GENERATING CREATIVE IDEAS AT WORK: A QUALITATIVE STUDY OF AN ADVERTISING AGENCY AND A STATE REHABILITATION AGENCY

DISSERTATION

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By

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ABSTRACT

This qualitative research study involved interviews with respondents from a mid-west Advertising Agency and a mid-west State Rehabilitation Agency and examined individuals’ stories of successful and unsuccessful attempts of using creativity at work. Creativity was defined in this study as a novel product, service, or process which successfully addressed a work-related problem. This study differed significantly from the existing creativity research literature by addressing a lower level of creativity, addressing failed attempts at creativity as well as successful ones, and addressing how individual-based creativity unfolds in an organizational context.

One finding of this study is that, in both organizations, co-workers were more likely to dispute the creativity of another person’s idea or product than to dispute the effectiveness of that idea or product. A second major finding is that the respondents described themselves as collaborating with others within and outside the organization to craft and implement their creative ideas.

Organizational-level factors have a greater impact on idea generation and the creative process at work than individual-level factors. The most common organizational-level factors attributed with hindering creative efforts were workload, the goals/type of organization, and organizational features including formalization and production.
Dedicated to my family
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CHAPTER 1

INTRODUCTION

Organizations benefit from individual creativity in a variety of ways. Organizational members are, in general, more satisfied with their jobs when they can share their ideas with co-workers and superiors (Albrecht & Hall, 1991a; Hurt & Teigen, 1977; Jablin, 1987), and believe that their creative efforts will be valued and rewarded (Amabile, 1988; Woodman, Sawyer, & Griffin, 1993). Individual creativity has also been linked with an organization’s success as measured by productivity and profits (Van de Ven, Angle, & Poole, 1989). Particularly in fast-paced industries, such as advertising or the technology sector, creativity is a crucial component in an organization’s ability to innovate and survive (Angle & Van de Ven, 1989; Castells & Hall, 1994).

Innovation is essential for the long-term survival of organizations and innovation requires individual creative action (Ford, 1996; Scott & Bruce, 1994). Individual creativity and organizational innovation are consanguine processes (Amabile, 1988; Woodman, et al., 1993). The ideas developed and implemented as innovations begin as the creative ideas of individuals. Organizations should, therefore, be keenly interested in encouraging the creative efforts of their members, as the increased quantity of ideas is

Existing interaction psychology models of creativity (Amabile, 1988; Woodman et al., 1993) depict factors in the situation and the individual as combining to influence creative outcomes. The process model of creativity applied here (Stein, 1974) assumes that creativity germinates and is initiated by an individual operating in a specific domain. The creative process then becomes primarily a decision making process, which has been characterized as consisting of idea generation, development and implementation (Amabile, 1988; Scott & Bruce, 1994; Van de Ven, et al., 1989). The initial individual choice to pursue a creative idea is based on a combination of individual factors (e.g., personality, knowledge and experience), situational factors (e.g., type of task, time constraints), and organizational attributes. Organizational attributes include such factors as centralization of decision-making and amount of program change typically experienced in the organization (Hage & Aiken, 1970).

The central contribution of the research study presented here is to describe the emergence of creative ideas and to test individual’s accounts of both successful and unsuccessful attempts at creativity at work using Stein’s (1974) process model of creativity. The stories of creativity are analyzed and coded for constraints and enabling factors relevant to the initiation of the creative process, factors based on the extant organizational creativity literature.
Definition of Creativity

Creativity has been viewed from three perspectives: as an attribute of a person, as a product, and as a process. One person-based definition of creativity defines the construct as “the constellation of personality and intellectual traits shown by an individual who, when given a measure of free rein, spends significant amounts of time engaged in the creative process” (Findlay & Lumsden, 1988). The product view of creativity has dominated the literature because it seems the most conducive to empirical study (i.e., can be measured more easily) and theory development (Amabile, 1988; Ford, 1996). Creativity can be defined from a product perspective as the production of novel, useful ideas, products, processes, or services (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Ford, 1996). This definition includes situations in which existing resources are recombined into a new form of product or service (Albrecht & Hall, 1991a; Van de Ven et al., 1989).

Stein (1974) argues that the creative process occurs in the mind of one person, and is impacted by a social context. Creativity has also been described from a process perspective as “the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of his life on the other” (Rogers, 1954). Drazin, Glynn, and Kazanjian (1999) present a process model of organizational creativity that includes individual sense making and a collective negotiated belief structure. They define individual-level creativity as “the engagement of an individual in a creative act” (Drazin, et al., 1999, p. 290). The process of creativity must result in a product, be it successful or unsuccessful.
Stein (1974) describes creativity as a process that “results in a novel work that is accepted as useful, tenable, or satisfying” (p. xi).

While I acknowledge the value of the product-based definition, especially in testing relationships between creative outcomes and different variables, I choose to adopt the process perspective. Unlike the product-based definitions that lead to static models, a process perspective enables the exploration of how the process of creativity unfolds over time in the organizational context (Drazin, et al., 1999, p. 289). The process is not orderly, and the stages can overlap or occur at different times and may be repeated as necessary. Therefore, linear models do not adequately describe the actual process of individual-based creativity. The model of the creative process applied in this research study consists of the phases of hypothesis formation, hypothesis testing and the communication of results (Stein, 1974).

Creativity emerges within a specific context (Rogers, 1954). Creativity begins as the idea of an individual and the process of creativity is instantiated in the on-going exchange between the individual and the situation. This situation includes formal and informal organizational structures, the nature of the task the individual is engaged in, and the nature of the individual’s relationships with others in the situation.

Creativity has also been differentiated as new to society or novel innovation versus new to the specific organization, recognizing the borrowing of existing practices (Hage & Aiken, 1970). I include the use of existing products or practices in defining creativity as a product or service the individual has never used before. Stein (1974) argues that the concept of novelty is central to all definitions of creativity. Novelty that is useful or adaptive can be achieved in a variety of ways hence novelty can occur without the
creative process. For example, a novel solution may be arrived at through trial and error or serendipity. Novelty can be regarded as “a measure of the ‘distance’ between that which is developed and that which exists” (Stein, 1974, p. 6).

**Levels of Creativity**

Investigators studying creativity have differentiated between degrees of creativity (Stein, 1974). Lacklen and Harmon (1958) define creativity in terms of the “breadth of applicability” of a person’s work and provide a 15-point scale for rating it. Ghiselin (1963) has distinguished between creative action of a “higher sort” and creative action of the “lower sort” (p. 42). According to Ghiselin, creative action of the “higher sort” alters the “universe of meaning” in a specific domain, by introducing into it some new element of meaning or some new order of significance. He defines creative action of the “lower sort” as that which “gives further development to an established body of meaning through initiating some advance it its use” (Ghiselin, 1963, p. 42). It is this lower sort or “everyday” or “grassroots” creativity (Torrance, 1995) which is the focus of the present work.

Stein considers the various processes that, while not creative, do result in novelty as “sub-cases of the more general case of creativity” (1974, p. 34). These processes include trial and error, serendipity, inventiveness and discovery. Stein argues that the characteristics that distinguish creativity from these other processes are that the individual “draws more heavily on his (or her) own resources”, it is more of an internal process than the other “sub-cases”, and it also involves more distance between the
solution and the status quo (1974, p. 34). Stein states that, the creative process “involves a greater leap into the unknown, a leap that results in a high degree of meaning and significance” (1974, p. 34). The “meaning and significance” may be ascertained in a variety of ways, but one popular method is the “test of time”, like the music of Chopin or the art of Claude Monet.

**Novelty and Creativity**

Labeling an idea or solution as “novel” involves an assessment based upon a particular culture and domain-based criteria. For example, the Nobel Prize is typically awarded to those individuals in the physical sciences who have not only generated creative ideas but who have produced working models applying those ideas. Stein posits that “the kinds of persons who are valued for creating novelty also vary as a function of cultural characteristics” (1974, p. 35).

Criteria used to distinguish “creative” ideas and products from non-creative ones include generally acknowledged creativity, representation in secondary sources, expert judgment, the quantity of creative products produced, and psychometric tests. These criteria do not address creativity as a process but rather focus on the product of that process.

The “generally acknowledged creativity” criterion is based on the significance of a work over time and the perception of the creativity of that work. In applying this criterion the investigator uses a case study technique, gathering information on the individual’s life and the factors affecting creative production (Stein, 1974, p. 40).
Examples include Freud’s (1948) analysis of da Vinci and Wertheimer’s (1945) analysis of Einstein. Although this technique has yielded valuable insights and the identification of factors, it is limited by not only the lack of generalizability but also the “test of time” standard which may mean that such individuals are not eligible until after they are deceased. This necessitates the reliance on secondary sources, and the investigator must cope with the subjective nature of those accounts. For example, one might describe a certain painter as a creative and precocious child when in fact there seemed nothing particularly noteworthy in that child at the time. Having that individual identified as a “creative genius” of some sort casts a strong Pygmalion effect. The investigator often supplements these account with public records when possible.

The criterion of representation in secondary sources involves starting with a significant secondary source such as a “Who’s Who” of an area of specialization. A major work that demonstrates this technique is Galton’s (1870) “Hereditary Genius”. To select his subjects Galton used a variety of domain specific secondary sources including Foss’s “Lives of the Judges” for judges, and biographical dictionaries for samples of scientists and literary individuals.

The criterion of “expert judgment” involves the use of the assessments of experts or “other individuals deemed capable of evaluating the individuals in the study” (Stein, 1974, p. 43). These individuals may include managers in an organization, veteran scientists, educators, or the researcher and his or her trained staff. Examples of the use of this criterion include the work of E. Paul Torrance (1995) in researching creative potential in school-age children and Mackinnon (1961) in his study of architects.
Quantity or products was used as a major criterion of creativity by Rossman (1931) in his study of inventors, which also included a kind of expert judgment as he focused on individuals that held patents. Therefore, he not only counted the number of patents attributed to the individual, he relied on the judgment of the patent office upon the novelty and usefulness of the work.

The criterion of psychometric tests is illustrated by Guildford’s (1967) tests based on his theory of the structure of intellect. This theory identified many distinguishable abilities which have been found to be relevant for creative performance and the abilities central to that creative performance are identified as “divergent production” abilities and “transformation” abilities. The category of abilities known as “divergent production” comprises the abilities to generate ideas especially in relation to problem-solving, and the abilities that are characterized as “kinds of fluency” including mental flexibility and elaboration (Guildford, 1967, p. 8). Guildford (1967) states that the “varieties of abilities within the DP category depend upon the kind of information with which the person is dealing” (p. 8). This suggests that creative talents depend upon the media in which the individual is working, such as working with music composition as opposed to architectural drafting.

The second category is that of “transformation” abilities which addresses one’s ability to draw upon their knowledge and experience and revise the existing knowledge and previous experience to create new forms and patterns. Guildford (1967) posits that “readiness to be flexible” (p. 8) is a general characteristic of this category of abilities. Parallel with the DP category, the variety of transformation abilities depends upon the
medium in which the creating individual is working, and may result in reinterpretations or reorganizations.

The criterion applied here is self-assessment critiqued by expert judgment in the form of a confederate. I argue that using self-report of creative ideas is valuable because individual perceptions’ of creativity and one’s willingness to share those creative ideas is central to this work. The confederate interviews indicate that not all self-proclaimed examples of creativity are in fact creative meaning the central concept of novelty has not been met.

**Purpose of the Study**

In this present work I describe the process of creative idea germination and the initiation of the creative process, focusing on the constraints and enabling factors. I have administered an interview instrument to subjects at two different organizations, which was designed to elicit detailed accounts of successful and unsuccessful attempts at individual creativity at work. The results have been tested through comparison with Stein’s (1974) process model of creativity. The research study presented here is a case-study based on individual stories of successful and unsuccessful attempts at creativity at work. The results of this present work may be used to address the initiation of the process of creativity in an organizational context empirically in future work.

While a few studies have addressed organizational factors that encourage or enable the development and implementation of creativity (Amabile et al., 1996; Amabile, 1988) impediments to creativity have received scant attention (Woodman, et al., 1993). Many questions have been left unanswered in the current research literature. For example, what
do creative individuals identify as impediments to creativity at work? Are organizational features/structures greater constraints than individual factors? How might individual actions create or reinforce constraints on individual-based creativity?

**Value of the Research Study**

The value of this research study is that it helps us to better understand how individual creativity in a professional organizational context is enabled and constrained. The research presented here describes how quality work based on creativity is linked to certain enabling and constraining factors in the organizational context that impact the generation of creative solutions. The potential significance includes demonstrating the value of individual creative efforts to consumers and, over time, to the overall success of the organization. The standard approach to handling a particular task (e.g., vocational assessment, preparing a media product, or creating an advertising campaign) may not allow for rapid changes in the context of the arena of action, and may not adequately address all aspects of a particular case. The use of individual creativity in carrying out assigned tasks represents an important potential avenue of improving service to consumers (i.e., those served by the organization).

The strategic change model of organizations hinges on creativity (Burns & Stalker, 1969). The dilemma of industry’s need for creativity and innovation and organizational need for stability has been considered in the extant literature (Stein, 1975). Organizations often quash creative ideas (Williams & Yang, 1999). People with good ideas are often not rewarded, although their ideas may represent significant potential gains for the organization (Stein, 1975). Because of the importance of organizational structure as
context in which individual action is embedded, organizational attributes (e.g., reward structures, centralization, etc.) (Hage & Aiken, 1970) have been included in the research design.

**Models of Creativity**

The process of individual creativity has been represented primarily as an activity-phase model. Scott and Bruce (1994) posit a stage model, based on an existing model by Kanter (1988), of individual creativity, that consists of problem recognition and idea generation, support seeking/securing support of an idea, and completion of the idea culminating in the production of a prototype or model. Kanter’s (1988) model addresses organizational innovation. Individual and group creativity has also been described as a five-stage process model consisting of; 1) task presentation, 2) preparation (information and resource gathering), 3) idea generation (brainstorming), 4) idea validation (checking ideas per task criteria), and 5) outcome assessment (success/ failure of solution) (Amabile, 1988). These models reflect a product-orientation, and have been used primarily to assess the creative output of organizations or large groups within organizations (Amabile, 1996; Van de Ven, et al., 1989). These phase-models identify communication activities and processes also associated with group decision making (Poole, 1983). Such models fail to account for the complexity of organizational life and the on-going interplay between contextual and individual factors.

The process of creativity has also been described as consisting of four stages: preparation, incubation, illumination, and verification (Wallas, 1926). In this four-stage model of the process of creativity the problem is investigated during the preparation stage
which also includes information gathering. In his summary of the creativity research literature Stein points out that the various descriptions of the creative process agree that the “stages” of the creative process “do not occur in a systematic and orderly manner” (1974, p. 14).

The process of creativity has received scant attention in the creativity research literature (Drazin et al., 1999). However, existing models “adopt a variance analysis framework”, focusing on context-outcomes relationships, “presuming that a creative process underlies the generation of creative outcomes” (Drazin et al., 1999, p. 290). A process model of creativity is complex and a study covering the entire process may not be feasible. I have elected to focus on the individual at work and the germination of creative ideas and the initiation of the creative process in that context.

Woodman, Sawyer, and Griffin (1993) and Amabile (1988) appear to suggest that individual and group level processes are interchangeable. Individual and group creativity are, however, two different beasts (Williams & Yang, 1999). Therefore, theories must be crafted with clear descriptions of the levels to which generalization is appropriate (Rousseau, 1985). The research study presented here centers on the individual-level of analysis and theory because it has been largely neglected in the organizational creativity research literature (Ford, 1996; Albrecht & Hall, 1991a; Van de Ven, et al., 1989).

I agree with Drazin et al. (1999) that creativity is “a choice made by an individual to engage in producing novel ideas” (p. 290), and that the level of creative engagement can vary based on the individual and the situation. This study improves our understanding of the creative process at work, in part, by drawing on a richer perspective of “the situation”
and the interaction between the individual and the confluence of factors that give rise to the generation of creative ideas.

**Model of Decision Making**

As was pointed out in the discussion of the models of individual creativity, the process of creativity is typically depicted as consisting of problem recognition and idea generation, support seeking/ securing support of an idea, and completion of the idea culminating in the production of a prototype or model (Scott & Bruce, 1994; Kanter, 1988). Scott and Bruce’s (1994) model of creativity fits exactly the existing decision-making models popular in small group research (Hirokawa, 1988; Poole, Seibold & McPhee, 1989). Models of creativity are essentially based on existing models of decision making (Poole, 1983). I argue that the initial generation of the creative idea is the core of the creative process, which then becomes largely a decision making process which reflects economic and political circumstances in the organization.

