Stages of Small-Group Development Revisited

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The purpose of this review was to examine published research on small-group development done in the last ten years that would constitute an empirical test of Tuckman's (1965) hypothesis that groups go through these stages of "forming," "storming," "norming," and "performing." Of the twenty-two studies reviewed, only one set out to directly test this hypothesis, although many of the others could be related to it. Following a review of these studies, a fifth stage, "adjourning." was added to the hypothesis, and more empirical work was recommended.

Tuckman (1965) reviewed fifty-five articles dealing with stages of small-group development in an attempt to isolate those concepts common to the various studies and produce a generalizable model of changes in group life over time. He examined studies of (1) therapy groups, (2) human relations training or T-groups, and (3) natural and laboratory-task groups in terms of two-realms – task and interpersonal. The way members acted and related to one another was considered group structure or the interpersonal realm; the content of the interactions as related to the task was referred to as the task-activity realm. Both realms represented simultaneous aspects of group functioning because members completed tasks while relating to one another.

The Model

As a result of the literature reviewed, Tuckman proposed a model of developmental stages for various group settings over time, labeled (1) testing and dependence, (2) intragroup conflict, (3) development of group cohesion, and (4) functional role relatedness. The stages of task activity were labeled (1) orientation to task, (2) emotional response to task demands, (3) open exchange of relevant interpretations, and (4) emergence of solutions. An essential correspondence between the group structure realm and the task-activity realm over time caused Tuckman to summarize the group stages as "forming," "storming," "norming," and "performing." He acknowledged, however, that this was "a conceptual statement suggested by the state presented and subject to further test" (p.5).

Tuckman cited several limitations of the literature, e.g., that the literature could not be considered truly representative of small-group developmental processes because there was an overrepresentation of therapy and T-group settings and an under representation of natural or laboratory-group settings, making generalizing difficult. He suggested the need for further research on natural and laboratory groups, indicated the need for more rigorous methodological considerations in studying group process, and criticized the use of a single group for observation because it made control and systematic manipulation of independent variables impossible.

Tuckman provided a developmental model of group process by organizing and conceptualizing existing research data and theoretical precepts rather than by presenting original empirical data to support a particular model. He stated, however, that his model was in need of further testing.

Purpose of Methodology of This Review

The purpose of this follow-up study is to discover whether anyone has empirically tested the model of group development proposed by Tuckman in 1965, to investigate any new models in light of Tuckman's hypothesis, and to determine whether any alternative models have been conceived.

To locate any studies referencing the 1965 Tuckman article, the *Science Citation Index* from 1965 and the *Social Science Citation Index* from 1970 were consulted and a list of fifty-seven articles was compiled.

Of these, only those studies concerned primarily with empirical research (approximately twenty-two) were reviewed.

Review of the "New" Literature

Only one study could be found that set out to test Tuckman's hypothesis. Runkel et al. (1971) studied three groups of fifteen to twenty college students in a classroom setting. The task of each group was to decide on a project, collect and interpret data, and write a final report. During meetings of the work group, sixteen observers, armed with descriptions of the Tuckman model of stage development, observed the group "until something happened that fitted a behavior described by Tuckman as belonging to one of the four stages of group structure or task activity" (p.186). The observers rotated among groups in an effort to reduce observer bias. Ratings from observers supported Tuckman's theory of group development.

Although this empirical test of Tuckman's hypothesis supported his suggested developmental sequence, observers were given only descriptions of Tuckman's four stages and asked to "fit" their observations to that model. A methodology less prone to observer bias would have been to have observers record particular behaviors apparent in the group; at a later time, these could have been reviewed in light of particular models. Runkel et al. did, however, provide an empirical base for further testing of the Tuckman model.

