4E's Socratic Model: A grounded theory for managing team creativity in an organisational context

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Chapter 3: Research Design

This chapter describes the design adopted by this research to achieve the aims and objectives stated in section 1.3 of Chapter 1. Section 3.1 discusses the methodology used in the study, the stages by which the methodology is implemented, and the research design. Section 3.2 describes the participants in the study; sections 3.3 and 3.4 list all the instruments used in the study and justify their use, and section 3.5 outlines the procedure used and the timeline for completion of each stage of the study. Section 3.6 discusses how the data are analysed and finally, section 3.7 discusses the ethical considerations of the research and its limitations.

This chapter is the start of the examination stage of the Socratic Model as it describes the process by which the data is obtained.

3.1 Methodology and Research Design

3.1.1 Methodology

Phenomenology or grounded theory? While both of these qualitative approaches have similarities in that they seek to investigate phenomena, the grounded theorist is not seeking only to reveal phenomena but to develop a theory that emerges from them (Wimpenny & Gass, 2000). Also, phenomenology only considers what people say, whereas in grounded theory, observation and published literature are also valid sources (Goulding, 1998).

Few researchers have described the best approach to the study of organisations using phenomenological techniques; however, Sanders (1982) is highly cited (Gill, 2014). She identifies four levels of analysis for phenomenological studies: description of phenomena; identification of common themes; reflection on themes,
and abstraction of the essence (the why). In addition to interviews, Sanders (1982) also advocates the use of document analysis and observation as appropriate phenomenological techniques. Sanders’ suggested approach is consistent with that of grounded theorists.

I used a grounded theory methodology because it supports the development of a theory (the proposed Socratic Model) through the use of constant comparison and ongoing questioning and it is appropriate when looking for new insights into existing problems (Charmaz, 2006; Corbin & Strauss, 2015).

Grounded theory is a form of emergent inquiry in which new knowledge is created out of the ongoing interaction between researcher and participants (Keegan, 2009). Charmaz (2006) points out that grounded theory encourages early analysis of qualitative data, which stimulates new questions and leads the researcher on new paths not necessarily exposed in a traditional literature review. This is a key advantage of the methodology, as the use of a Socratic approach to managing creativity in organisations has not been comprehensively explored. This means that the development of a new theory grounded in data will provide a base for further examination. A constructivist approach was also taken because it allows the researcher to be an active participant (Conlon et al., 2013), which in this case was as a facilitator.

Data in a grounded theory study doesn’t just come from what people say, it also comes from the context in which they say it and the social interactions that are a part of it (Charmaz, 2006). This is critical for this study, as individuals are not being studied in isolation. The essence is to examine how a group of individuals working as a team come to a creative solution to a problem. This suggests a constructivist
process in which knowledge is socially constructed and comes from shared meaning. (Williamson, 2006; Pouliot, 2007).

The coding process that is at the core of a grounded theory study allows ongoing comparison and analysis that enables future data gathering to be adjusted (Charmaz, 2006; Hallberg, 2006). Coding begins immediately so that specific phenomena are identified in order to see if they reoccur (Clarke, 2003).

A common criticism of grounded theory is the potential for a lack of rigour (Chiovitti & Piran, 2003). To avoid this, Beck (1993) proposes three criteria (credibility, fittingness, and auditability) that can be used to establish rigour. Based on Beck’s suggestions, rigour in this study is established in three ways: Firstly, credibility comes through agreement from participants that results reflect their experience and accurately describe the outcomes from the session. Secondly, fittingness is achieved by checking that findings are consistent across all the groups under study. And thirdly, auditability comes via the production of detailed field notes immediately following each session.

### 3.1.2 Research Design

Using a grounded theory methodology allows the use of multiple sources of data (Charmaz, 2006; Corbin & Strauss, 2015) from which the theory is developed. Data gathering methods used were:

- Workshops conducted in a real-world setting, which examine a question of interest to the subject organisation using the proposed Socratic model.
- Questionnaires given to each participant exploring their perceptions of creativity as it relates to themselves and their organisation.
- Observations during each workshop
• Seminar to gather feedback from managers on the final model developed over the course of the study.

The use of workshops allowed the model to be tested using a real dialogue. The original conception of the model itself arose out of the literature review but in order to develop theory from its use, it had to be applied to a real situation. It also allowed the researcher (as facilitator) to be both an observer of the social interplay and a participant in the process in order to identify issues with both the structure and application of the model.

The use of individual questionnaires was designed to produce a baseline for the level of individual perceptions of creativity and the perceived tolerance of it by both the supervisor and the organisation itself. This was used to gain insight into how creativity is viewed in each organisation and how that might influence the results that were obtained. The data would also be valuable during implementation of the Socratic model in an organisation over time to measure the effect it had on people’s perceptions and to highlight any operational issues.

Questions were based on Amabile et al’s (1996) perceptual model of creativity that used five categories of question: encouragement, autonomy, resources, pressures, and organisational impediments. The questionnaire was designed in two parts, the first to establish a baseline as described above and the second, administered after the workshop was designed to capture individual perceptions of the process itself.