The model of decision making used as a larger framework for the model of creativity embraced here is problem-centered. The nature of the task at hand needs to be considered as a central part of the decision making process (Nutt, 2001). The present work assumes that typically decisions are made which satisfy at least “minimal criteria of acceptability” (Conrad & Poole, 1998, p. 274).
Creativity and Change

The study of creativity in the organizational context at least implicitly involves the underlying organizational dialectic of stability and change. While no single theoretical perspective can adequately explain organizational change (Hall, 1996), a specific position is implicated in the approach taken in conducting research. I have adopted the punctuated equilibrium model perspective of organizational change (Tushman & Romanelli, 1985; Gersick, 1991; Hammer, 1996). This model depicts organizations as evolving through relatively long periods of stability (i.e., equilibrium periods) in their basic patterns of activity that are punctuated by short bursts of fundamental change (i.e., revolutionary periods) (Gersick, 1991). Tushman and Romanelli (1985) posit that through incremental change and adaptation organizations elaborate structure, systems, controls and resources. I argue that the rules, resources and power structures, which directly impact creative endeavors, are also elaborated during these long periods of relative stability.

Revolutionary periods are brief periods when a system’s deep structure comes apart and these periods end when choices are made regarding how the organization should be re-formed. They vary in magnitude (Tushman & Romanelli, 1985; Gersick, 1991) and represent stressful events for organization members due to uncertainty about the future and anxiety associated with the loss of the previous deep structure. Several models of change specify that the trigger for large-scale change is a crisis, often external to the organization (Hall, 1996; Hammer, 1996).

I contend that individual-level creativity is triggered by a task-related problem or issue, not necessarily a crisis. This lower level of creativity is considered “incremental
change” or system maintenance by most organizational theories of change, and it is this “everyday” or “grassroots” (Torrance, 1995) level of creativity that has been neglected in the creativity research literature.

Contingency theory (Burns & Stalker, 1961) posits that organizations are open systems that need to effectively fulfill and balance internal needs and adapt to environmental circumstances. Burns and Stalker (1961) argue that when organizations are faced with changing technological and market conditions the appropriate response is open and flexible styles of organization and management. The flexibility stressed by the contingency approach is based on incremental on-going change. The creative ideas and actions of individuals at all levels of the organization illustrate this small-scale change (Albrecht & Hall, 1991a).

**Resistance to Change**

Kaufman (1971) has argued that several factors contribute to resistance to change, such as the collective benefits of stability or comfort with the status quo, purposive opposition to change by groups within the organization (whose resources may be threatened), and a basic inability to change related to tunnel vision.

While large-scale creative endeavors are clearly dependent upon the coordination of resources at the group and organizational-levels, small-scale creativity should be possible in almost any context. I acknowledge that the support of an “innovation champion” or “change agent” (Gersick, 1991; Van de Ven, et al., 1989) is necessary to successfully develop and implement large-scale change. However, I argue that mid-level workers in a variety of occupations have some measure of flexibility in choosing how they will fulfill
required tasks. If top management explicitly supports creative efforts, what other obstacles are most salient in one’s decision to pursue a creative idea?

The present study focused on individual creative efforts which can be described as small-scale change, referred to in the organizational change literature as “incremental change”.

Several authors make a clear distinction between the germination and generation of a new idea by an individual or group and organizational-level development and implementation (Amabile, 1988; Angle & Van de Ven, 1989; Lewis & Seibold, 1996; Woodman, et al., 1993). Stein argues that the communication of results is the only stage which involves interaction with others (1974). The products of individual creativity become innovations when they result in organizational-level change. The individual creativity, which is not intended to address an organizational-level problem, but rather addresses a problem that falls within the professional domain of an individual worker, has not been addressed. Organizational citizenship has been addressed, which refers to individuals taking up roles which are not formally assigned to them to help others in the organization (Morrison & Phelps, 1999). However, such action does not necessarily constitute creativity, just as not all problem solving is creative, although some problem solving is creative.

Guildford (1967) argues that the discovery of the intellectual factors of DP and transformation abilities effectively answers the “what” part of the nature of creativity, and that through the application of these factors to specific instances of creative performance investigators should be able to answer the “how” of the nature of creativity. I argue that we lack depth of understanding regarding how the creative process occurs at
work, and therefore qualitative research such as the study presented here is needed to describe the process and the most significant enablers and hindrances, providing a different perspective for future research.
CHAPTER 2

REVIEW OF THE RESEARCH LITERATURE

The earliest research on creativity comes from Guildford (1950) based in psychology. 1950 was a major turning point for creativity research, which was spurred by WWII and the related emphasis on innovation in research and development and the cold war “contest of intellects” (Guildford, 1967). The creativity research literature is expansive, spanning work on creative potential in children (Torrance, 1964; 1995) to organizational-level innovations (Hage & Aiken, 1970).

In this chapter, studies that represent salient aspects of the creativity literature will be reviewed. The studies selected for inclusion in this review address individual-based creativity, with preference given to research on creativity in professional organizations and research focused on the early stages of the creative process. The chapter is organized in two basic levels of analysis: individual and organizational.
Individual-Level Issues

Creativity has been characterized as an individual-based phenomenon, described as a combination of reason, imagination and an appreciation for aesthetics (Runco & Charles, 1997, p. 126). The research literature on individual creativity has followed a similar path to that of the research literature on leadership in that both research literatures have initially emphasized the study of historic individuals (e.g., the great man theories), shifting to the study of individual characteristics (e.g., personality, intelligence, etc.), and finally focusing on a combination of individual characteristics and aspects of the situation.

Stein (1974) identified four key areas of creativity research: personality theories, cognitive procedures, role-playing, and altered states of consciousness. He also argues that the creative process follows a preparatory phase. I will begin with a brief review of the creativity research literature applying these categories excluding altered states. Much of the work on altered states of consciousness does not relate to the core concern of this present review, which is creativity at work.

Preparation

In summarizing the creativity research literature, Stein (1974) states that there is considerable agreement across various descriptions of the creative process that the creative individual has spent some time in a preparation phase. The amount of time spent and the nature of the preparation vary widely from extensive periods of formal training to
intensive shorter time periods of training or education in a particular area of specialization.

Knowledge and experience may be viewed as necessary for creativity or as a hindrance to creativity. The negative view of knowledge and experience suggests that knowledge of existing practices and processes in a domain may make it harder to “think outside the box” and come up with creative ideas. I argue that both domain specific knowledge and a diversity of relevant experiences (salient to the task at hand) may be positively related to successful creativity at work (i.e., creative ideas that are developed and used). An individual’s knowledge and experience are connected with the organization’s complexity (Hage & Aiken, 1970), as more complex organizations will employ individuals of greater specialization with more education and training.

Domain specific knowledge and experience and diverse experience are potential enabling factors for the generation of creative ideas. I argue that the factor of knowledge and experience is particularly important to creativity at work. The nature of the task is part of the situation faced by the individual, and the individual’s relevant experiences and knowledge play a major role in their ability to come up with creative ideas.

Autonomy is also essential for creativity and the factor of autonomy is related to the organizational-level factor of centralization. This could be measured by describing the procedures followed in a specific case and the general scope of the individual’s authority in their organizational role. Centralization can be measured as the number of procedures per company manuals or reported adherence to these rules.
Personality

Personality characteristics that have been associated with the creative individual include: a need for achievement (Stein, 1974); curiosity (Amabile, 1988); self-assertive and self-sufficient (Barron & Harrington, 1981); low on measures of authoritarian values (Stein, 1974); industrious (Barron & Harrington, 1981; Stein, 1974); independent and autonomous (Stein, 1974); constructively critical (Barron & Harrington, 1981; Stein, 1974); versatile; introverted and intuitive; and a strong sense of aesthetics (Barron & Harrington, 1981; Stein, 1974). Stein (1974) argues that the psychological factors that facilitate the creative process during the hypothesis formation stage are really a combination of personality factors and cognitive factors (p. 24-27). These are characteristics associated with that phase which has been called “inspiration”, “hypothesis formation”, and the “context of discovery”.

The phrase “constructively critical” points to a very important distinguishing factor related to the “hedonic response” and internal motivation. Basically that characteristic may be described as their dissatisfaction with merely passable existing solutions. These are individuals that feel compelled to explore other avenues in order to find a more satisfactory solution. Individuals low on measures of authoritarian values (Stein, 1974) may also be described as less formal, less conventional and less inhibited than others.

Stein (1974) argues that a key aesthetic factor enables the creative individual to select the most fruitful path which leads to a creative problem resolution. He asserts that this aesthetic factor, sometimes called the “hedonic response”, is also involved in deciding when the work is completed and when enough has been accomplished (Stein, 1974, p. 33). Stein (1974) argues that this aesthetic factor, first identified as a “hedonic response”
by Gordon (1961), may be one of the most important differentiators between the creative individual and less creative persons. Unfortunately, this important factor has proven to be illusive in research studies. The creative person selects the path or option that simply “feels” right.

Stein asserts that the creative person perceives their environment not only with their eyes but also with their whole body. He argues that the creative individual senses, feels with, and follows the lead of the stimuli in his/her problem or environment “through bodily or kinesthetic sensations” (Stein, 1974, p. 27). Stein (1974) posits that it is this capacity for attending to cues from all of the senses, this aesthetic feel that enables the creative individual to select an effective (creative) solution from available alternatives.

The creative individual is also versatile, having many interests and a diversity of experiences. Barron and Harrington (1981) posit that the creative individual has a high valuation of esthetic qualities in experience and broad interests. Intuition and openness to feeling and emotions are also typical characteristics of a creative individual. The creative individual has a strong sense of aesthetics and sees themselves as “creative”. While creative persons are typically introverted they have a strong sense of self or are “low in self-criticism” (Stein, 1974). Social interaction is simply not highly valued by such individuals. This may explain the finding that creative persons are introverted yet also dominant (Eysenck & Eysenck, 1985). Self-esteem has also been linked with divergent thinking and creative outcomes (Guildford, 1967).

Personality traits can be described as predisposing individuals to act (or avoid acting) in particular ways (Burleson & Caplan, 1998, p. 236). Hage and Aiken (1970) studied social change in sixteen welfare and health organizations. They used an existing
attitudinal measure based on two motivational orientations of pro-change (motivated by sense of values) and anti-change (motivated by self-interest) (p. 122). Hage and Aiken used this attitudinal (personality factor) measure to test the effect of job occupants’ attitudes toward change on the rate of program change (1970). They found that the structural properties of an organization had a significantly greater impact on the rate of program change than individuals’ attitudes toward change (Hage & Aiken, 1970, p. 122).

One’s attitude toward risk-taking or their willingness to challenge the status quo can be considered a personality characteristic. The risk for the individual (i.e., negative evaluation) is a key factor in the level of creativity. Greater knowledge of our confidante is hypothesized to play a role in weighing the risks associated with crafting and proposing new ideas (Albrecht & Hall, 1991a; Fidler & Johnson, 1984). New ideas are fragile, and we may fear looking foolish or unconventional.

Albrecht and Hall (1991a) studied relational conditions at work conducive to talk about new ideas, in a radiation oncology department and at an elementary school. The contact's influence, credibility, trustworthiness, and supportiveness of new ideas were dependent variables. Study one found approximately two-thirds of the relationships where new ideas were discussed were multiplex, meaning that topics of talk consisted of three content areas (work, new ideas, and personal). New ideas were discussed with contacts that were perceived as more credible, influential, trustworthy, and supportive of their new idea. The second study found that, while multiplex relationships including friendships were in the minority (n = 7, .07%), they provided the most positive environment for talk about new ideas.
Self-perceptions as well as the role (s) that co-workers cast us in may influence our willingness to risk verbalizing a new idea. New ideas evoke feelings of uncertainty in individuals because they “represent disturbances to familiar routines, carefully constructed relationships, political turf, and job security” (Albrecht & Hall, 1991b, p. 537). The uncertainty and risk associated with an innovation are managed by drawing on co-workers to define a socially acceptable interpretation (Burt, 1989).

Applying a social psychology perspective, Torrance (1962) studied how teachers in elementary schools regard creative students, using Guilford-like tests to measure creativity. He found that their ideas were considered wild or silly and that such creativity was denigrated. In a similar study, Torrance (1995) compared students across cultures, involving Germany, India, Greece and the United States and found consistent undue punishment of a lack of conformity which might be described as creativity. These studies demonstrate the very real penalties and risks faced by the creative individual.

**Personality and Cognitive Ability Measures**

Data on personality characteristics has been gathered using a variety of psychological tests and procedures including “life history questionnaires” and “both objective and projective types of psychological tests” (Stein, 1974, p. 61). A classic example of the “life history” case study technique is Galton’s (1869) studies of men of genius, studies which are the commonly accepted beginning of the creativity research literature. Galton focused on the hereditary determination of creative performances. Guildford (1967) argues that Galton did not seriously attempt to understand the mental operations by which
distinguished leaders produce their novel ideas and that he failed to produce irrefutable
evidence of the intra-personal source(s) of creativity.

The measures Stein (1974) has termed “objective” tests of personality are comprised
of closed-ended questions, which yield a sum that indicates if the respondent possesses
the specific personality characteristic that measure is designed to address. Such an
instrument may address one specific characteristic or several such as the Myers-Briggs
Type Indicator or Guilford’s tests (Guilford, 1967). The Myers-Briggs Type Indicator
is based on Jungian personality theory. The scale measures four bipolar dimensions:
Thinking-Feeling, Sensing-Intuiting, Judging-Perceiving, and Extroversion-Introversion.
The MBTI has been used as a creativity indicator with the Feeling/Intuiting/Perceiving
/Introversion type identified as most creative.

The “projective” personality test consists of “unstructured stimuli” such as inkblots
(e.g., the Rorschach test) or pictures of social situations (e.g., the Thematic Apperception
Test). Torrance (1995) has used a version of “unstructured stimuli” in his tests of the
creative potential of children having the children draw their notion of what kind of
creature would have feathers and live underwater or something similar, pairing two
opposites.

Several scholars have examined different personality factors, attempting to establish a
list of such factors that positively correlate with creativity. These studies reveal attributes
which can be identified in an individual. However, the identification of such attributes
has not been found to predict creative behavior.

The focus of this present study is the generation of creative ideas and factors that may
enable this creativity, not a list of personality factors, as lists of such factors have been
addressed in previous research (e.g., Barron & Harrington, 1981; Della & Gaier, 1970). I agree with the claim that certain personality types are more likely to pursue creative ideas and in my future work a valid instrument such as the MBTI may be combined with measures of creative process.

**Cognitive Procedures**

Guildford addressed the self-initiation of ideas or creativity and cognitive factors related to that creativity (1967). Guildford and his associates (1967) conducted research which focused on the intellectual qualities that might contribute to creative thinking and creative performance applying multivariate methods of factor analysis. Guildford and his associates also put forth the view that creative talents are not confined to a “favored few” but are widely distributed to different degrees throughout the population (Guildford, 1967, p. 7).

Guildford’s (1950) pioneering work on “divergent thinking” suggests that a certain mode of thinking, one that breaks away from previously established ideas, is necessary for creativity to occur. Guildford formulated a general theory of intelligence and its components known as the “structure of intellect”. Intelligence is not synonymous with creativity, although intelligence or IQ does appear to set an upper limit on creative potential (Guildford, 1967). Only in the lower IQ range is there a clear correlation between measures of intelligence and measures of creativity. In the upper range of IQ the correlation drops to zero, meaning that while creativity requires a certain level of intelligence, a higher IQ does not guarantee creativity.
The “structure of intellect” theory identified several distinct abilities which are especially relevant for creative performance. These abilities were organized under two categories. The first category is “divergent production” (DP) abilities, and it includes the abilities to generate ideas especially in relation to problem solving, and abilities that are characterized as types of fluency including mental flexibility and elaboration.

Fluency is largely a matter of information retrieval. Carrol (1985) argues that the key factors related to idea production are associative fluency, fluency of expression, figural fluency, ideational fluency, speech fluency, word fluency, practical ideational fluency and originality. Guildford (1967) states that, the varieties of abilities within the DP category depend upon the kind of information with which the person is dealing or “upon the media in which the person is working” (Guildford, 1967, p. 8). For example, one may work with lines and colors, sounds, or words.

The second category is that of “transformation” abilities which pertain to revising existing knowledge to craft new forms or ideas. Mental flexibility or the individuals “readiness to be flexible” is a general characteristic of this category. As is the case with the DP category, the variety of transformation abilities is contingent upon the media with which the creating individual is working. Guildford (1967) argues that the discovery of these intellectual factors effectively answers the “what” part of the nature of creativity, and that in applying these factors to operations performed by the creative individual researchers will be able to answer the “how”, to look at the process of creativity via the lens of research inquiry. Guildford’s tests have had a tremendous impact on the study of creativity and have been used to identify creative individuals and to measure the effectiveness of programs designed to stimulate creativity.
Training organizational members in creative thinking has been hypothesized to increase creative output (Basadur, Wakabayashi, & Graen, 1990) although there is no consistent evidence to support this conclusion in real-world organizations. A cognitive-perceptual style that is adept in comprehending complexities and able to maintain flexibility during problem solving (Amabile, 1988) is argued to be most conducive to creativity at work.

Divergent thinking is a major focus in cognitive-based explanations of creativity (Guilford, 1983). However, a wildly creative person may come up with fantastic ideas which may be impractical. Therefore, one must successfully employ a combination of divergent and convergent thinking to generate useful creative ideas (e.g., products and services) (Van de Ven, Angle, & Poole, 1989; Woodman et al., 1993).