Several articles from the literature contained elements of the Tuckman model. Zurcher (1969) offered some explanation of the developmental sequence in natural groups, an area Tuckman described as underrepresented in the literature. Data were obtained from 174 meetings of twelve poverty program neighborhood action committees in Topeka, Kansas, over a nineteen-month period. Results from a team of participant-observers indicated that the stages of development for these neighborhood committees included (1) orientation, (2) catharsis, (3) focus, (4) action, (5) limbo, (6) testing, and (7) purposive. Zurcher stated that these seven stages "could parsimoniously have been reduced to four stages suggested by Tuckman" (p.245) as shown below.

Orientation Forming Catharsis Storming Focus, Action, Limbo, Testing Norming

Purposive Performing

Although Zurcher's results would serve to support the Tuckman model, he did not specifically set out to test any particular model of group development and did not present any statistical treatment of his data.

Smith (1966) observed, over a period of approximately four months, a group of seven men stationed in Antarctica and collected data on technical-task activities as well as on behavioral dimensions of informal structure. He reported only two developmental stages rather than the four listed by Tuckman. However, Smith's two developmental stages appear to be task-activity behavior and interpersonal behavior, both of which were identified by Tuckman as the realms of group behavior. Smith's results serve to reinforce the hypothesis that task and interpersonal dimensions play a substantial role in the way groups develop.

Smith also concluded that the order of development would be different for various groups. Although the interpersonal "stage" seemed most important for therapy or training groups, task activity was stressed by the men in Antarctica. That the content or task activity appeared prior to development of a group structure might be due to the specific nature of the group assignment and to the well-defined roles of the participants, which suggest that those aspects related to the primary purpose of the group develop first. Due to the uniqueness of his group in terms of task and setting, Smith's results might not be applicable to other types of groups.

Shambaugh and Kanter (1969) described the evolution of a therapy group for spouses of patients on hemodialysis machines. A group of six spouses met weekly for a period of eight months. As observed by the group leader/psychiatrist, the stages of group development included (1) initial experience, (1) formation of the group, (3) optimism and partial separation, and (4) final stage.

The authors believed that this group was a "paradigm of the unconscious forces inherent in group structure and process" and that "the overall developmental sequence was that of the usual small group" (p.936). They did not attempt to "test" any particular model of group development; however, their observations appeared to fit the behaviors characterizing Tuckman's stages of "forming," "storming," "norming," and "performing" (i.e, dependence on leader, criticism among members, optimism, and cohesiveness). Shambaugh and Kanter did not describe behaviors characteristic of each stage clearly, which made it difficult to differentiate among them. The authors did observe, however, that their observations supported Tuckman's four-stage theory.

A second problem with this study was the introduction of new members into the group prior to the final stage, which made identification of the four stages and the characteristic behaviors pertinent to each difficult.

Lacoursiere (1974) observed stage development while using a group method to facilitate learning for student nurses involved in a psychiatric setting. The student nurses, in their twenties, single, and female (except for one male student in each of the three groups observed), worked in a state mental hospital and met as a group for one and one-half hours each week to discuss their concerns. Over a ten-week period, Lacoursiere observed four stages of group development:

- 1. Orientation, characterized by fears and anxieties and fairly strong positive expectations;
- 2. Dissatisfaction, characterized by an increasing sense of frustration, along with depression and anger;
- 3. Production, demonstrated by a more realistic appraisal of what could be accomplished; and
- 4. Termination, concerned with sadness and some self-evaluation.

Lacoursiere's four stages differed from Tuckman's in three respects. First, in stage 2, dissatisfaction, there was a lack of intragroup conflict among the student nurses. Any anger and hostility present was directed toward the hospital, the staff, and psychiatry in general rather than toward group members. Second, Lacoursiere combined "norming" and "performing" into stage 3, production, at which time students' expectations became more realistic and they desired "to learn what can be learned and to do what they can reasonably do as student nurses" (p. 348). Third, and the major difference between models, was the addition of the termination stage.

