Systems-Centered® Theory and Practice:

A Review of Empirical Research

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Abstract: Systems-Centered theory and practice are hypothesized to be useful to human systems in all contexts. In organizational contexts, systems-centered training (SCT®, Agazarian & Gantt, 2005; O’Neill & Constantino, 2008) presents an innovative approach to organizational structure and teamwork to improve performance. In psychotherapy contexts, systems-centered therapy (SCT) provides a new method for individual, couples’ and group psychotherapy to enhance therapeutic outcome (Agazarian, 1997, 2002; Agazarian & Byram, 2010). In this paper we review the empirical studies of SCT methods used in both organizational training and psychotherapy contexts, including studies of comparative training and work group performance (O’Neill & Constantino, 2008; O’Neill, Murphy, Mogle, MacKenzie, MacGregor, Pearson, & Parekh, 2012), the central SCT method of functional subgrouping (O’Neill, Smyth, & MacKenzie, 2011; O’Neill, Constantino, & Mogle, 2012), and a pilot study of SCT for reducing generalized anxiety of clinical significance (Ladden, Gantt, Rude, & Agazarian, 2007). We found preliminary, significant support for SCT hypotheses.
Introduction

Agazarian (1997) observed and hypothesized:

"The conditions of functional subgrouping include several group dynamic variables that are directly connected to successful goal achievement. Subgroups come together around similarity, which increases cohesiveness. The task of each subgroup is clear. The working methods are simple and familiar. There is intense work energy, focused over a relatively short period of time, toward a clear goal in an environment of high cohesiveness. Thus, the probability of positive outcomes for members who join and work within functional subgrouping norms is high. A member's subjective experience of subgrouping includes, on the one hand, the comfort of attunement and mirroring and, on the other, the intensity of involvement in a self-reinforcing activity " (p.46).

The first empirical study of SCT training groups (O’Neill & Constantino, 2008), later studies specifically of functional subgrouping (O’Neill, Smyth, & MacKenzie, 2011; O’Neill, Constantino, & Mogle, 2012), and a quasi-empirical comparison of teams using SCT versus Robert’s Rules of Order communication structures (Robert, 2007; O’Neill, Murphy, Mogle, MacKenzie, MacGregor, Pearson, & Parekh, 2012) have provided some support for these theoretically-derived hypotheses and clinical observations. In addition, a pilot study with people diagnosed with clinically significant levels of anxiety showed SCT methods reduced anxiety below diagnosable levels for at least a year (Ladden, Gantt, Rude, & Agazarian, 2007; see Table 1 for research summary).

O’Neill & Constantino’s (2008) quasi-experimental study compared the process and outcome of 6 systems-centered experiential training groups to those of American Group Psychotherapy Association Special Interest Groups (SIG) from two prior studies (MacKenzie, Dies, Coche, Rutan, & Stone, 1987; Tschuschke & Greene, 2002). They based their hypotheses
on Agazarian’s (1997) statements about functional subgrouping. As predicted, they found that SCT groups evidenced less group-as-a-whole level conflict and avoidance, as well as better member-to-member relationship quality and activity, and more member self-confidence, than the SIG comparison groups.

Consistent with the idea above that functional subgrouping is “self-reinforcing,” they found that these SCT groups demonstrated increased engagement with the group task over time, as Mackenzie et al. (1987) also found in successful groups of other theoretical orientations. Importantly, as favorable response to leadership has been shown to correlate with successful outcome (MacKenzie et al., 1987), the SCT groups also gave more favorable leader evaluations than their SIG counterparts.

Counter to hypotheses, however, the SCT groups showed less engagement relative to SIG groups. They also reported less learning about self-peer relationships and authority-leadership, but simultaneously reported the high overall level of learning characteristic of successful groups (MacKenzie et al. (1987). O’Neill and Constantino (2008) cautioned, however, that their quasi-experimental design did not allow for causal interpretations. They noted that many factors other than the SCT methods may have accounted for their findings, and pointed out that no reliable observations of functional subgrouping were made.

O’Neill, Smyth & MacKenzie (2011a) used the SCT Functional Subgrouping Questionnaire to measure functional subgrouping across time in two SCT experiential training groups. These group members were being trained to use functional subgrouping and to use the SCT Stages of Defense Modification skills to undo their own anxious, depressive, and other defense-related experiences. Results showed trainees rated their experience of functional subgrouping using positive affect words about 40% of the time, compared to using negative
affect word about 5% of the time. They also reported significantly increased use of functional subgrouping from the start of the workshops to the end. This finding supports Agazarian’s assertion above that functional subgrouping provides “comfort” to members and is “self-reinforcing.” Exploratory analyses found that more functional subgrouping was associated with significantly less anxious and depressive experience. This finding also supports Agazarian’s (1997) hypotheses quoted above, specifically that it may enhance “…positive outcomes for group members who join and work in the functional subgrouping norms” p.46.