**Role Playing**

Role-playing is an exercise where an individual, or group of individuals, are asked to pretend and take on the role and feelings of another. Barron and Leary (1961) studied the affect of role-playing on changing creativity with students at the Rhode Island School of Design. Twenty pairs of juniors were matched on faculty ratings for creativity. The groups were studied on a variety of tests, including Barron tests for originality, independence, and preference for complexity; the Levinson revision of the Adorno F-Scale (a measure of authoritarianism); and the Guilford Plot Titles Test. The students were divided into two groups. One was asked to “play the role of an extraordinarily original and creative person” and the other group was asked to “play the role of a highly intelligent (authoritarian) person” (Leary, 1964, p. 98). Two tests were administered to
both groups. The first test was Barron’s test of originality, and this measure had been
given to them previously. The second test was Guildford’s Unusual Uses Test.

The student group that had assumed the creative set did better on thinking up ideas on
the Guildford Unusual Uses Test. The intelligent-authoritarian group scored lower on the
Barron tests than they had previously on the same tests before assuming their assigned
roles. The creative group had higher scores on this same test. Role-playing is primarily
associated with the idea-generation or hypothesis formation stage of the creative process.

<table>
<thead>
<tr>
<th>Individual-level Factors*</th>
<th>Enabler/Positive</th>
<th>Hindrance/Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and Experience (Stein, 1974;</td>
<td>Diverse experience and domain-specific knowledge (5 years)</td>
<td>High in experience but inflexible or inexperienced and overwhelmed</td>
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<tr>
<td>Barron &amp; Harrington, 1981)</td>
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<tr>
<td>The “hedonic response” (Stein, 1974;</td>
<td>Aesthetic factor/ capacity for attending to cues from all senses</td>
<td>Lack of/ Atrophy of Aesthetic ability</td>
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<td>Gordon, 1961)</td>
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<tr>
<td>Cognitive abilities “divergent</td>
<td>High in DP and or transformation abilities</td>
<td>Low in DP and or transformation abilities</td>
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<td>production” (DP) abilities &amp;</td>
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<td>“transformation” abilities (Stein,</td>
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<td>1974; Guilford, 1950)</td>
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<tr>
<td>Self-perception – (Albrecht &amp; Hall,</td>
<td>Sees self as a creative person</td>
<td>Defines creativity narrowly – for “those” people (artists, etc.)</td>
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<td>1991b, Stein, 1974).</td>
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<td></td>
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<tr>
<td>Personality: (Stein, 1974; Barron &amp;</td>
<td>Need for achievement, low on measures of authoritarian values, industrious,</td>
<td>High on measures of authoritarian values, anti-risk taking/change</td>
</tr>
<tr>
<td>Harrington, 1981; Albrecht &amp; Hall,</td>
<td>independent &amp; autonomous, constructively critical, pro risk-taking</td>
<td></td>
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<tr>
<td>1991a; Fidler &amp; Johnson, 1984)</td>
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Table 2.1: Enabling and Hindering Individual-Level Factors
Summary

Stein argues that within both the intrapersonal processes and the interpersonal processes there are factors that “might have stimulated and facilitated or blocked and inhibited the course of the creative process and the development of the creative product” (1974, p. 13). The individual factors reviewed here may be considered enablers or hindrances to the creative process. Table 2.1 shows the factors reviewed here and categorizes each as an Enabler/Positive or Hindrance/Negative. Obviously some items can be both, and the individual circumstance must be taken into consideration in order to determine if a specific factor is a hindrance or an enabling factor in that situation.
Organizational-Level Issues

The organizational-level issues of central importance to the study of creativity in organizational contexts that will be reviewed here are: type of organization, the goals of the organization, the organizational features, the climate of the organization, and inertia and communication. Each of these factors will be addressed and the research findings pertaining to each will be summarized.

Type of Organization

Albrecht and Hall have argued that the frequency of talk about new ideas is tied to the type of organization and/or industry involved (1991a, 1991b). Albrecht and Hall’s (1991a) study of a cancer unit showed a fourth of all talk pertained to innovation, while a second study focused on elementary teachers found they discussed innovation/new ideas at least twice (within two weeks) in only 17% of all included relationships. While talk about new ideas may be less frequent in traditionally bureaucratic institutions such interaction does occur, and its importance to organizational members can only be assessed through further investigation.

The bulk of creativity research has been done on R&D organizations or special project teams (Allen, Lee, & Tushman, 1980; Amabile, et al., 1996; Amabile, 1988; Andrews, 1979; Payne, 1990). For example, Amabile (1988) interviewed R&D scientists from over 20 companies (n = 120), and Amabile et al. (1996) administered a “climate for creativity” questionnaire at several organizations including biotechnology, electronics and
pharmaceutical companies and traditional R&D organizations. While I acknowledge the value of examining creativity in a context where it is explicitly part of organizational and individual task goals, creativity can occur in any organizational context. By focusing on people whose explicit job duties include creativity we miss the situations in which creativity is spontaneous.

The range of types of organizations found in the private and public sectors are not adequately represented in the creativity literature (e.g., social service, media organizations, manufacturing, financial services, transportation, etc.). As Burns and Stalker (1961) point out, the organizational flexibility represented by small-scale change (e.g., individual creative behavior) is important in any organization.

**Goals of the Organization**

The strategic choices made in the establishment of an organization are the initial constraints placed on actions occurring in the domain of that organization. In his extensive review of government agencies, Wilson argues that the actions of rank-and-file employees are based, in part, on “the array of interests in which their agency is embedded, and the impetus given to the organization by its founders” (2000, p. 27). Organizations are created and “planned to accomplish specific objectives” (e.g., the care of patients, the manufacture of products, and the education of children) (Hage & Aiken, 1970, p. 7).

All organizations have a strategy for organizing their activities, often applying more than one strategy (Conrad & Poole, 1998). Conrad and Poole have argued that strategies “create particular kinds of organizational situations” (1998, p. 9). A continuum of these
situations might be anchored on one end by simple situations and anchored on the other by “paralyzing situations” where “the guidelines and constraints are clear but the resources available to meet them are unclear, unknown or insufficient” (Conrad & Poole, 1998, p. 10). The majority of the work situations employees’ face would be located in the middle of such a continuum, providing a range of options that may forward the goals of both the individual and the organization. To the extent that the guidelines are clear and resources are available to meet the goals of creative action, creativity may be enabled by the existing goals of the organization. To the extent that guidelines and constraints are not clear or resources are not available creativity will be constrained.

The task itself is also important in addressing the process of creativity. Assigned tasks are domain specific and support the larger organizational-goal(s). For example, the hospital patient in-take process is part of the larger goal of providing care to patients. The domain in which “problem finding” takes place is an important part of the context (Jay & Perkins, 1997, p. 262).

**Organizational Features**

In their study of social change in sixteen social welfare and health organization, Hage and Aiken (1970) focused on the structural attributes of the organization and on program change which they defined as “the addition of new services or products” (1970, p. 13). Hage and Aiken (1970) found that structural properties were more significant in terms of predicting the rate of program change than were the attitudes of organization members. They argued “the structure of an organization may be more crucial for the successful
implementation of change than the particular blend of personality types in an organization” (p. 122).

**Centralization**

An organization is highly centralized if only a few decision makers at the apex of the organization have the power to initiate new programs, allocate funds, promote personnel, etc. (Hage & Aiken, 1970). Centralization is about control, and tight control is detrimental to creativity (Nutt, 2002; Van de Ven, et al., 1989).

The degree of participation in organizational decision-making has been used as a measure of centralization (Hage & Aiken, 1970). In their study involving social welfare and health organization, Hage and Aiken found that the degree of participation in decision making was “more strongly related to program change than were attitudes of individual members” (1970, p. 122). Therefore, more decentralized organizations are hypothesized to have higher levels of creativity.

**Formalization**

The rules and policies of the organization are the basic guidelines needed for day-to-day operations. Rules make coordination efficient, but may also result in “rigidity and neglect of the social and psychological needs of organization members” (Hage & Aiken, 1970, p. 21). Support has been found for the claim that the greater the formalization of an organization (i.e., amount of rules and adherence to rules) and less the program change or innovation (Hage & Aiken, 1970).
Several researchers (Lewis & Seibold, 1996; Van de Ven, et al., 1989; Woodward, et al., 1993) have suggested that the organizational structures or the traditional bureaucratic form of the organization stifles creativity. Centralization and formalization are hallmarks of the bureaucracy which is characterized as a hindrance to creativity.

**Stratification**

The degree of stratification in an organization represents the importance of rewards. The stratification system refers to the “way in which rewards are distributed among jobs and occupations” (Hage & Aiken, 1970, p. 24). One measure of stratification is the ease of movement from one status level to the next or the “rate of mobility” (Hage & Aiken, 1970, p. 24). A second measure is how status is marked in the organization (e.g., larger office, executive washroom, etc.). Hage and Aiken (1970) argue that greater stratification leads to divisiveness and competition. The purpose of stratification is to motivate people to work harder, but it results in a lack of creativity and change. The greater the stratification the lower the program change, because innovation leads to the redistribution of rewards.

**Complexity**

Hage and Aiken have measured the degree of organizational complexity as the number of occupations, especially those requiring domain-specific knowledge, and by the extensiveness of training and intricacy of tasks performed (1970, p. 17). The number of occupational specialties, “as an indicator of complexity, had the strongest relationship with program change ($r = .64$)” (1970, p. 122).
Another measure of complexity, the degree of professional activism of the staffs of these agencies, was also related to program change \( (r = .42) \) (Hage & Aiken, 1970). The greater the complexity the higher the rate of program change (Hage & Aiken, 1970). The organizational-level factor of complexity is arguably linked with the individual-level factor of knowledge and experience, as more complex organizations will employ individuals of greater specialization with more education and training.

**Production**

If the organization emphasizes quality over quantity in its production the rate of program change will be higher (Hage & Aiken, 1970). TQM and similar programs suggest that on-going changes are needed to maintain competitive edge, and change models like the punctuated equilibrium model also posit that small changes are part of organizational survival. Change and creativity are higher in an environment that emphasizes quality because a quality standard provides a “most elusive performance measure and provides a continuing impetus for change” (Hage & Aiken, 1970, p. 49).

An emphasis on quantity rather than quality in production leads to lower levels of program change or innovation (Hage & Aiken, 1970). Innovation takes time and leads to higher quality solutions, but quantity-driven production (e.g., number of patients seen by HMO doctor, number of cars repaired, etc.) does not leave room for such improvement.
**Sufficient Resources**

Resource availability is emphasized in economic models of innovation, and it has been suggested that “slack” provides the needed support for flexibility at the organizational and group level (Amabile, 1988).

Applying a variable analytic approach based on social psychology, Amabile and her associates developed an instrument called KEYS. This instrument was designed to “assess perceived stimulants and obstacles to creativity in organizational work environments” (1996, p. 1154). They focused on creative project teams and the impact of work environment perceptions on the creativity of project outcomes (Amabile, et al., 1996, p. 1162). Amabile (1996) presents two categories of research, the first of which is basic psychometric research to validate the instrument itself. Here the focus is the second category which consists of a single construct-validity study (1996, p. 1163). Based on the phase three data collected on 36 projects (18 high-creativity projects and 18 low-creativity projects) partial support was found for the hypothesized differences between high- and low-creativity project teams on the creativity stimulant scales (H₁) and the creativity obstacle scales (H₂). No differences were found between high- and low-creativity projects on the stimulant scale of “sufficient resources” (F = .10) and the obstacle scale of “workload pressure” (F = .71).

Woodman and Schoenfeldt (1989) have argued that the key variables that they describe as “contextual influences” on creativity are the physical environment, task and time constraints. The relationship between workload pressure and resource availability and attempts at creativity may not be as strong as the economic models suggest (Amabile, et al., 1996; Woodman, et al., 1993). Amabile (1996) and her colleagues did not find any
significant difference on ratings of workload pressure and resource availability between high- and low-creativity project groups (p < .05, F = .71 and F = .10 respectively). It is, however, likely that competition for scarce resources would reduce the level of creativity in an organization.

**Reward Structures**

Reward structures that reward risk taking or the “learning through small losses” strategy (Sitkin, 1992) have been positively associated with individual creativity. A context that is consistently supportive of attempts at creativity is positively related to actual attempts at creativity (Amabile, 1988; Van de Ven, et al., 1989).

Organizational and group structures that provide access to innovation role models and mentors and psychological contracts that legitimate and solicit spontaneous innovative behavior also promote creativity and innovation (Van de Ven et al., 1989).

**Job Satisfaction**

Hage and Aiken have argued that job satisfaction is a summary measure of “many aspects associated with the job, including salary, pace of work, freedom of movement, hours, company regulations, etc.” (1970, p. 27). Hage and Aiken (1970) found support for the claim that the greater the emphasis on job satisfaction or morale the higher the rate of program change. The claim that job satisfaction is positively correlated with participation in organizational decision making related to an innovation has also been supported (Hurt & Teigen, 1977).
Climate

The most significant challenge faced by managers is to create a climate where creativity can flourish and, at the same time, provide appropriate motivation for organizational members (Angle & Van de Ven, 1989; Ford, 1996). Climate has been defined as “the relatively enduring quality of the internal environment of an organization that (a) is experienced by its members, (b) influences their behavior; and (c) can be described in terms of the values of a particular set of characteristics of the organization” (Tagiuri & Litwin, 1968, p. 27). Climate has been assessed in terms of the behaviors in the organization and the feelings of organizational members (Albrecht, 1979).

Scott and Bruce (1994) argue that leadership, individual problem-solving style, and work group relations influence perceptions of the climate for innovation, and therefore affect directly and indirectly innovative behavior. Scott and Bruce (1994) include problem-solving style, perceptions of innovation climate, and leader-member relationship quality and team-member exchange in their model of “individual innovative behavior” or creativity. They used structural equation analysis to test their model of individual innovative behavior. The findings did not support a link between team-member exchange and innovative behavior. Support for innovation was positively related to individual creative behavior, but resource supply was not. In general they found a lack of support for climate as a mediator in the determination of individual creative behavior.

Hurt and Teigen (1977) found support for the claim that both individual and organizational innovativeness positively correlate with the individual’s participation in each stage of the decision-making process associated with an innovation. Perceived organizational innovativeness was positively correlated with employees’ satisfaction with
their supervisor (x = .77, s = .59), with their perceived chances for promotion (x = .62, s = .38) and satisfaction with their co-workers (x = .58, s = .34). Employee perceptions of their organization's innovativeness were not related in the individual's satisfaction with their own work according to this study.

Amabile (1996) describes “organizational impediments” as “an organizational culture that impedes creativity though internal political problems, harsh criticism of new ideas, destructive internal competition, an avoidance of risk, and an overemphasis on the status quo” (p. 1166). Amabile (1996) has created one scale that appears to include several constructs which might more appropriately be addressed separately.

For example, the political climate of an organization and one’s relationships with superiors and co-workers may be important constraints to individual creativity. In order to secure resources individuals may need to marshal support for their creative ideas and plan proactive strategies or, if necessary, mount resistance to threats against a creative proposal (Albrecht & Hall, 1991b). Individuals who effectively use strategy to circumvent obstacles to their creative ideas will be more successful in their attempts at creativity (Angle & Van de Ven, 1989). The political climate in an organization may have a significant impact on even small-scale change, as a creative project can become a “lightning rod” in political battles (Lewis & Seibold, 1996).

Inertia

Kaufman (1971) has argued that several factors contribute to resistance to change, such as the collective benefits of stability or comfort with the status quo and a basic inability to change related to tunnel vision. Institutionalization refers to the process by
which patterns of behavior become routinized to the point that they become organization-wide norms, and part of the formal organizational structure. As a result of inertia and institutionalization, organizations develop coherent systems of shared understandings that support continuation of the established patterns. The division of labor contributes to potential constraint of creativity. Williams and Yang (1999) argue that, due to the traditional hierarchy, supervisors cannot have expertise in all the areas they oversee. Therefore, a supervisor may simply not recognize the value of a creative idea, and as a result individual creativity will be quashed.

Individuals may also get locked into courses of action, their commitment to courses of action escalate when they have already invested previous effort in their behavior. Williams and Yang (1999) argue that certain individuals, with a bureaucratic personality, will obstruct creative efforts simply because they represent change.

Organizations can get locked into courses of action just as individuals can, with “sunk costs” dissuading change. Katz and Kahn (1978) have argued that a key factor in an organization’s resistance to change is the extent to which the organization is over-determined, meaning that there are multiple mechanisms to ensure stability.

**Communication**

Interactions with superiors and co-workers play a critical role in the process of creativity in organization contexts. Ring and Rands argue that such interactions provide “a vehicle by which individuals, functioning in a variety of roles (and) constrained by context, generate ideas, and seek to achieve desired outcomes” (1989, p. 341). Individual creativity is enabled by communication between organization members, and sometimes
outside contacts as well (Ebadi & Utterback, 1984). Ford has argued that communication within and across organizational domains is “of central importance to creativity” (1996, p. 1124). Unfortunately, communication is largely neglected in the existing models of individual creativity, and is given short shrift in the expansive research literature on creativity (Amabile, 1988; Woodman, et al., 1993).