Another article dealing with the training of nursing students was one by Spitz and Sadock (1973), who observed twenty-one second-year nursing students, all white females from twenty to forty years old, using techniques such as role playing, video taping, and analysis of dreams. Spitz and Sadock categorized group life into three phases:

- 1. Stage One, characterized by anxiety, guardedness, dependency, and a mixture of curiosity and confusion:
- 2. Stage Two, the period of beginning trust, cohesiveness, interdependence, and group interaction;
- 3. Stage Three, the final phase of disengagement, anxiety about separation and termination, and positive feelings toward the leader.

Stages one and two contain elements of Tuckman's "forming" and "norming" stages, respectively. Tuckman's second stage, "storming," has for the most part been eliminated. Although Lacoursiere's group demonstrated anger and hostility toward an outside force, Spitz and Sadock's group appeared only to touch on themes of anger and discontent in their group discussions. It is of significance that neither student-nurse group demonstrated noticeable characteristics of intragroup conflict. Possibly, the close association experienced by student nurses unites them in a cohesive, personal group. Also, the group's composition – overwhelmingly female – might be a factor, as women have traditionally been socialized to be more passive and trusting. Spitz and Sadock also observed third-year medical students and found them to be more guarded and more "overtly hostile." Group composition, therefore, may be one of the variables that influence appearance of stages in the development process.

A second variation in Spitz and Sadock's model, which also was found in the Lacoursiere model, was the addition of a stage concerned with termination and separation, a significant departure from the Tuckman model.

Braaten (1975) compiled an interesting review of fourteen models of the developmental stages of groups. Several of the more recent models not reviewed in the 1965 Tuckman article demonstrated a

resemblance to his four-stage model. For example, Yalom(1970) presented a four-stage model, including an initial phase of orientation and hesitant participation; a second phase of conflict, dominance, and rebellion; a third phase of intimacy, closeness, and cohesiveness; and a final phase of termination (differing from Tuckman).

Braaten presented a composite model of fhe fourteen theories and also set forth his own model. His composite model outlined the three stages identified by Tuckman as "forming," "storming," and "performing" (which incorporated "norming") and added a final stage of termination. Braaten's own model followed the composite model fairly closely:

- 1. Initial phase lacking in structure;
- 2. An early phase characterized by hostility and conflicts between subgroups;
- 3. The mature work phase in which norms are resolved and interdependency and trust formation are apparent;
- 4. Termination, concerned with disengagement and ending.

Braaten concluded, as did Tuckman, that there appeared to be substantial agreement among authors on the aspects of a developmental phase model, but that systematic research was needed to verify the theoretical concepts. Braaten's review of the literature suggests that empirical research in stages of small group development is sparse and inconclusive.

Only two of the journal articles reviewed substantially deviated from the four-stage Tuckman model. Dunphy (1968) conducted an empirical study of the developmental process in self-analytic groups (therapy and T-groups). He observed two sections of a Harvard Social Relations 120 course for a period of nine months. Through the use of a computer system of content analysis, Dunphy identified six development phases for the group:

- 1. Maintenance of external normative standards;
- 2. Individual rivalry;
- 3. Aggression;
- 4. Negativism;
- 5. Emotional concerns;
- 6. High affection

Individual rivalry, aggression, and negativism parallel Tuckman's second stage, "storming." Emotional concerns and high affection might be viewed in terms of the "norming" stage. However, Dunphy's model does not include any stage resembling "performing." Dunphy acknowledged that his results might not be generalizable to all self-analytic groups and that further testing was needed to establish the extent of their validity.

A study by Heckel, Holmes, and Salzberg (1967) examined whether distinct verbal behavioral phases occur in group psychotherapy. Seventeen neuropsychiatric male and female patients were observed over eighteen sessions of group therapy. Verbal responses of participants were recorded and grouped according to type of response and specific category (i.e., therapist-directed response, etc.). Results revealed a significant change between the seventh and eighth and twelfth and thirteenth sessions. Therapist-directed responses were most noticeably affected, going from fifty-nine to twenty-three; group-directed response went from twenty-one to thirty-nine. On the basis of these results, Heckel et al. believed their findings were "somewhat supportive" of a two-stage hypothesis of group development. The authors did not describe characteristics of the two stages, however, nor did they attempt to propose their own theoretical model for further testing.