The third method, observation, came from notes made by the facilitator during each workshop combined with the qualitative responses from part B of the
questionnaire. These two sources created the data from which the grounded theory was developed.

The fourth method was a seminar with managers from different organisations to present the model developed from the theory to establish whether they felt it had the potential for real-world application.

### 3.2 Participants

Seven participating organisations were self-selected based on responding to a message sent to 311 business contacts on LinkedIn. This method of selection was chosen because of the level of trust required of organisations in sharing confidential data. As I was a known quantity to all of the managers responding it removed any potential uncertainty.

The seven organisations operated in a range of different industries. This helped minimise the likelihood of any contextual bias. Industries represented were: market research, engineering, education, local government, medicine, psychology, and an industry association. The number of participants in each organisation ranged between 3 and 5 with a total number of 29 individuals.

I chose to use multiple organisations to ensure that results were transferable, which is preferable when dealing with a broad-based phenomenon (Yin, 1981). It is also appropriate in building a grounded theory that will be extended as the study proceeds (Benbasat, Goldstein & Mead, 1987).

While single industry studies are common because they allow more environmental control (Dobni & Luffman, 2000), the aim of this study was to develop a model that has more universal relevance (Romaniuk & Sharp, 2003). The
eventual number of organisations participating was determined by the saturation point that comes when no new themes emerge (Corbin & Strauss, 2015).

3.3 Instruments

3.3.1 Workshop template

Each workshop was conducted using the Socratic Dialogue Model outlined in Figure 2.9.

3.3.2 Interview record

In the first workshop participants were interviewed using the first three sections of the record of interview presented in Figure 3.1. The final section was used during follow-up interviews with each participant.

Figure 3.1.

*Interview Record*

<table>
<thead>
<tr>
<th>Interview Record</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 1: Tasks requiring creativity</strong></td>
</tr>
<tr>
<td><strong>Topic</strong></td>
</tr>
<tr>
<td>Incidence of creativity in the respondent's department</td>
</tr>
<tr>
<td><strong>Section 2: Leader-member exchange</strong></td>
</tr>
<tr>
<td><strong>Topic</strong></td>
</tr>
<tr>
<td>Working relationship between leader and member</td>
</tr>
<tr>
<td><strong>Section 3: Support for creativity</strong></td>
</tr>
<tr>
<td><strong>Topic</strong></td>
</tr>
<tr>
<td>Existence of conditions under which creativity might flourish</td>
</tr>
<tr>
<td><strong>Section 4: Creative self efficacy</strong></td>
</tr>
<tr>
<td><strong>Topic</strong></td>
</tr>
<tr>
<td>Level of confidence in ability to be creative</td>
</tr>
<tr>
<td><strong>Section 5: Follow-up interview</strong></td>
</tr>
</tbody>
</table>
The remaining workshops used a written questionnaire to overcome restrictions in data gathering that arose from the first workshop (see Appendix 5).

3.4 Data Collection

Workshops were conducted with teams in seven organisations. In the first organisation the Socratic Model developed from the initial literature review was used to ensure it was understandable and workable in real life and to provide a benchmark from which to develop the grounded theory. Following this, teams from six additional organisations were chosen. Team size ranged from seven members to three and the organisations were a mix of profit and non-profit.

3.5 Procedure and Timeline

1. Organisations responding to my initial request were given an outline of the study (Appendix 4) and an appointment was made to conduct the Socratic workshop.

2. A follow-up telephone interview was conducted with the team leader to discuss the question they wished to consider in the workshop.

3. An initial workshop was held to expose any operational issues that might arise and to allow time for any required research or adjustments.

4. The remaining six workshops were held between February and December 2014.

5. A seminar with three managers was held (May 22, 2015) to gather feedback on the final model.

3.6 Analysis

Data comprised:

- Questionnaires completed by participants during the workshops.
• Written minutes of each workshop recording the process and discussion.

• Information relevant to the substantive area obtained from public records.

The sources of data are consistent with Corbin and Strauss’s (2015) view that all forms of data are (both qualitative and quantitative) are appropriate in grounded theory and that data collection and analysis should be ongoing.

Data was analysed first using open coding to identify concepts and then compared for similarities and differences (Corbin & Strauss, 2015). The resulting lower-level concepts were then divided into categories to identify major themes, as recommended by Corbin and Strauss (2015). During this process a series of memos were written (see Appendix 6) to record the theory as it developed.

### 3.7 Ethics and Limitations

All participants were given a plain language statement and signed a consent form. At no time during the research were names or other individual identifying data recorded. Questionnaires were anonymous and were not shared with the organisations involved. Ethics clearance was granted for this research.

There were two limitations that could affect the validity of the results. The first was that the organisations participating were self-selected and while they came from a variety of industries there is the potential that their proactivity made them more open to creativity and therefore more actively engaged. The second limitation was that of access. The data gathered was based on a single session with each organisation and a single questionnaire that was completed by participants before and after that session.

However, the objective of the research was to develop and test a model that could be used to produce creative outcomes in teams and the objective was that each
workshop be concluded with a satisfactory outcome (as recognised by the participants).