A better understanding of how the factor of communication may enable (or hinder) the generation of creative ideas in professional organizations (e.g., news media organizations, retail, and health services) is needed. Communication has been operationalized as a factor in previous organizational studies (Hall, 1996), measured in terms of the frequency of contact, number of contacts in different domains (Ebadi & Utterback, 1984), and satisfaction with the overall quality of communication (Albrecht & Hall, 1991a). People may produce more creative work when they perceive managerial support of creativity. While the supportiveness of colleagues may be important to creative endeavors, how conflict or strife may affect creativity is not well understood.

As organization members manage multiple tasks and multiple roles at work creativity may even be facilitated by such overlap. Ford (1996) has argued that exposure to different views and different domains can result in higher creativity. Individual creativity is enabled by communication between organization members, and sometimes outside contacts as well (Ebadi & Utterback, 1984). Ford (1996) has argued that communication within and across organizational domains is “of central importance to creativity” (p. 1124). Qualitatively one might explore the role of communication in creative process as depicted in the stories of respondents.
Systems Thinking and Creativity

In “The Fifth Discipline” Peter Senge (1990) presents a version of systems thinking or modeling. The five disciplines outlined as a way to build learning organizations are; systems thinking, personal mastery, mental models, shared vision, and team learning (Senge, 1990). Systems thinking, personal mastery, and mental models apply to individuals and their intra-personal processes. Mental models are deeply ingrained assumptions or generalizations. Shared vision and team learning apply to groups within the organizational context. Personal mastery is about clarifying and deepening our personal vision and about seeing reality objectively. When an individual has a personal vision and sees current reality objectively the difference between the two causes "creative tension" (Senge, 1990). One may use this creative tension to move toward their vision.

Systems thinking is a set of general principles and a set of specific tools and techniques originating in two threads: from “feedback” concepts associated with cybernetics and in “servo-mechanism” engineering theory (Senge, 1990, p. 68). Senge (1990) points out that feedback in his model of systems thinking does not refer to opinions about an act one has performed (e.g., give me feedback on my presentation). In systems thinking feedback is a broader concept, which refers to “any reciprocal flow of influence” (Senge, 1990, p. 75). It is an axiom in systems thinking that every influence is both cause and effect (Senge, 1990, p. 75). Therefore one’s perception of self as creative is both a cause and an effect of the creative process.

Systems thinking may provide a valuable framework for mapping interaction and finding inter-relationships. One of the central problems in the creativity research
literature is that the process is treated from a linear cause-and-effect view, typically focusing on the output or final product of the creative process. Structure in human systems, such as schools, financial investment companies and state agencies, is subtle.

Senge (1990) has argued that structure influences behavior and that “systemic” structure includes the individual. To understand how aspects of organizations and interpersonal interactions influence the creative process, positively or negatively, one must consider the structures that reproduce those causes/effects. One may understand intuitively that if creativity is valued and encouraged it will occur more often than in a hostile environment where creativity is neither valued nor encouraged.

Mapping the experiences of individuals who attempt creativity using a systems thinking framework may enable the identification of the sometimes subtle inter-relationships which actually enable or hinder potential creativity at work. Systems thinking is a conceptual framework that looks at systems in terms of particular types of cycles (archetypes) and it can be used to create explicit system models of complex issues. Senge (1990) uses case studies from particular companies to illustrate his ideas and has not yet tested his ideas in a rigorous empirical design. Systems thinking is resonant with the use of the process perspective and enables the exploration of how enabling and hindering factors within the organization are created and recreated.
<table>
<thead>
<tr>
<th>Organizational-Level Factors</th>
<th>Enabler/Positive</th>
<th>Hindrance/Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Organization</strong></td>
<td>Technology or service industry - fast paced &amp; competitive</td>
<td>Public Service and other stable long-term organizations</td>
</tr>
<tr>
<td>Albrecht and Hall (1991a, 1991b)</td>
<td>Communication within and across domains enables creativity (Relationship quality and frequency)</td>
<td>Communication with co-workers and superiors may discourage creativity and risk taking</td>
</tr>
<tr>
<td>Goals of the Organization (Wilson, 2000: Conrad &amp; Poole, 1998; Hage &amp; Aiken, 1970)</td>
<td>Focus on quality and innovation</td>
<td>Focus on quantity and stability</td>
</tr>
<tr>
<td><strong>Communication</strong> (Ford, 1996; Ring &amp; Rands, 1989; Ebadi &amp; Utterback, 1984)</td>
<td>Flexible organizational structures – including autonomy in carrying out tasks</td>
<td>Greater formalization (i.e., amount of rules and adherence to rules) results in less creativity</td>
</tr>
<tr>
<td><strong>Centralization</strong> (Nutt, 2002; Van de Ven, et al., 1989; Hage &amp; Aiken, 1970)</td>
<td>Decentralized organizations are hypothesized to have higher levels of creativity</td>
<td>Centralization is about control, and tight control is detrimental to creativity</td>
</tr>
<tr>
<td><strong>Formalization</strong> (Lewis &amp; Seibold, 1996; Woodward, et al., 1993; Van de Ven, et al., 1989; Hage &amp; Aiken, 1970)</td>
<td>Flat organization - low rate of mobility and few status markers. Consistent support of attempts at creativity is positively related to successful creativity</td>
<td>Greater stratification - results in a lack of creativity and change because creativity leads to the redistribution of rewards</td>
</tr>
<tr>
<td><strong>Stratification/Rewards</strong> (Sitkin, 1992; Van de Ven, et al., 1989; Amabile, 1988; Hage &amp; Aiken, 1970)</td>
<td>The greater the complexity the higher the rate of program change</td>
<td>The lower the complexity the lower the rate of program change</td>
</tr>
<tr>
<td><strong>Complexity</strong> (Hage &amp; Aiken, 1970). Number of occupations and training and tasks performed</td>
<td>If the organization emphasizes quality over quantity in its production creativity will be higher</td>
<td>An emphasis on quantity rather than quality in production leads to lower levels of creativity</td>
</tr>
<tr>
<td><strong>Production</strong> (Hage &amp; Aiken, 1970)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 2.2: Enabling and Hindering Organizational-Level Factors*
Summary of the Findings

The situation has been acknowledged as an important construct in the study of creativity in organizations. Woodman and Schoenfeldt (1989) describe the situation as characterized in terms of the contextual and social influences that either facilitate or inhibit creative accomplishment. The research proposed here would address the beginning of the process of creativity, as well as the factors that both deter and promote the initiation of individual creativity. The organizational factors reviewed here may be considered enablers or hindrances to the creative process. Table 2.2 shows the organizational-level factors reviewed here and categorizes each as an Enabler/Positive or Hindrance/Negative.

The individual is inspired to begin the journey of the creative process, but the germination and initial generation of a creative idea occurs within a specific organizational context. The organizational climate and the perceptions of its members regarding how supportive the organization is, have a direct impact on individual creative behavior. An organizational climate that encourages creativity and learning through small-losses has been linked with higher levels of creativity and innovation (Hurt & Teigen, 1977; Scott & Bruce, 1994).

The stability characteristic of organizations is associated with limits placed on possible change. Even incremental changes are, therefore, in line with existing structures and implicit rules accepted by the system.

Other findings regarding organizational-level variables have been identified in conjunction with studies on innovation, the organizational-level construct that premises
large-scale change supported and adopted by top management. One of the findings that emerged from a series of innovation studies (Minnesota Innovation Research Program) is that organizations with moderate environmental uncertainty and mechanisms for focusing attention on changing conditions will be more innovative (Angle & Van de Ven, 1989).

Individual creativity which is not intended to address an organizational-level problem, but rather addresses a problem that falls within the professional domain of an individual worker, has not been addressed in the research literature. Organizational citizenship has been addressed, which refers to individuals taking up roles not formally assigned them to help others in the organization (Morrison & Phelps, 1999). However, such action does not constitute creativity, just as not all problem solving is creative, although some problem solving is creative.
Discussion

How creative ideas are “born” within organizations has not been adequately addressed in the creativity research literature. Creativity is a choice “made by an individual to engage in producing novel ideas” (Drazin, et al., 1999, p. 290), and that the level of creative engagement can vary based on the individual and the situation. Stimulating creativity involves not only stimulating the individual organizational member but also “affecting his (or her) social milieu and the people in it” (Stein, 1974, p. xii).

The organizational innovation literature has focused on successful development and implementation (Lewis & Seibold, 1996), with very little research addressing the initiation of creative ideas (Albrecht & Hall, 1991a; Van de Ven, et al., 1989). The research on individual creativity in organizations has focused on developing a work environment that stimulates creativity, mostly in R&D organizations (Amabile et al., 1996; Amabile, 1988; Woodman et al., 1993).

Several authors make a clear distinction between the germination and generation of a new idea by an individual or group and organizational-level development and implementation (Amabile, 1988; Angle & Van de Ven, 1989; Lewis & Seibold, 1996; Woodman, et al., 1993). The products of individual creativity become innovations when they result in organization-level change.

Hage and Aiken distinguish between characteristics that assist program initiation (innovation) and those that assist implementation (1970, p. 32). The focus of the study presented here is the generation of creative ideas and the factors that facilitate or hinder the initiation of creativity. The creative actions of an individual are limited by the
existing organizational structures. However, I argue that we need a better understanding of how such actions are limited. The Senge (1990) model may assist in addressing the structural factors that are created and recreated which hinder and enable individual creativity. This system’s model is similar to the work of Hage and Aiken (1970), and useful for examining how individual actions are tied to organization and group structures.

Problem-centered individual creativity that addresses tasks within the professional domain of the individual worker has not been addressed. The present research study offers a description of how creative ideas are generated in work contexts based on the experiences of working adults in social service and advertising. This research also compares these accounts with the enabling and constraining factors applied in creativity development and implementation research. Research that focuses on actual work experience rather than lab-based tests of creativity is needed, and accounts of both successful and unsuccessful creative efforts warrant investigation. The research questions designed to address these issues are presented below.

**Research Questions**

RQ1) What are common themes in individual accounts of creative idea generation at work?

RQ2) What factors are positively related to successful creative idea generation (i.e., resulting in creative product which is used)?

RQ3) What factors are negatively related to successful creative idea generation?
CHAPTER 3

METHODOLOGY

The goal of the study described here is to extend present knowledge of the process of individual creativity by describing the generation of creative ideas at work and identifying factors that enable or hinder the emergence of this creativity. The factors that facilitate the initiation of creativity can be differentiated from the factors that facilitate implementation (Hage & Aiken, 1970). In order to be considered “creative” the novel result must be “useful, tenable, or satisfying” (Stein, 1974, p. 15) or adaptive (Mackinnon, 1964).

The judgment of one’s peers of the novelty of an idea is a key component of creativity. Novelty itself is dependent upon a qualitative evaluation of the novelty of the final product (Stein, 1974). The process of creativity is highly context dependent as the process of creativity unfolds in light of particular tasks, actors involved, aspects of the organization such as reward structures and censure, nature of the work group, and other salient factors. Stein (1974) argues that the individual creates in a social context and is therefore affected by the persons and social forces in the environment.
Study Overview

The process perspective taken in analyzing the research literature and framing the research questions led to the selection of the naturalistic research design. The assumptions of the naturalist paradigm include the idea that all knowledge is tied to the time and context and realities are multiple, constructed and continuously evolving. This is a valuable paradigm to base this study on because these are the same ideas echoed in the research design and the central research questions. Individual creativity occurs in a specific circumstance and is influenced by socially constructed relationships and organizational structures.

The ten elements of a naturalistic design are; (1) the focus of the study and (2) the fit of the naturalistic paradigm to that focus, (3) the fit of the paradigm to the substantive theory used to guide the inquiry, (4) the successive phases of the inquiry, (5) data sources and sites, (6) logistics, (7) instrumentation, (8) data collection and recording modes, (9) planning for trustworthiness, (10) and data analysis procedures (Lincoln & Guba, 1985, p. 234). This chapter covers the study’s research design in chronological order and the method employed in carrying out that research, which is modeled from Lincoln and Guba’s Naturalistic Inquiry approach. The chapter also includes a brief discussion on the limitations of using interview data.
The Naturalistic Paradigm, the Focus of the Study, and Substantive Theory

Lincoln and Guba (1985) argue that determining a focus for the inquiry serves two main purposes: it establishes the boundaries for a study and it effectively determines inclusion-exclusion criteria for new information that comes to light. Creativity at work has typically been described in terms of resolution to problems (Stein, 1974). Therefore, of the three possible foci, problems, evaluands and policy options (Lincoln & Guba, 1985), I focused on problems. I am interested in every-day creativity or what Torrance calls “grassroots” creativity (1995, p. 24). This creativity arises as a response to a task-based problem which has not been satisfactorily addressed by more typical or standard responses.

The paradigm of Naturalistic Inquiry fits well with the focus of this study for five specific reasons: the phenomenon of creativity is represented by an array of complex constructions (e.g., individual and collective constructions of the nature of work and the role of creativity in work), there is a considerable degree of indeterminacy introduced into the study as a result of these complexities, the phenomenon is highly context dependent, conventional causal connections should not be ascribed, and values of the individual and the organization are likely to be crucial to the outcome.

The substantive theory used to guide this study is based on Stein’s (1974) process model of the creative process. The strategic change model (Burns & Stalker, 1969) and critical theory suggest that the phenomenon of creativity is embedded in a social, political and economic context. The theory applied in this study is critical theory and the method is based on critical ethnography in the tradition of Lincoln and Guba (1985). Therefore,
there is a good fit between the inquiry paradigm and the substantive theory selected to guide the inquiry, which has been argued to be essential in addressing the value-resonance problem.

**Inquiry Phases**

The successive phases of the inquiry included three phases. In phase one the researcher conducted two informational interviews to get some handle on what is salient. These initial interviews were conducted with individuals from one of the two organizations used in this study. In the phase one interviews counselors Betty* and Sandy* were asked about creativity and their jobs including what kinds of things they found helpful and what made things more difficult for them to be creative. Phase two consisted of conducting interviews with primary respondents at both locations to find out about the phenomenon, and phase three involved summarizing respondents’ comments for their critique at the point of interview and conducting confederate interviews to check the findings in accordance with trustworthiness procedures and gaining closure.
Data Sources and Sites

The data was gathered at a mid-western Advertising Agency and a State Rehabilitation Agency. Purposive sampling was employed based on access to subjects and the type of organization. Purposive sampling is used when the researcher looks for places where the processes of interest are most likely to occur (Denzin & Lincoln, 1994, p. 202). In the field of advertising, the central goals involve creativity because clients seek to create interest in their products and rely upon the ad campaign to capture audience interest. In this study the Ad Agency was used because the creative process was expected to occur there. The State Vocational Rehabilitation Agency provided good contrast. The difference in organization type was of particular interest. This present study included different individual cases using the same method and focused on the same processes, employing what has been called “the collective case approach” (Stake, 1994, pp. 236-246).

In reviewing the research findings of studies on creativity in organizational contexts I have argued that autonomy and discretion play an important role in one’s choice to pursue a creative idea. Counselors in the State Agency have a caseload and a budget, and a fair degree of autonomy and authority given these constraints. By “autonomy” I am referring to the individual’s ability to use the resources of the organization in fulfilling their job duties using independent judgment. For example, once counselors have approved services for a consumer, these services are provided. All cases are subject to supervisor review, but experienced counselors typically have annual reviews. The
advertising professionals also have a limited amount of autonomy and discretion and their area of freedom for creativity is primarily contingent on the individual client.

The values of both the organization and the individual are crucial to the outcome of the process of creativity. Therefore, interviews were collected from these organizations which have different organizational goals in order to contrast the descriptions given by individual respondents.

**Logistics**

After contacting the head of the organization to request permission to interview their employees, I submitted the formal letters of permission to the Office of Research Risks and Protection and requested a “pool” of potential respondents from the employer. This pool consisted of approximately 24 people, with 12 of these individuals employed there for two years or less and 12 of them employed by the organization for over three years. The comparison of “old timers” to new organizational members allows for identification of socialization effects on organizational members values and perceptions of risks and rewards. I then selected half of the pool to use as respondents for the study. This two-step selection process was employed so that the organization would not know exactly who participated out of the potential pool of employees (i.e., those given permission to participate in the research study), and to reduce selection bias (i.e., non-random error). I then contacted each individual employee by phone to schedule an on-site hour-long interview at their office. The subjects were assured that their identities would not be
revealed and that no direct quotes would be included in the final report released to their respective organizations.

**Instrumentation**

I used the nonscheduled standardized interview or “unstructured schedule interview (USI)” (Denzin, 1989, p. 105). This interview form allows one to specify the types of information desired from the respondents while still permitting some flexibility in phrasing questions. The two main purposes of the interview are to translate the research objectives into specific questions and to motivate respondents to provide this data (Denzin, 1989, p. 107). Approaching the USI as a conversation (Denzin, 1989) may contribute to the goal of motivating the respondent so that the needed information may be obtained.

The primary instrument used to collect the data were unstructured face-to-face interviews consisting of open-ended interview questions (see examples given below) to address individual accounts of creativity at work.

