance of Teamwork and Training for Employee Well-Being and Patient Satisfaction. *Group & Organization Management*, 43(3), 475-503. <https://doi.org/10.1177/105960118767244>
- Rapp, T., Maynard, T., Domingo, M., & Klock, E. (2021). Team Emergent States: What Has Emerged in The Literature Over 20 Years. *Small Group Research*, 52(1), 68-102. <https://doi.org/10.1177/1046496420956715>