Building on O’Neill & Constantino’s (2008) and O’Neill et al.’s (2011a) findings, O’Neill, Constantino, & Mogle (2011b) used the SCT FSGQ to study functional subgrouping, mood, learning, and goal achievement. The groups studied were two large SCT experiential training groups. The group members were being trained to use functional subgrouping and the SCT Stages of Defense Modification skills to undo their own anxious, depressive, and other defense-related experiences. Results showed that pre-training mood did not predict the amount of functional subgrouping during training, that is, members did similar amounts of functional subgrouping regardless of their mood at the start of the training. Also as predicted, after controlling for pre-training mood, more functional subgrouping predicted better mood /less emotional distress after the training. In addition, results also showed that, after controlling for post-training mood, more functional subgrouping was unrelated to post-training reports of learning about self-peer relations, marginally related to learning about authority-leadership, and significantly related to more overall learning and more goal achievement. This was a partial replication of O’Neill and Constantino (2008). Like O’Neill and Constantino (2008), however, O’Neill et al. (2011b) urged caution in interpreting the results, in this case noting that the SCT Functional Subgrouping Questionnaire had adequate but limited reliability and validity data.
In fact, while the SCT Functional Subgrouping Questionnaire used in this research above has adequate internal reliability, it does not explicitly discriminate between functional and stereotyped subgrouping, nor assess the sequential steps of functional subgrouping. Future research might productively focus on developing a new version of the SCT Functional Subgrouping Questionnaire which will reach those goals. This new version of the scale would then be more useful in training, practice, and research.

O’Neill, Murphy, Mogle, MacKenzie, MacGregor, Pearson, & Parekh (2011) compared the verbal behavior and productivity, and the process and creativity of work groups using either SCT methods or Robert’s Rules of Order (Robert, 2007). As measured by the System for Analyzing Verbal Interaction (SAVI); Simon & Agazarian, 2000), SCT work groups talked in ways more likely to transfer and integrate task-related information, and were more productive, better performing, and more creative as measured by the Group Productivity Scale (Bunderson & Sutcliff, 2002) and the Work Group Inventory (Kaplan & Greenbaum, 1989; Wilson Learning, 2011), respectively.

To summarize, research suggests that SCT methods may be useful in improving outcome in organizational and clinical contexts. The central SCT method of functional subgrouping appears to be experienced positively, and to be linked to improved team morale and less personal emotional distress. Overall, SCT methods are related to increased learning, productivity, creativity, and goal achievement. Pilot study results show SCT methods reduced anxiety below diagnosable levels for at least a year. These results are primarily correlational, however, so cause-and-effect conclusions cannot be drawn. Future research should include experimental manipulations of SCT methods and random assignment of subjects to experimental and control conditions.
References


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<th>Study Design</th>
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2. Self-reinforcing  
3. Intense work energy/intensely involved  
4. Greater cohesiveness  
5. Successful goal achievement  
6. Positive outcome (increased depth of experience) |
| Support: More self-confident; trend toward less anxiety but depression unchanged | Mixed results: Less avoidant but also less engaged initially; Less avoidant and highly engaged later; more active | Support: Less conflict; better relationship quality | Mixed results: Less learning about self-peer relations and authority/leadership but high global learning |

| **O’Neill, Smyth, & MacKenzie (2011): Correlational study of SCT FSGQ score, descriptors of FSG experience, and mood, in SCT training groups** | Support: Functional subgrouping increased over time | Support: Functional subgrouping descriptors had 8 to 1 ratio of positive to negative affect words | Support: Functional subgrouping linked to less anxious and depressive experience at end of workshop |
| Support: Functional subgrouping predicts less emotional distress | Support: Members’ pre-training mood not related to functional subgrouping | Support: Functional subgrouping predicts self-reported learning and goal achievement | Support: Functional subgrouping predicts less emotional distress |

| **O’Neill, Constantino, & Mogle, (2012): Pre-post study of mood, SCT FSGQ score, learning and goal achievement** | Support: More task-focused and productive | Support: More positive verbal behaviors and better group process on 3 of 8 variables | Support: More productive and creative |

| **Ladden et al (2007): Pilot study of SCT with people with generalized anxiety disorder** | Support: Successful resolution of GAD over 1 year period | | |
Footnotes

1 Systems-Centered® and SCT® are registered trademarks of Dr. Yvonne M. Agazarian and the Systems-Centered Training & Research Institute.

2 SAVI® is a registered trademark of Dr. Anita Simon and Dr. Yvonne M. Agazarian.