**Examples of Questions Used in Primary Interviews:**

*Tell me a story about when you had a creative idea at work and things went well.*

*To what do you attribute the success of that example of creativity?*

*Tell me a story about when you had a creative idea at work and things did not go well.*

*How is creativity rewarded in your organization?*
Examples of Questions Used in Confederate Interviews:

Your colleague (Jack*) told me about a case where ________________ (brief synopsis of story).

In what way is that typical of work in your office?

In what way is that creative?

To what would you attribute the success in that case?

For complete versions of the Interview Schedules see the Appendix B and C.

Interview questions used in this case study were reviewed by dissertation committee members and revised. The open-ended questions were worded to illicit stories of creativity and attributions of success and failure in those accounts. The same wording was used in all primary respondent interviews and the confederate interviews, which consisted of questions designed to check the accounts of primary respondents as well as get the confederate’s perspective.

All interviews were conducted by the same interviewer, and they were recorded on an audio-cassette recorder and transcribed word-for-word. The two dimensions of data recording modes, fidelity and structure, are accounted for by consistent use of the instrument which has been revised in light of information gathering on the phenomenon itself and consultation with experienced researchers.

Planning for Trustworthiness

The data consists of stories of creativity provided by the interviewees and the descriptions provided by their confederates. The transcribed interviews are compared
with factors identified in the literature review as well as Stein’s (1974) process model of creativity and Peter Senge’s (1990) version of system theory and causal mapping.

Lincoln and Guba (1985) argue that planning for trustworthiness (p. 247) is parallel to internal/external validity, reliability and objectivity in the traditional science paradigm. I will follow Lincoln and Guba (1985), describing the constructs of focus in the naturalistic paradigm as credibility, transferability, dependability and confirmability. The shift from an open-ended posture to a relatively more focused approach was managed as described in the earlier study overview. The confederate interview schedules were created after the primary respondent interviews had been conducted so that they correctly addressed the primary concern of checking those initial accounts. Triangulation was incorporated by source, through the use of individual interviews and confederate interviews (i.e., a co-worker not directly involved in the creative process of focus), and application of theory and comparison to established models of process.

Regarding the issue of “transfer-ability” the proposed research is exploratory and the sampling is purposive. Therefore, study findings may be extrapolated to individuals outside the study only with due caution. Admittedly, individuals who tend to be nonconformist and engage in creative acts are not likely to represent the perspective of the majority of organizational members. I am not concerned about the low statistical power of the research design because the purpose of this study is descriptive rather than predictive. Larger sample sizes can be used in future work aimed at prediction.

The Stein (1970) model of the creative process used here is intended as a framework to test qualitative data against, rather than creating the framework following data collection. By establishing such a model and categories for coding based on the factors
identified the design is strengthened in terms of rigor, avoiding the error of creating a model to fit the data.

One way in which negative case analysis has been carried out is the comparison between successful and unsuccessful attempts at creativity to help in identifying distortion due to positivity bias and attributions. A second way in which negative case analysis has been carried out is the comparison between “old timers” versus newer employees and the use of confederate interviews. To address the peer debriefing issue regular meetings were held with my advisor. My field notes and discussions based on the peer debriefing structure and additional consultation with committee members throughout data collection allowed me to subject emerging “hypotheses” to continuous test and to refine them until they were fully explanatory of observed phenomenon. I used within-case analyses (Eisenhardt, 1989) to describe the initiation of creativity in a specific instance using the factor framework outlined previously. I applied across-case analyses to identify features common to the successful attempts at creativity, contrasting these to the features common to the unsuccessful cases.

Member checks were provided for during each field excursion by briefly summarizing and reading back the respondent’s story to them for critique. In the final member check of the draft case study the individuals and their organizations will receive a brief report of findings with no participant names or direct quotes for their assessment. At a later time a panel of key informants may be assembled to react to case study drafts and findings.

Thick description has been provided for through the use of audio recordings of all the interviews supplemented by field notes. The audio recordings of primary respondents
and confederates have been transcribed word-for-word. The notes taken during and after the interviews have also been synthesized into the final “thick description”.

I will maintain copies of all the documents used and the audio recordings of all interviews for a period of at least two years to provide an audit trail for a final dependability and confirmability audit. Assessment of dependability involves several steps, including an examination of “the appropriateness of inquiry decisions and methodological shifts” (Lincoln & Guba, 1985, p. 324). The researcher must adequately explain how the research design changed over time and support the choices made in carrying out the inquiry. A second component of the assessment of dependability is the evaluation of inquirer bias and potential early closure. Auditors also test the extent to which all data have been accounted for and look for evidence of negative case data as well as positive case data. The overall emergent design is evaluated and the degree of dependability is determined.

The study materials, including literature review and critique, research questions, research study design, execution and results have been summarized in the dissertation for audit/critique by the dissertation committee members and defended. The study presented here is one step toward understanding individual-based creative process in an organizational context.
Data Collection

The data-collection activities used in this study include preliminary interviews, structured interviews, and the recording of data. I have addressed the preliminary interviews, the developed interview schedules, and how the data was recorded in previous sections. In this section I will briefly clarify the limitations and advantages of using personal interviews as sources of data.

The Limitations and Advantages of Basing Data on Interviews

Accounts can be valuable and yet are subjective. Stories told in retrospect tend to be distorted by a self-serving positive bias on the part of the respondent. The data used in this study are the stories or accounts of individuals about their positive and negative experiences with creativity at work and how they make sense of those experiences.

To address concerns related to the nature of accounts the research design includes confederate interviews with those not directly involved in the creative example and use of attribution theory in carefully weighing the sources of task-based creativity success and failure.

Attribution theory describes the process by which one explains events and the behavioral and emotional consequences of those explanations. Heider (1958) initially proposed a set of rules of inference by which a person might attribute responsibility to another person for an action, distinguishing between internal and external attributions. I argue that attributions affect the creative process and that such attributions are reflected
in individual and confederate accounts. The most salient attributions in this study are those of the individual and their co-workers.

Given that people act on the basis of their beliefs, Heider (1958) argued that one’s beliefs need to be given consideration when making sense of accounts of human behavior. Heider stressed the importance of taking the ordinary person’s explanations and understandings of events and behaviors seriously, hence the title of “naïve” psychology given to his approach.

Kelley (1973) expanded upon Heider’s theory by adding hypotheses about the factors that affect the formation of attributions: consistency, distinctiveness, and consensus. Consistency refers to the degree to which the actor performs that same behavior toward an object on different occasions. Distinctiveness is the degree to which the actor performs different behaviors with different objects. Consensus refers to the degree to which other actors perform the same behavior with the same object.

Kelley’s (1973) theory of attribution includes the subjective experience of attributional validity. He explores the issue of how individuals establish the validity of their own or of another person’s impression of an object or action. For example, how do we establish the validity of our belief that a particular idea is truly creative? The target person’s judgment of the creative idea should be perceived as valid if the perceiver knows that 1) others in the organization or area of specialization view the idea as creative, 2) the target person rarely sees examples of creativity, and 3) the target person still views this as a creative idea in retrospect (e.g., after two years). In that example there is evidence of high consensus, high distinctiveness and high consistency supporting the attribution.
Ashford (1989) addresses self-assessments at work and the intra-personal processes which lead to distortions in these accounts. Her work is useful to the current research study because she identifies problems inherent in self-report while taking into account “both the psychological experiences of the individual and the nature of the organization as a social context for (self) assessments” (Ashford, 1989, p. 163). Ashford (1989) argues that the research literature on self-assessment has documented the pervasiveness of inaccuracies in self-assessments but the sources of the distortion remain unexplored. Two important themes in self-assessments identified by Ashford (1989) are ego-defense/self-presentation and mixed cues/conflicting information.

It is proposed that to assess their performance adequately, individuals must fulfill three tasks: They must establish the environment-specific standards on which they should judge their performance; they must learn which feedback cues among the many available they should attend to; and they must correctly interpret those cues. Individuals have three problems in successfully completing these tasks. First, they must complete them in an organizational environment that often provides only random and conflictual cues. These cues must be decoded accurately. Secondly, they must resolve the tension within them between wanting assessment information for its instrumental value while also wanting to protect their egos and self-esteem. Finally, they must reconcile their needs to maintain a self-presentation as a self-confident performer (Ashford, 1989, p. 133).

The process of self-assessment is complex and involves an individual’s existing beliefs about themselves and “interpretive schemes” which are used to make sense of their own actions and events occurring around them (Ashford, 1989, p. 134). People constantly draw inferences in their sense making process, but these inferences do not always follow from the premises (Argyris, 1990).
Chris Argyris argues that “whenever individuals or organizations are free to act as they wish and yet choose to act in ways contrary to their own interests, there is defensive reasoning going on” (1990, p. 10). Argyris states that individuals assume that the beliefs they hold are valid, however, these beliefs are often invalid or incorrect when actually tested (e.g., the beliefs are counter to observable behaviors and deductive or inductive reasoning).

_Defensive reasoning occurs when individuals (1) hold premises, the validity of which is questionable, yet they think it is not, (2) make inferences that do not necessarily follow from the premises yet they think that they do, and (3) reach conclusions that they believe they have tested carefully yet they have not because the way they have been framed makes them untestable (Argyris, 1990, p. 10)._

Kelley (1973) argues that an important part of the attribution process is the testing of the validity of beliefs or conclusions. Many inferences may be made by an individual within a professional organizational context that may prove “untestable”. This may be due to the social norms in force at the time. For example, we do not ask one another “Do I sound stupid?”

With any given incident, successful or unsuccessful, individuals will make a judgment or judgments yielding an attribution of causality. What information is used to make an attribution of causality? If the creative journey is largely internal as Stein (1974) has argued, how can the assessments of others accurately reflect all or most of the inputs? In this study I used a free flowing interview style to access individuals’ stories about the use of creative ideas at work.

Littlejohn asserts that “one of the ways people construct social realities is by making accounts, or explaining and justifying their behavior” (1996, p. 184). Buttny (1985) has
studied how people use accounts to reconstruct the meaning of an event, particularly accounts of failure. He argues that one accomplishes specific goals through giving accounts, including saving face and preserving relationships (Buttny, 1985).

**Creative Process Model**

Stein’s (1974) theoretical orientation to creativity is that creativity “is a process that results in a novel work that is accepted as useful, tenable, or satisfying by a significant group of people at some point in time” (p. xi). Stein’s (1974) model of the process of creativity consists of three overlapping stages: hypothesis formation, hypothesis testing, and the communication of results. Each stage includes the effects of a variety of intrapersonal and interpersonal factors. The creative individual is affected by and affects his/her environment throughout the entire creative process (Stein, 1974). This point is dulled in the literature where the focus is on resources available at the hypothesis formation stage and especially the communication of results to superiors.

Stein (1974) describes hypothesis formation as beginning after preparation (e.g., education and training) and ending with “the formation of a tentative idea or plan” (p. 14). I call this tentative plan the “kernel” of the creative idea. The three aspects of the “mystique” of creativity applied in the hypothesis formation phase are inspiration, intuition and an aesthetic feel. The hypothesis formation phase is “often experienced as having a goal without a charted pathway leading to it” (p. 25). The creating individual typically has only a vague sense of direction and no clear plan of how to get to the
desired goal. An internal feeling also called “aesthetic sensitivity” is hypothesized to be of central importance in this phase of the creative process. See Table 2.1 for a summary of this individual-level factor. It has been suggested that we may gain insight into the nature of the aesthetic sensitivity, which is the linchpin of the creative process, through study of individual’s experiences with the creative process (Stein, 1974, p. 33). That is the goal of this present work.

The hypothesis testing stage has also been called the “elaboration” stage and the “context of justification” (Stein, 1974, p. 29). It is during this stage that fledgling ideas are tested against specific criteria to test their “fit” with the problem to be addressed. I argue that the creating individual may use communication with co-workers as part of this process. This might be described as “bouncing ideas” off one another.

The hypothesis testing phase is marked by a shift of attitude and behavior from openness and avoidance of criticism to careful evaluation and criticism based on some criteria (Stein, 1974, p. 29). In the realm of advertising these criteria are often the client’s stated desires, budget and public image.

The final stage of the creative process is called the “communication” stage in Stein’s model and it involves presenting the final product so that “others may react to and possibly accept it” (1974, p. 14). The present study focuses on the hypothesis formation and testing stages. The stages of the creative process are not only overlapping, they are muddled and even chaotic at times.
Systems Model

In his book “The Fifth Discipline” Peter Senge (1990) presents a version of systems thinking or modeling. “Systems thinking” is a set of general principles and a set of specific tools and techniques originating in two threads: from “feedback” concepts associated with cybernetics and in “servo-mechanism” engineering theory (Senge, 1990, p. 68). Senge (1990) points out that feedback in his model of systems thinking does not refer to opinions about an act one has performed (e.g., give me feedback on my presentation). In systems thinking feedback is a broader concept, which refers to “any reciprocal flow of influence” (Senge, 1990, p. 75). It is an axiom in systems thinking that every influence is both cause and effect (Senge, 1990, p. 75). Therefore one’s perception of self as creative is both a cause and an effect of the creative process.

Systems thinking may provide a valuable framework for mapping interaction and finding inter-relationships. One of the central problems in the creativity research literature is that the process is treated from a linear cause-and-effect view, typically focusing on the output or final product of the creative process.

One example of how Senge’s (1990) causal mapping could be applied to a work setting is when an individual generates a kernel creative idea and discusses this with a superior. The superior may feel threatened by the individual’s expertise or change initiative or simply feel that the timing is poor and inform the individual that the idea is not appropriate. The individual may make the attribution that the idea was rejected because of the superior’s insecurities, and resolve to not share creative ideas with that particular superior in future. This interaction is impacted by the larger organizational
environment and economic and social climate, and also creates or contributes to results that eventually impact these larger systems.

Senge (1990) has argued that structure influences behavior and that systemic structure includes the individual. Structure in human systems, such as schools, financial investment companies and state agencies, is subtle. To understand how aspects of organizations and interpersonal interactions influence the creative process, positively or negatively, one must consider the structures that reproduce those causes/effects. One may understand intuitively that if creativity is valued and encouraged it will occur more often than in a hostile environment where creativity is neither valued nor encouraged. Mapping the experiences of individuals who attempt creativity using a systems thinking framework may enable the identification of the sometimes subtle inter-relationships which actually enable or hinder potential creativity at work.

The Senge (1990) model assists in addressing the structural factors that are created and recreated which hinder and enable individual creativity. Peter Senge (1990) argues that “structure influences behavior”, “structure in human systems is subtle”, and that “leverage often comes from new ways of thinking” (p. 40). The system’s model proposed by Senge (1990) is very similar to the work of Hage and Aiken, and useful for examining how individual actions are tied to organization and group structures.

A process perspective of creativity conflicts with ascribing conventional causal connections to the factors involved. The causes and effects of the creative process cannot be accurately distinguished, particularly ex post facto. Therefore, the goal of the present study was to describe experience and identify salient elements.
Factors Excluded From the Design

Factors excluded from this design include personality and job satisfaction. Stein posits that researchers and those familiar with the creativity research literature know a good deal about the “motivational and personality characteristics of creative individuals as well as their cognitive characteristics” including perception, thought processes and problem-solving behavior (Stein, 1974, p. 7). Guilford (1962) posits that flexibility of thought processes is characteristic of creative individuals.

Previous studies on innovation implementation have found that higher job satisfaction coincided with a greater rate of program change (Hage & Aiken, 1970; Hurt & Teigen, 1977). I argue that, while job satisfaction may be related to one’s acceptance of innovation selected by organizational leaders, it is not predictive of individual creativity. The linchpin of the initiation of the creative process is one’s dissatisfaction with existing methods for addressing the problem, which is part of the hedonic response. Therefore, one may argue that less satisfied people are more likely to forge new creative avenues whereas satisfied employees would be content with the status quo.

The economic and political issues associated with development and implementation may be linked with degree of stratification, production orientation and costs. The economic and political issues associated with the creative process are numerous and complex and it is not feasible to include them in the scope of the present study.
Data Analysis Procedures

I started by transcribing all of the audio-taped interviews. Each of the 24 interviews were coded in waves. I read all interviews to code first for old timers and new people, then positive and negative stories. The interviews were then coded for the Stein process model phases of hypothesis formation, hypothesis testing, and the communication of results. I then coded all interviews for enablers or positive factors and subsequently for hindering or negative factors.

Following Tracy (2001) and Dobbs (2000), I used QSR software to organize and store the coded data. In her study of how girls use popular music in identity construction, Tracy (2001) used open coding and free-nodes to code the interview data. Dobbs (2000) used QSR N5 to organize a tremendous amount of interview data on risk assessment and health messages. In both cases, the data primarily consisted of the retrospective stories of the subjects and their responses to open-ended interview questions. In both studies, the analysis software was used to effectively create and apply specific coding categories as well as more general themes.

The unit of analysis I selected was “line” of text, which is the smallest unit permitted in the QSR program. The features of greatest value to my work included:

1. Importing all text documents (i.e., transcribed interviews)
2. Coding text documents using specialized terms or “nodes”
3. Labeling each file with a full description including respondent’s gender, age, and seniority in the organization.
4. Tracking the number of codes per interview and the identity of the codes.
5. Tracking the total number of documents/interviews coded under each “node” with excerpts from all included documents.