A second study by Heckel, Holmes, and Rosecrans (1971) employed a factor-analytic approach for analyzing verbal responses of group-therapy members. Utilizing the theory of two-stage development derived from the 1967 study, the authors rated responses from approximately thirty male neuropsychiatry patients during their second and third sessions and from seventeen of these patients during the twelfth and thirteenth sessions. The authors reported that combined results from sessions two and three indicated low group cohesiveness, high defensiveness and superficial verbal interactions and a pattern of personal and group-building responses. An obvious change had occurred by the twelfth and thirteenth sessions, but the loss of almost half the members of the group by this time also may have had an impact on changes in their

verbal response. Without observing interactions over the life of the group, the suggestion that these four sessions represent the only changes taking place seems premature.

Mann (1967) offered a third variation to the four-stage model. Through the use of factor analysis, he categorized five stages of group development: (1) initial complaining, (2) premature enactment, (3) confrontation, (4) internalization, (5) separation and terminal review. This model appears to incorporate characteristics of Tuckman's "forming," "storming," "norming," and "performing" stages with the addition of stage 5 – termination.

Braaten (1975) included an updated version of Mann's (1971) developmental model:

- 1. Dependency upon trainer;
- 2. Initial anxiety and/or resistance;
- 3. Mounting frustration, hostility;
- 4. Work phase, intimacy, integration, mutual synthesis;
- 5. Separation.

Discussion

This review of articles was undertaken to discover whether the Tuckman (1965) model of group development had been empirically tested. Only Runkel et al. (1971) set out to test this model. Their conclusions were supportive of Tuckman's four-stage model, but their results may not be reliable because of the researchers' methodology.

The bulk of the literature from 1965 to the present has been theoretical in nature; those articles describing empirical research were not primarily concerned with testing already existing models. Many of the authors described a group's behavior and offered their own models of group development, however, similar to models already described in the literature. Two studies and a review did identify termination as an important final stage overlooked by Tuckman. Braaten's (1975) review of fourteen models led to a composite model incorporating "forming," "storming," and "performing" stages and including a termination stage.

Gibbard and Hartman (1973) introduced the concept of a "life cycle" model as developed by Mills (1964). Proponents of a life cycle approach recognize the importance of separation concerns as an issue in group development. Although Tuckman saw performing as the final stage of group evolution, those who agree with a life cycle model view separation as an important issue throughout the life of the group and as a separate and distinct final stage. With a substantial amount of activity taking place in training and therapy groups in which presumably strong interpersonal feelings are developed, the "death of the group" becomes an extremely important issue to many of the group members. As a reflection of the recent appearance of studies postulating a life cycle approach (Mann, 1971; Gibbard & Hartman, 1973; Spitz & Sadock, 1973; Lacoursiere, 1974; Braaten, 1975), the Tuckman model is hereby amended to include a fifth stage: adjourning.

Conclusion

It is noteworthy that since 1965 there have been few studies that report empirical data concerning the stages of group development. It is also of interest that most authors, although writing form a theoretical framework, call for further research to verify their hypotheses. A virtually untapped field is the empirical testing of existing models of group-stage development. There is a need to supply statistical evidence as to the usefulness and applicability of the various models suggested in the literature.

A major outcome of this review has been the discovery that recent research posits the existence of a final discernible and significant stage of group development-termination. Because the 1965 model was a conceptual statement determined by the literature, it is reasonable, therefore, to modify the model to reflect recent literature. The model now stands: forming, storming, norming, performing, and adjourning.

¹ Other studies examined but not cited because of their limited relevance to the discussion are Lundgren (1971), Liebowitz (1972), Tucker (1973), and Adelson (1975).

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