6. Creating reports for individual “nodes” or code categories.

The coding scheme evolved over time. Certain codes seemed to not occur in the data at all. Other codes were too broad and needed to be separated under other specific factors to capture what seemed to be really going on with the respondents. The coding scheme shown below from the start of data analysis shows the initial factors and categories.

After working with the data more extensively I recognized patterns of attributions across the respondents’ stories and the recurrence of primarily organizational factors.


(F 10) //Free Nodes/Creativity welcome but not supported
(1 4) /Individual Enablers/Autonomy
(1 3) /Individual Enablers/Self-perception
(1 2) /Individual Enablers/Education/training/experience
(2 1) /Individual Hindrances/Experience/knowledge
(2 2) /Individual Hindrances/Workload/time
(3 1) /Organization Enablers/Communication
(3 2) /Organization Enablers/Goals/type of org.
(3 3) /Organization Enablers/Structures
(3 9) /Organization Enablers/Rewards
(4 3) /Organizational hindrances/Goals/type of organization
(4 2) /Organizational hindrances/Structures
(4 1) /Organizational hindrances/Communication

Contextual Factors Included in the Coding Scheme

Hage and Aiken (1970) developed a model of key attributes for any organization. These useful descriptors of important aspects of organizational structure are included here as measures of key organizational attributes that may also be significant in small-scale change or individual creativity.
I argue that the contextual factors of reward structure and the organization’s structural attributes are more predictive of successful attempts at individual creativity than are individual factors (e.g., attitudes toward risk and DP abilities) (Hage & Aiken, 1970).

Reward and evaluation structures is included in the design to tap the factors of motivation and risk, with the enabling factor of extrinsic motivation and perceived climate for creativity tied to reward structures. The risk associated with fear of negative evaluation, and the anti-creativity climate related to that censure, are constraints.

A higher frequency of communication between different groups or domains within an organization has also been linked with higher creativity (Ring & Van de Ven, 1989; Woodman, et al., 1993).

While stratification, production and efficiency are primarily development and implementation phase factors they do impact the initiation of the creative process. Production and efficiency are important factors in the climate for creativity within an organization and it is difficult to address problem-based creativity which is part of carrying out one’s job and to exclude the goals of that position and organization. Therefore, production has been assessed as goals (i.e., measured outcomes) such as successful products and satisfied clients. Efficiency has been assessed as time and amount of effort required completing tasks, an issue that is important in describing hindrances to creativity.
CHAPTER 4

THE RESEARCH FINDINGS

In this chapter the finding of my research study on creativity at work will be presented and described. I will first address the basic demographic data of the sample population and then discuss the positive and negative accounts. The overall trends in the positive accounts will be addressed in terms of respondent-confederate agreement on the creativity of a product/resolution and the effectiveness of that product/resolution, with examples provided to support the summary of the data. I will then address the factors within those positive accounts which respondents identified as enabling factors in their positive accounts of creativity at work. Following the section on positive accounts, I will employ the same structure for the treatment of negative accounts, first addressing the overall trends in the negative accounts in terms of agreement on the creativity of a product/resolution and the effectiveness of that product/resolution.

I will then summarize the specific factors identified in the respondents’ negative accounts. In the last section of this chapter I will address the common themes in individual accounts of creative idea generation at work. First, I will clarify how the concept of “theme” was approached in this study (i.e., what constitutes a theme) and then
discuss what patterns of attributions were clear across all of the accounts focusing on the birth of new ideas or the start of the creative process.

**Demographic Data of the Sample Population**

Tables 4.1-4.3 show that the majority of respondents in both organizations combined were female, had been at their respective organizations for at least a year and were college educated. The respondents from the State Agency (Table 4.3) had post-graduate degrees. To compare the perspectives of experienced and newer employees, half of the selected sample in each organization had been employed by that organization for approximately two years or less and the other half of the selected sample had been employed by that organization for over three years. The Ad Agency respondents were, in general, younger and less experienced than the State Agency respondents (Table 4.2). The total age range for respondents was 22 to 57 years of age.

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total N = 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Agency</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>State Agency</td>
<td>3</td>
<td>9</td>
<td>12</td>
</tr>
</tbody>
</table>

*Table 4.1: Respondent Gender Ratios*

<table>
<thead>
<tr>
<th>Employed:</th>
<th>0-6 mo.</th>
<th>7 mo.-1 yr</th>
<th>&gt;1 -2 yrs</th>
<th>&gt;2 -3.5 yrs</th>
<th>4 -10 yrs</th>
<th>11 yrs &amp; up</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Agency</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>State Agency</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

*Table 4.2: Respondents’ Employment Terms in Years and Months*
The research findings from this study of creativity at work are presented in this chapter and organized under the following three research questions. As stated in the introduction, I will address research questions one and two and then discuss the broader research question three on themes. I chose to emphasize what the respondents’ said, taking pains to avoid distortion by providing several examples and slightly longer quotes when necessary.

The Research Questions

RQ1. What factors (enablers) are positively related to successful creative idea generation (i.e., resulting in creative product which is used)?

RQ2. What factors (hindrances) are negatively related to successful creative idea generation?

RQ3. What are common themes in individual accounts of creative idea generation at work?

Based on respondent reactions to the interview questions I elected to code for more general factors which seemed to impact successful and unsuccessful attempts at creativity in the work place. These positive and negative factors are presented in Tables 2.1 and 2.2 in Chapter 2, and are applied here with the data corresponding to each research question.

<table>
<thead>
<tr>
<th>Highest Level of Education</th>
<th>BA/BS</th>
<th>Masters Degree</th>
<th>Other</th>
<th>N = 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Agency</td>
<td>11</td>
<td>0</td>
<td>1 (Art School)</td>
<td>12</td>
</tr>
<tr>
<td>State Agency</td>
<td>0</td>
<td>11</td>
<td>1 (Ph.D.)</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total N</strong></td>
<td><strong>24</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 4.3: Respondent Highest Level of Education Completed*
**Description of the Positive Accounts**

I compared primary respondent accounts with confederate accounts in regards to their agreement/ disagreement in the assessment of the product/result as creative and also if they agree or disagreed in assessing the effectiveness of that product/result. These findings are summarized below in a table showing each of the confederates and if they agreed or disagreed with the primary respondents on the positive stories.

Table 4.4 displays if the confederate agreed or disagreed with the primary respondent on two features of the example provided in the positive account: the creativity of the product/result, and the effectiveness of the product/result.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Assessment of Creativity</th>
<th>Assessment of Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ad Agency (N = 6)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kevin</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Carl</td>
<td>Agreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Caryn</td>
<td>Disagreed</td>
<td>Disagreed</td>
</tr>
<tr>
<td>Joe</td>
<td>Agreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Kate</td>
<td>Agreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Patrice</td>
<td>Agreed</td>
<td>Agreed</td>
</tr>
<tr>
<td><strong>State Agency (N = 6)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jake</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Kay</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Don</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Rachael</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Carol</td>
<td>Agreed</td>
<td>Agreed</td>
</tr>
<tr>
<td>Ann</td>
<td>Disagreed</td>
<td>Agreed</td>
</tr>
</tbody>
</table>

Key: Disagreed means they dispute that respondent’s assessment.

*Table 4.4: Matching Respondent & Confederate on Positive Accounts*
The following excerpt is from an interview at the advertising agency. I interviewed primary respondent Jeff*1 who is a 46 year old male who earned a degree from an art school with an emphasis on painting. Jeff is a leader in the creative division and he has worked for the agency for 12 years. In response to the question “tell me a story about when you had a creative idea at work and things went well” Jeff* provided the following positive account.

“Well one of our clients is a major tire company* and when we got that piece of business they had very low awareness even though they're the fourth biggest tire company there is. So they're creative up to that point had been very focused on golf because of Arnold, which has nothing to do with tires, and their theme was 'Drive on' which is a play on words with golf and tires, and that’s fine and it made their dealers happy because their dealers liked the advertising and Arnold came to the big sales meeting every year and they got to shake hands and stuff so on that level it was working but they were not building their brand. So what we decided to do or try to talk them into doing was, at least until his contract ran out, use Arnold for the things he was effective for but dial him way back and dial the tire company* way up and then eventually transition them to where people knew them for themselves and not for a celebrity. To them, since they were paying Arnold three million dollars, that was a pretty radical step for them but we did some spots for them that were very original I guess and they were pretty wacky but each one made a strong point about their product attributes. And humor was new for them, being outrageous was new for them but Arnold came in at the end and just kind of tied it all up and he'd said they were his favorite commercials he's ever been in and he's been in a lot so that made them feel better and when they showed them to their dealers everybody - it turned out that everybody was really really ready for a breath of fresh air and a strong statement of some sort. And you know, those slots won awards and blah blah blah but what was really new was just getting them to

1 All names have been changed to protect the participants. View the Consent Form in Appendix A.
take a chance and go off ground they were very comfortable on, that is was really really well trodden.”

Jeff’s confederate was Kate, a 55 year old female. Kate holds a BA in English and Psychology and is a senior executive, employed by this organization for approximately four years. Kate responded to her co-worker’s story by saying “I guess my definition of creativity is putting together things that you’re pretty familiar with in an unexpected way, you know? It isn’t something out of nothing. It’s maybe a different slant on situations and the slant that they put on certain situations for the tire company* ads were different and unexpected. Something happened in one of those spots where you just went ‘whoa’. And what was interesting was that another tire dealer in Europe had done practically identical spots shortly before, we’d never seen them. So there’s – my other theory is that you get a really great piece of creative and there’s three or four people doing the same thing at the same time, always seems to happen. So it’s weird.” I summarized her co-worker’s attribution in the story by stating “He felt that the success of that case was largely due to that it was ‘original’ and they were able to get the client to actually buy into the idea.” I asked her “What would you attribute the success in that case to?” Kate replied “Well, definitely both of those, as I said our clients are very conservative, it’s hard to get them to try something different. I mean part of our job is selling what we think is the right thing and positioning it in a way that our very conservative clients will find palatable.”

An example of a positive account where the confederate did not agree with the primary respondent on the creativity of the product or resolution is given below.

Jane* was a primary respondent from the Ad Agency. She is a 24 year old female with a BA in advertising, employed for about one year as a copywriter for the organization.
Jane’s response to the question “tell me a story about when you had a creative idea at work and things went well” was the following.

“I was working on a television ad campaign with an art director for a major auto parts company* and we were trying to think of concepts that would strategically reflect, well actually would reflect the objective of the client as well as be funny and include two professional sport-car* drivers, that really had nothing to do with the brand name I mentioned of the product what so ever. It was like my partner was kind of throwing out one thing and me building on that and building on that we ended up coming up with some pretty, pretty good ideas that included dwarfed professional sport-car drivers - it was really funny. You'd have to have the script to really get the full effect of it. That was one and actually those scripts ended up getting chosen by the creative director to be taken to the meeting and were reacted to pretty well by the clients.”

I asked Jane about the attributed source of success in that account. She responded

“You mean what made me think that it was a good idea or what made me feel like I had accomplished a creative goal? The fact that both of us felt equally confident with the idea and that it was truly a combination of two head put together. It wasn't like his idea and I was piggy backing onto it or anything like that. It really took two solid people thinking together on it and that made it successful. And also it really made us laugh.”

I asked “And in terms of its success and being presented to your manager and some of the ideas presumably going on or for some kind of development for the customer, to what would you attribute the success there?” Jane said “with the creative director - why it was successful with him? Probably because it managed to make him laugh and because it was completely strategic, it followed the creative brief to a tee.” Therefore, the creative idea met external criteria for success.
Caryn* served as a confederate for Jane*. Caryn is a 22 year old female who has earned her BS in Journalism/Marketing. Caryn works in public relations and has been with the organization for approximately one year. Caryn did not agree that the product was creative, stating “I'm not necessarily sure that using midgets in a campaign is creativity. That kind of is repulsive to me actually, and I think it’s kind of socially offensive. It’s just the concept of making fun of midgets…I don't know, I just don't like it.” In terms of the effectiveness of the product, which had been accepted by the client, Caryn attributed the success to “the ability to identify with the consumer … I think that the most creative and the most catchy advertisements are the one's that resonate within the consumer.”

The only confederate from the State Agency to agree that a product/resolution was actually creative was Carol*, who was a confederate for Laura*. Carol is a 41 year old female with a MA in Rehabilitation Counselor Education who has been employed by the agency for 18 years. I summarized Laura’s central positive account by stating “I have interviewed your colleague, Laura*, and today I would like to hear your perspective on a few aspects of creativity at work identified by your colleague. Your colleague told me about a case where she placed the first deaf/blind person at a major cable company* by initially bringing in someone to write scripts to make the computer systems compatible for them.” I asked “In what way is that typical of work in your office?” Carol stated “Well it is very typical. I mean what we typically do is we typically go into an employment site, offer accommodations, you know, both to the employee and the employer, modify existing equipment, assist the client with training.” I asked her “in what way is that creative?” Carol said simply “use of new technology.”
Positive Factors in Creative Idea Generation

Positive Individual-Level Factors

Knowledge and Experience

Knowledge and experience are factors which can be described as residing in the individual. These factors are required for idea generation and development although the presence of this expertise does not guarantee a creative product. Diverse experience as well as domain-specific knowledge has been argued to enable creativity (Barron & Harrington, 1981; Stein, 1974).

The number of respondents and confederates who made a positive attribution to knowledge and experience (1 out of 24) in their accounts is displayed in Table 4.5.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Positive Factor: Knowledge and Experience (N = 24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive Stories</td>
</tr>
<tr>
<td>Ad Agency (N = 12)</td>
<td>0</td>
</tr>
<tr>
<td>State Agency (N = 12)</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 4.5: Frequency of Attributions for Knowledge/Experience

Aesthetic Feel

The “hedonic response” (Gordon, 1961) also known as the aesthetic feel or factor (Stein, 1974) is described as the capacity for attending to kinesthetic sensations. Following the birth of the kernel of the creative idea, there is an internal sense of
knowing which has been described as a “combination of affective feeling and cognitive awareness” or as an “aesthetic sensitivity that signals the completion of the work” (Stein, 1974, p. 15). I argue that this factor is not limited to bodily motion and therefore should be described as the ability to attend to all sensory cues, not only kinesthetic sensations.

The number of respondents and confederates who made a positive attribution to aesthetic feel (9 out of 24) is displayed in Table 4.6. Reference to this feeling or internal sense was much more prevalent in accounts from the Ad Agency (8 out of 12) than the State Agency (1 out of 12).

<table>
<thead>
<tr>
<th>Organization</th>
<th>Positive Factor: Aesthetic Feel (N = 24)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive Stories</td>
</tr>
<tr>
<td>Ad Agency (N = 12)</td>
<td>7</td>
</tr>
<tr>
<td>State Agency (N = 12)</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.6: Frequency of Attributions for Aesthetic Feel

The aesthetic feel factor was identified in 9 out of 24 interviews. I asked Ad Agency respondent Jane* if she could think of any particular point at which she selected the creative idea. Jane stated “Somehow in our minds (myself and my co-worker’s) it's like you have these three wheels and you have this cog in the middle and somehow it clicks with, you know, is an outside audience going to like it, is our manager and the client going to like it and was it, was it strategic. Did it really do what it was supposed to do? And somehow it manages to catch all of that and it just kind of, I don't know, it just clicks, it just goes. Just somehow you know when you have that idea clicking, like this
light shines upon you. You say wow I don't have to sit here for five more hours trying to think of something.”

Her confederate Caryn* described the same phenomena in more emotional rather than cognitive terms stating “That’s what creativity is about, is taking those risks. You can't succeed if you're too afraid to fail. I think that - just being able to feel, whatever you feel, after you throw something out, that's kind of fun, that's kind of cool. Being able to feel. Yeah.”
## Frequency of Attributions for Positive Organizational-Level Factors

<table>
<thead>
<tr>
<th>Organization</th>
<th>Positive Factor: Goals/Type of Organization (N = 24)</th>
<th></th>
<th></th>
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Table 4.7: Respondent Positive Attributions to Goals/ Type of Organization

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Table 4.8: Respondent Positive Attributions to Organizational Features

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</thead>
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Table 4.9: Respondent Positive Attributions to Rewards

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Table 4.10: Respondent Positive Attributions to Communication

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2 The text unit of analysis was a “line” of text, approximately 14 words.
Positive Organizational-Level Factors

Tables 4.7 through 4.10 show the number of respondents and confederates that made a positive attribution to the organizational-level factors of goals or type of organization (Table 4.7), organizational features (Table 4.8), rewards for creativity (Table 4.9), and communication with co-workers and supervisors (Table 4.10). These factors correspond to the literature review offered in Chapter 2 and were factors identified in previous creativity research (Table 2.2).

Type and Goals of the Organization

Positive factors identified in the respondent interviews included the goals of the organization and the type or nature of the organization. The type of organization or the nature of the organization has been argued to impact the amount of creativity and talk related to creative idea production (Albrecht & Hall, 1991a, 1991b). In the present study the goals of the organization and the type of organization are pooled for the purposes of coding and discussion. Although these are two different things they are directly related. Organizations are formed for different purposes and those purposes are translated into the goals and objectives of the organization. According to Hage and Aiken (1970, p. 7), organizations are created and “planned to accomplish specific objectives” (e.g., to find disabled persons employment, to provide fresh and successful advertising products, etc.).

In describing their accounts of successful creativity at work 4 out of 12 Ad Agency respondents made positive attributions to the type of organization or the goals of the
organization. State Agency respondents made positive attributions to organizational type and goals in 2 out of 12 accounts (Table 4.7).

Organizational Features

The organizational features included here are centralization, formalization, stratification, complexity and production. These sub-categories are from Hage and Aiken (1970) and the discussion of these terms is found in Chapter 2. To summarize; centralization refers to decision making, formalization to formality of communication, stratification refers to the layers or number of levels, complexity refers to the number of specializations and special education or training needed, and production refers to the focus on quantity or quality.

Decentralized organizations are hypothesized to have higher levels of creativity (Hage & Aiken, 1970; Nutt, 2002; Van de Ven, et al., 1989). However, having a fair degree of autonomy does not guarantee creative idea generation. In responding to a query about management support of creativity, senior State Agency counselor Joan* stated the following.

“I don't view the system as necessarily encouraging creativity as a system. As an individual job, I am allowed a lot of autonomy and that is why I do this job. I suppose a way to deal with our agency creatively is to -- I just have to figure out what they want and do enough to meet those needs but still be able to do my job in a way I think it needs to be done. I don't see the agency as having a lot of creativity and I don't even see it as our agency as much as any large organization. I think the creativity in an organization is usually done at my level. And I suppose to the credit of this agency allowing a lot of autonomy at my level is to their credit. In my particular office my supervisor allows for that, not every supervisor does. I've often joked but the down side of this particular office is I
don't always feel a lot of support; the upside is I can do anything I want. I mean it also works because I am responsible, I mean, you know I don't mean I always work with everybody but I am given a lot of freedom and I don't abuse it.”

Joan’s confederate Don* is a 38 year old male with an MA in Rehabilitation Counseling employed by this agency for 4.5 years. In explaining how Joan’s example was creative he said “I guess just in that the fact that we're working with individuals and everybody's different. I think where the creativity comes into play mostly is how you are interacting with and counseling each individual person. And trying to …keep them motivated and you know looking for a job or keeping their spirits through the entire process because people come to us literally their lives are devastated and we have to try and help them pick up the pieces and move forward. Or someone has never worked before in the first place. So I think that really a lot of the creativity comes in on individual basis and you're really kind of thinking on your feet with each person. You know we all have all of our different kinds of guidelines and rules that we still have to follow, but within that that is where I think most of our creativity takes place.”

In the State Agency it was flexibility at the lower level that seemed to allow for some creativity. This flexibility is contingent upon the immediate supervisors work style, because some supervisors may micro-manage and limit potential freedom and others may nurture that sense of freedom.

For the Ad Agency, 7 out of 12 positive accounts contained a positive attribution to organizational features (Table 4.8). One negative account in the Ad Agency also contained a positive attribution to organizational features. State Agency respondents
appeared to find their organization’s features as more enabling, as 9 out of 12 respondents made a positive attribution to organizational features.

Stratification

In a relatively “flat” organization there is a low rate of mobility and few status markers. The Ad Agency has fewer organizational layers than the State Agency. In an interview with a primary respondent who is a senior staff member of the Ad Agency I asked “Could you comment on whether your autonomy and your decision making make a difference for your being able to be creative or your flexibility in carrying out tasks?” Adam responded “Well as an organization overall we're very flat, we don't have lots of layers and people are very accessible. You know I don't just go to lunch with senior people, I don't socialize with just senior people you know there's very little class structure.”

Stratification is directly related to rewards (Amabile, 1988; Hage & Aiken, 1970; Sitkin, 1992; Van de Ven, et al., 1989). Creativity is more likely to occur where creative efforts are rewarded within and beyond the organization. Consistent support of attempts at creativity is positively related to successful creativity. When asked about management support of trying new ideas Ad Agency leader Jeff* stated that “It’s the same thing as how's creativity rewarded, I mean it’s really the same, money, promotions, get the best jobs, get asked to big meetings.”
Communication

Communication within and across domains has been argued to enable creativity (Ebadi & Utterback, 1984; Ford, 1996; Ring & Rands, 1989). Communication with co-workers and superiors, including informal “water cooler” or “coffee pot” conversations can stimulate and support creative efforts. Communication with co-workers and supervisors was a positive attribution in 6 out of 12 Ad Agency positive accounts and one account of an unsuccessful attempt at creativity. In the State Agency communication was a positive attribution in 6 out of 12 positive accounts (Table 4.10).

In the Ad Agency interview with senior staff member Bill* I asked “When would you say, if you could pinpoint a point or an aspect of that process where you came up with this idea, the ‘ah-ha’ where it really clicked that you needed to do this really different thing?” Bill said “It came very early on, as I was started to pull things together, because I was in charge of the project at least organizing it. And I think what it was was we had just recently hired a Product Manager, kind of a classically trained product manager who had come from a major food corporation*. And she was talking about some the analyses she had done in her past life and I think it was hearing how someone else did it and getting a flash of how you might apply that knowledge to this situation.”

Bill’s confederate was Patrice* who responded to his positive account by saying “Well in advertising our main thing is to pretty much come up with some kind of creative idea that is ‘the next best thing’. We need to take products that are everyday products and give them a spin. So the best part for us to do is brainstorm with other people. We hardly ever try to come up with anything on our own just because you can come up with great ideas but somebody can always take your idea and say ‘Well what about this’ and then another
person can say ‘Yeah, and then we can do x’ and that’s kind of how everything comes together with creativity.” Patrice is a 24 year old female with a BS in Communications who has worked for the Ad Agency for three years.

While the most prevalent form of communication related to idea generation was between same status persons, the immediate supervisor was also frequently involved. Andy* is a 41 year old male with an MA in Rehabilitation Counseling employed by the State Agency for 17 years. I asked Andy how creativity is rewarded in the State Agency and he said “When I think of the organization I think of RSC (Rehabilitation Services Commission) as a whole and I would say in most situations they’re actually not going to know, I think the only part of the organization that may know is your immediate supervisor. And in my situation he’s very supportive of new ideas and being creative, and I think the catch word or whatever is the ‘thinking outside of the box’ kind of a thing, and I think he’s all about that himself and provides ideas along with things that way many times when you review things with him.”

Andy’s confederate was Jake*, a 48 year old male with a BA in Psychology and Philosophy (currently earning his MA in Rehabilitation Counseling). Jake* has worked for the State Agency for 24 years, for three years in this division as a counselor. In discussing what he felt enabled his creativity he stated “you need to access other resources and not presume to be able to do everything on your own and I think there's a lot to be said for collaborative and cooperative engagements and efforts with other resources, other counselors, other vendors, other staff, other person's not even connected with the agency. Well the other aspect of it is training. You're limited to some degree in your own domain you know building upon various training or things you've picked up.
What I was going to say is the agency I think is pretty good about arranging trainings themselves and there is a liberal training policies for counselors and staff to seek training that they think would be advantageous to doing the work that they are doing.”

In describing how her immediate supervisor might encourage new ideas State Agency counselor and primary respondent Andrea* said “She's good at bouncing ideas off. She's creative in her personal life as well as in the office. But I think, you know, her being creative in her personal life, you know, flows into her work, you know, life and that just definitely helps us, you know, be able to bounce ideas off of her and she might have suggestion of what would work and what would not work. She is very open to communication and that type of area.” The terminology “bouncing ideas off” was used frequently in both organizations to address informal communication related to creativity.
Description of the Negative Cases

The negative accounts are described below in terms of respondent-confederate accounts and if they agreed or disagreed in the assessment of the product/result as creative and also if they agree or disagreed in assessing the effectiveness of that product/result. These cases were to be “unsuccessful” attempts at creativity so it is not surprising that the majority of confederates agreed with the primary respondents’ own negative assessment (e.g., that it was not an effective product/resolution). For the negative accounts I needed a way to distinguish when the confederate agreed with the respondent that the product/result was not effective, which is listed in the table as “Agreed – (negative sign)”. Table 4.11 displays if the confederate agreed or disagreed with the primary respondent on two features of the example provided in the negative account: the creativity of the product/result, and the effectiveness of the product/result.

| Key: Disagreed means they dispute that respondent's assessment. Agreed – means that they agree with the respondent that it was not effective. |
| Table 4.11: Matching Respondent & Confederate on Negative Accounts |

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</tr>
<tr>
<td>Joe</td>
<td>Agreed</td>
<td>Agreed -</td>
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<tr>
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<td>Agreed -</td>
</tr>
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</tr>
<tr>
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</tr>
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<td>Carol</td>
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<tr>
<td>Ann</td>
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</tr>
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Consistent with the previous section, I used excerpts from the same interviews so that positive and negative accounts can be more easily compared. Primary Ad Agency respondent Jeff provided the following as a story of when he had a creative idea at work and things did not go well.

“I did have, I guess when I worked on a state tourism project* for like five years we, after like two or three years we were asked to do a minority spot, featuring minorities. And we devised a spot, all our spots were funny for them, or used to be, um they were sort of playing on the notion of planning a vacation or whatever so we developed this spot around this black couple an elderly black couple so we sort of got two minorities at once and when we finished the spot we sent it out with press releases to the press in that state* which is normal procedure and the press in that state*...know anything about that state? It is not exactly the most liberal state okay. Several smaller papers in the state came just short of being completely racist but just were going on ranting about trying to draw more black people to that state*, that that was our mission this year. And the spot was pulled after a week, because it’s a political organization and they don't need the headaches. And they just pulled it and hoped it would all go away. So I don't consider that a great success (laughs) even though that spot won more awards, and more national awards than anything else we'd ever done for them and it only ran for a week. And I felt bad all the way around on that one because I was born there* and I was ashamed of the state first of all and I was ashamed of our client and I just I guess I've never had anybody be that opposed to something I helped create so that's bizarre.”

When I summarized this negative account for his confederate, Kate, she stated “There in lies the real life and the notion of creativity in its pure form. That’s creativity in its pure form but when you come down to business it’s not working.” I asked her how that
example was typical of work in her office. Kate said “I don’t think it is typical, alright? And I don’t think it’s typical because we typically have very conservative clients and believe me, when you give them a piece of creative they will sit there and over-think it ad-nausea so all possible bad things that could be thought about a piece of work usually have been thoroughly explored, including 40 things that probably nobody would ever think of at anytime anywhere (laughs) you know, it’s just amazing. So I don’t think that’s typical at all. I’m surprised. I think that that’s just kind of a pathetic example – of what goes on in some communities as far as rather stereo typical reactions. They obviously thought better of their constituents than really was the case.”

I followed up by asking “In what way is that creative?” Kate replied “I look for creativity as the culmination of things in a usual way and I don’t have enough information to really respond to that. But there was probably something pretty cool in it knowing Jeff* (laughs).” Jeff’s attribution for the failure in this case was racism. I asked Kate* to what would she attribute the lack of success in that case. Kate’s response was “It would be racism. And a misreading of constituents you know not necessarily on our part but very much on the part of our client. Often we are presenting a piece of work and it morphs into something else that may not be something that we might ideally recommend but that you know we are primarily a service organization so you serve your client, right? It’s his money, so if he wants to do something really dumb (laughs) you can go on the record but you’re probably going to end up doing it.”

In another Ad Agency interview, Jane’s negative story involved a television campaign for another state’s tourism project*. Jane’s negative account is given below.

“I sat down with an art director and we thought of just some concepts, some very lose concepts that we were going to go off and develop on our own and I had
another idea that was kind of way off in left field, it was good but it was way off in left field and I got really excited about it and I brought it back and when I was kind of showing it to my partner he thought it was good too but no matter how funny it was, no matter how neat it could be it just didn't seem right for one reason or another and we took it to the creative director just in case and he said ‘this doesn't really fit the brand image of our client’. So even though it's good, it's not good for them. So it got refused but I considered it more of a learning experience then you know something that went poorly like if one of my ideas doesn't sell or just doesn't fly I realize it's not necessarily because it's not a good idea, it's just because it needs tweaked in one way or another or it's just not right for that particular client. Something like it might be able to be picked up and applied to someone else in the future or things can be recycled and built upon. So I really never really take it poorly. So I wouldn't consider it a bad story.”

When I asked Jane to what she would attribute the lack of success in that particular case she stated “me not familiarizing myself with the client's previous work and their intended brand image.”

Jane’s confederate Caryn* agreed that the kernel idea was creative and stated “It’s typical of all brain storm session because we have to throw out every idea, whether we think it’s gonna fly or not. Because if you throw out an idea that’s not going to fly it’s likely to spark some type of creativity within that of your co-worker because we can just feed off each other's ideas and it helps promote others’ creativity. If they see you thinking outside the box I think they'll do that in turn and eventually through all that brainstorming you'll kind of climb out of the mud and come -- you'll be able to end up with this great concept that fits everyone's needs. You kind of need to go out in left field.” I asked for Caryn’s assessment of how that case was creative and she responded “I think creativity is having the ability to kind of stretch the boundaries, to keep saying ‘what if’.” To go
outside the box and think beyond what's normal so I think that's creativity, in that situation.” Caryn agreed that the cause of the failure in that case was probably Jane’s inability to identify with the client and the consumer.

**Negative Factors Related to Creative Idea Generation**

I previously defined successful attempts at creativity as resulting in a novel product which is used. In the unsuccessful accounts or negative stories the subject was typically a potential creative idea, a kernel idea which may have been tested in a preliminary fashion with informal communication. The creative solutions were not implemented primarily because there was a gap between what the creative solution offered and the expectations of the final audience.

**Negative Individual-Level Factors**

**Knowledge and Experience**

In summarizing the creativity research literature, Stein (1974) states that there is considerable agreement across various descriptions of the creative process that the creative individual has spent some time in a preparation phase. The amount of time spent and the nature of the preparation vary widely from extensive periods of formal training to intensive shorter time periods of training or education in a particular area of specialization. A lack of experience, knowledge or education and training may be a hindrance for individuals.
The number of respondents and confederates who made a negative attribution to knowledge and experience (5 out of 24) in their accounts is displayed in Table 4.12.

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*Table 4.12: Frequency of Negative Attributions for Knowledge/ Experience*

Newer employees may be overwhelmed with learning the basic rules and procedures of the organization. For example, State Agency member Don* said “We've changed so much with staff turnover that we continually have new people and so at this point you have people at various levels of competency and expertise, skill and years of experience but most of our staff is on the early end of things right now.”

In an Ad Agency interview with a senior executive I asked what enables creativity. Kate* said that being creative is “particularly challenging in media because you really have to have a pretty good understanding of basic media before you can really be creative. You don’t even know where to start, if you don’t understand you know the basic parameters.” I followed up with the question “So you would say that there has to be a certain level of expertise in that field?” Kate answered “Yeah, that’s been my experience... But once you get to a certain point, it’s usually around five years I’ve found, you’ve kind of got all the basics nailed down and if you’re good you’re bored. And you’re always looking for a different something to do.”
Frequency of Attributions for Negative Organizational-Level Factors

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15 [378 text units]

Table 4.13: Respondent Negative Attributions to Goals/Type of Organization

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11 [372 text units]

Table 4.14: Respondent Negative Attributions to Organizational Features

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14 [221 text units]

Table 4.15: Respondent Negative Attributions to Workload

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12 [203 text units]

Table 4.16: Respondent Negative Attributions to Communication
Negative Organizational-Level Factors

Tables 4.13 through 4.16 show the number of respondents and confederates that made a negative attribution to the organizational-level factors of goals or type of organization (Table 4.13), organizational features (Table 4.14), workload (Table 4.15), and communication with co-workers and supervisors (Table 4.16). These factors correspond to the literature review offered in Chapter 2 and were factors identified in previous creativity research (Table 2.2).

Goals and Type of Organization

Goals or type of organization is the same category used in the positive factors section only here it represents the negative or limiting aspect of that factor (Table 4.13). Primary respondent Adam is a 39 year old male with a BA in Advertising who has worked at the Ad Agency for four years. Adam provided a negative account featuring an idea for a state tourism project* which had been rejected by the client. He described it as a marriage between internet and digital-camera technology and the interest in sharing vacation photos. His confederate Kevin* did not agree that his co-worker’s example of creativity was true creativity. He said “Well it’s a neat idea that you described but creativity is only creative if it can be applied in some way (laughs). You know that’s a very interesting idea that you describe, you know the film drop and partnership with a major camera company* and putting kiosks everywhere but you know if it’s too difficult for the customer, if it won’t be implemented then I don’t really call it creativity. I have the same philosophy about technology. Technology is only useful if it can be applied.”
sought clarification by asking “Could you expand on that?” Kevin replied “Creativity to me is a solution to a problem that is different than the normal approach, something that is very simple, and something that just really solves a problem. If it doesn’t do those things, you know it might be a very exciting concept but it’s not useful.”

When responding to a question about how creativity was discouraged in the State Agency confederate interviewee Don* addressed the important issue of organizational survival and the role of creativity as he perceived it. Don said “as far as staff that’s been around I haven't seen a lot of where they're discouraging new ideas and things like that because of the changing nature of our Agency in the past few years, where we have to try and think about new things if we're going to survive this. I think that's what we're looking at now.” I followed up with “Ok. And how do you mean, to survive as an Agency?” Don* replied “Well I think that our Agency what it’s really boiling down to is that we have to show the state legislature* every year that we are successfully rehabbing people.”

Organizational Features

Organizational features were less prominent in negative accounts than anticipated. Four out of 12 respondents in the Ad Agency made negative attributions to organizational features, focusing on the need to please clients (Table 4.14). For the State Agency, 6 out of 12 respondents made negative attributions to organizational features, focusing on paperwork and procedures.

Centralization is about control, and tight control is detrimental to creativity (Hage & Aiken, 1970; Nutt, 2002; Van de Ven, et al., 1989). Greater formalization (i.e., amount of rules and adherence to rules) also results in less creativity (Hage & Aiken, 1970; Lewis
State Agency interviewee Andrea* responded to the prompt “Tell me a story about when you had a creative new idea at work and things went well” by saying “well this job is so streamlined that sometimes it is difficult to do the creativity part.” The presence of a large amount of paperwork and regulated processes for task accomplishment points to the fairly high degree of formalization in the State Agency.

Andrea’s confederate, Rachael, stated “the agency is so big and I think once you get beyond this point it gets pretty bureaucratic and there is just not a lot of room to do that kind of stuff (creativity). I am sure there are a lot of great people that work here that I am sure have a lot of fabulous ideas but I don't know if they ever get recognized or their ideas ever get tapped into with all the other stuff that we have to do.”

State Agency primary respondent Laura responded to the request for a positive account by saying “Probably any one of us would have any number of scenarios that aren't within the realm of maybe what they might teach as far as how to write a plan. So sometimes we don't point them out because if they are successful, you are rewarded, if they are not successful, you can be punished. So we are not always prone to pointing them out. I've been fortunate to have been given a lot of freedom to do different things because when you work with some of the supervisors for a long time you develop a sense of trust.”

When I asked her confederate Carol* to recall a specific instance where someone did something creative and describe how that creativity was rewarded by that person's immediate supervisor and by others in authority in the organization her brief and firm answer was “I don't think it is.” Greater stratification results in a lack of creativity and
change because creativity leads to the redistribution of rewards (Amabile, 1988; Hage & Aiken, 1970; Sitkin, 1992; Van de Ven, et al., 1989). Therefore it is likely that creativity will not be rewarded in the future because the organization is hierarchical and change is not supported.

The “Bureau” level was also differentiated from “our office” by State Agency respondents. While autonomy was hypothesized to be of central importance in enabling creativity it is clear from the interviews that autonomy is quickly overshadowed by workload and a lack of reward for creative efforts.

**Workload**

The factor of workload (Table 4.15) is given very little attention in the creativity research literature, yet this is a critically important factor which has changed dramatically over the last 20 years. The pace of work is much faster in the computer age and many organizations have been “downsized” so that fewer people are given the same (or greater) amount of work.

When I asked Ad Agency primary respondent Adam “What aspects of your job hinder your potential creativity?” He said “Hours in the day -- just honestly the biggest hindrance is the lack of time due to the mundane needs to be addressed. You know I think it’s the demise of most managers is allowing the minutia to choke them.” Kevin, who served as Adam’s confederate, stated “this is also a very fast paced job, there’s a lot of work, sometimes you’re in a position where I’ve got fifteen things to do, and I can’t do an exceptional creative point of view on everything, sometimes I’ve just got to get it done. Sometimes just the workload or just the quantity of work will hinder creativity.”
In discussing what hinders her from being creative in her job, State Agency counselor and primary respondent Becky said “we carry pretty high case loads and people get really bogged down with paper work here there's a lot of paperwork with this job. Lots of typing and things of that nature, and it takes a lot of time to develop new sources and new ideas and things of that nature and to try new avenues and I think that people just kind of get in a rut because it’s easier to just go with the way you do everybody else, you know refer to the same vendors, referring people to doing the same kinds of jobs. I think that in that sense it’s discouraged because we do carry high caseloads, and it takes time, I don't think it’s something the Agency up above says ‘Don't be creative’ I think it’s just really difficult to be creative because it takes extra time to develop new avenues and things of that nature.” Becky’s confederate was Kay*, who agreed with Becky and felt that the “agency is good about knowing that we are just trying and a lot of times we have to back track with services and maybe something’s not working or we have to do something differently.”

**Communication**

Communication with co-workers and superiors may discourage creativity and risk taking (Ebadi & Utterback, 1984; Ford, 1996; Ring & Rands, 1989). Stein argues that if those around the creating individual do not value creativity, “if they do not provide the necessary supportive environment, if they do not accept the creative work when it is completed” then it is likely that “the creative individual’s efforts will encounter serious if not insurmountable obstacles” (1974, p. xii). When superiors or co-workers discourage creativity through their verbal and nonverbal communication this suppresses creativity.
Specific instances of respondent’s attributing negative communication with sabotaging creative efforts were very rare. The primary means of discouraging via communication was a general discouragement of untested methods (Table 4.16). I offer the following example simply as an illustration.

In a confederate interview at the Advertising Agency I stated “I would like to understand how creativity may be discouraged in your organization. Can you think of an instance where someone tried something novel and it didn't go well?” Caryn* said “I had just started and was working on a low budget client, it was about $2,500 a month, which is extremely low budget around here and we were developing an expert directory for local media for a law firm in town. I have a graphic design background and … I decided I want to try to draft this project using a desk-top design program like Quark or Adobe and design and I want to try to make this look as visually appealing as possible… I wanted to make it my own instead of just the normal word document that my supervisor wanted me to go with. And so I stayed late one night and I tried it out and the next day I got a scathing e-mail telling me that that I could not waste the client's money the way I was doing because it was such a low budget client, I needed to just go with a normal word document. If they're paying for a Honda you can't give them a Mercedes, so I had to kind of keep their budget in consideration and you know just kind of limit my creativity because of the bottom line.”
Themes in Accounts of Creativity at Work

The term “theme” may be used in a variety of ways. In this study I use the term “theme” to label a pattern of reasoning identifiable across respondent accounts. A theme is a broader concept than a factor (e.g., workload or negative communication). The two themes I identified in this study related directly to the initial phase of the creative process and consist of “non-routine solution needed” and “collaborative idea generation.”

The first theme that I identified across the accounts was what I termed “non-routine solution needed.” This theme represents when creativity was used because other responses had failed or were found to be inadequate. The theme of “non-routine solution needed” was found in all 24 interviews and 786 text units or lines of text.

The problem-finding context is an important part of framing the response. The creative efforts may have more legitimacy because 1) the problem is assigned or within the purview of one’s job, and 2) the expenditure of resources is “necessary” because conventional solutions have failed to resolve the problem (e.g., a client who is back an eighth time for vocational services, or an Advertising Agency client seeking a new direction in promotion).

The second theme I identified across the positive and negative accounts was “collaborative idea generation”. The term “brainstorm” was used as a blanket term by respondents and included instances of both formal and informal discussions and group and dyadic interactions. The research literature on group problem solving includes a significant body of work on brainstorming, which is beyond the scope of this current study. I differentiate between the theme of “collaborative idea generation” and
brainstorming based on the participants, the structures or process and evaluative criteria. The instances that respondents’ naively label as brainstorming were typically unstructured, informal communications often at the dyadic level. A few references were made to the use of “brainstorming sessions” in the Advertising Agency, which is a separate but related issue. I have counted the number of actual references to the terms “brainstorm” or “brainstorming” as listed in Table 4.17, and while they seem to be over-used popular terms very little of the actual interviews could be coded under those terms.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Positive Stories</th>
<th>Negative Stories</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad Agency (N = 12)</td>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>State Agency (N = 12)</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

**Table 4.17: Brainstorm as Key Word**

I argue that what is of particular interest in this study is the fact that the accounts consistently involve the use of informal dyadic and small group face-to-face interactions during the initial idea generation. The kernel idea may undergo significant change after the individual first articulates it and may lead to the development of other more useful ideas. This finding contradicts the Stein (1972) model of the creative process and also contradicts Stein’s assumption that the final phase is the only portion of the process which is not internal, becoming a public experience in the presentation of ideas for approval and acceptance by various audiences. I argue that this is primarily because Stein’s model addresses a different, narrower definition of creativity. The Stein model addresses individual creativity independent from organizational contexts, such as the

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3 The text unit of analysis was a “line” of text, approximately 14 words.
process of the independent musical composer or inventor. Within the professional organizational context the individual is a part of the larger system in which they are embedded. The organizational factors will be more significant to the creative process than any individual-based factors.

**Summary**

The positive individual-level factor related to successful creative idea generation was aesthetic feel which refers to one’s ability to attend to all sensory cues (i.e., sight, smell, taste, touch, motion, and feeling). While a certain level of knowledge and experience are needed for creative idea generation this factor did not come up in the majority of individual accounts of creativity at work analyzed in this study. The factor of aesthetic feel was related not only to the respondent’s abilities to discern good potential ideas and to hone them properly, but also provided an intrinsic reward which was primarily emotional.

Positive organizational-level factors included the goals of the organization and the type of organization, organizational structures (primarily decentralized decision making and lower stratification), a flexible or fun work environment, and fruitful communication with same status co-workers or immediate supervisors.

I found that the primary individual-level negative factor related to creative idea generation was a lack of experience in the organization or the field of expertise. Organizational-level negative factors related to creative idea generation included a focus
on quantity in setting and measuring goals, large workloads, organization structures (mostly greater formalization and stratification), and negative communication from immediate superiors or same status co-workers. The greater formalization exacerbated the workload problem and stratification was a significant factor in terms of both the complexity of action and decision making (i.e., following the procedure of the chain of command) and rewards. The discussion of these findings as well as further research directions and conclusions are offered in the subsequent chapter.
CHAPTER 5

DISCUSSION OF RESULTS

In this chapter I will discuss the research study findings summarized in Chapter 4 and the significance and implications of these findings. I have organized this chapter into the following seven sections: 1) respondent-confederate agreement in the positive and negative accounts, 2) individual-level factors, 3) organizational-level factors, 4) themes identified through across-case analysis, 5) the limitations of this study, 6) a summary of the research findings and conclusions, and 7) future research directions.

Respondent-Confederate Agreement in the Accounts

I compared primary respondent and confederate accounts, including their assessments of the creativity and effectiveness of specific products/resolutions given in positive accounts and negative accounts of creativity at work (see Tables 4.4 and 4.11). In the Ad Agency four out of six confederates agreed with the primary respondents that the example they provided was creative. All six Ad Agency confederates agreed that the primary respondents’ creative idea or product was effective. In the two cases where the confederates did not agree with the primary respondent there was no consistent pattern of
attributions across the cases. In the first case the confederate simply felt that the approach was fairly common or typical (i.e., personalizing the mailings to appeal to peoples’ emotions). In the second case the confederate did not feel the central concept of the ad was creative and she found it “offensive” (i.e., using dwarfed professional sport* drivers).

In the State Agency five out of six confederates did not agree that the primary respondents’ example was creative. The only confederate to agree stated that it was creative in the use of technology rather than approach. This single example of creativity from the State Agency involved the use of technology to facilitate a placement at a large cable company*. The effort and money were invested because there is a potential opportunity for future placements. The State Agency counselor who came up with the idea stated “we've never had a blind person there. We've only had people who had enough vision to use the large print software. So we wrote a plan, this was the first time anybody in the state had done this was to bring in another blind man who writes scripts because the JAWS cursor in some of the larger companies will not follow the cursor with some of these older programs. But we got our first JAWS user into the cable company* so we are hoping that in the future the whole idea was to work on this special project and then in the future get other JAWS users in at that company*. So that is our big success probably for this year.”

In contrast, all six State Agency confederates agreed that the primary respondents’ example was effective. It is interesting that the novelty or creativity of an idea or resolution is more easily challenged than the competence involved in effectively handling
a problem. Co-workers also very rarely blamed one another or immediate supervisors in cases of failed attempts at creativity.

The weight or importance of a factor may be related to its prevalence or frequency of attributions in accounts. I believe that both of these findings may be related to the weight given to creativity and effectiveness. I argue that effectiveness in performing one’s assigned or position-related duties is essential. Perhaps it would break unspoken rules of helping maintain another person’s positive face (Goffman, 1959) to disagree with the effectiveness of a co-worker’s decision on-record. The finding is that confederates in this study disagreed more frequently on the creativity of a respondent’s idea/resolution than they differed in their assessment of its effectiveness. Connecting this finding to the idea of self-presentation and face is speculation and not intended as a conclusion to generalize to other situations of creativity at work.

Creativity is not essential; rather it is just “nice to have”. Therefore, there is no significant taboo associated with not supporting colleagues’ creative efforts or in critiquing the creativity of their ideas or resolutions. A second reason why it is not surprising that respondents would not blame immediate co-workers or immediate superiors is the desire to preserve relationships. In addressing accounts of failure, Buttny (1985) has argued that we use account giving as a way to save face and preserve relationships. Telling a story or giving an account allows one to essentially reframe events by creating a specific context (i.e., a scene, players, action) in which to interpret those events. When giving accounts we cast ourselves and others as actors in the drama, usually describing ourselves and our actions in positive terms. Shotter (1984) has argued that the meanings individuals assign to an event (e.g., generating a creative idea) are
closely tied to the language used to account for that event. The terms and phrasing used by respondents in this study when giving their positive and negative accounts of creativity at work reveal the meanings or assessments they associate with creativity at work.

I argue that the most important relationships in these organizations are with co-workers and immediate superiors. In the State Agency many respondents freely critiqued the larger “agency” (i.e., the parent organization of the field office) and in the Ad Agency several respondents harshly critiqued “the clients”. These parties are not likely to be aware of the respondent’s comments and will not maintain routine interactions with the respondents. I draw these conclusions based upon the patterns of attributions made by respondents and the fashion in which they described specific cases.

Throughout this research paper I have referred to organizations in three ways: as context, as a factor, and as an attribution. These three perspectives also permeate the accounts. I have referred to creativity primarily as a process. The respondents in this research study used the terms “creative” and “creativity” in three distinct ways: as a product (e.g., the creative), as a portion of the problem solving process (e.g., the creative part), and as an abstract idea similar to team spirit (e.g., they encourage creativity). The use of “creative” as a product was confined to the advertising agency where they labeled the proposed campaigns or ads as “the creative”. Ad Agency respondents described other facets of the organization as customer service, financial or logistical support.

The term “creativity” was used more abstractly in the State Agency, which I argue is related to a lack of agreement on what constitutes creativity and the lack of specific cases involving creativity. In the State Agency several individuals referred to supervisors
encouragement for creativity and “that type of thing”, however, when questioned about what the individual supervisors actually did to encourage creativity respondents were consistently vague and often referred to the individual being “open” to new ideas. I argue that creativity is part of their organization’s rhetoric but not part of the organization’s actual practice.

Individual-Level Factors

Respondent descriptions of their roles in successful creative projects were interesting and different from typical internal-locus of control explanations one might expect. Usually, when an outcome is positive individuals are quick to take credit for this outcome. In the State Agency the respondents were the central decision makers, able to pay for services or training for clients. Even so, they described themselves as collaborating with the clients and others outside the organization to complete (i.e., craft and implement) their creative ideas.

In the Ad Agency respondents also used many terms like collaboration, team brainstorming, and equal partnerships on specific products and ideas. One would expect people to make internal attributions for success (e.g., it worked because I had a clear vision from the start). I argue that this “shared” perspective is due to two things; the need to maintain humility as part of positive face, and the fact that in organizational practice there is no “lone-wolf”. A new model of creativity in a work context is needed, one which can address the embedded-ness of the individual within a specific organizational
context and the dynamics of the interactions among elements of that specific organization. I will return to this issue in the summary of findings.

In addition to these general patterns two factors emerged as potentially significant in creative idea production. These two factors were aesthetic feel, which was an attribution in positive stories, and a lack of knowledge or domain-specific experience, which was an attribution in negative stories.

**Aesthetic Feel**

It could be argued that personality and creativity are directly linked or even synonymous, as indicated by the phrase “a creative-type person”. This is a common belief, which was evident in the interviews as people described “creative people” and “that type” of person. Unfortunately, personality does not seem to explain or predict aesthetic feel.

The example of Ad Agency creative team member Shawn* illustrates this point. When responding to the query “tell me a story about when you had a creative idea at work and things went well”, Shawn* stated “We were able to spend several days thinking of ideas before we came up with one that seemed to be right. And there were other ideas that we felt were pretty good as well, it wasn't until we showed our creative director that we realized that this idea really was a strong one and that's usually how it works. You work as a team and then you present it to someone else and see what they think.

One thing that comes to mind is after we had the initial idea, I had written down some other ideas for a secondary spot and I read them to my partner and he didn't like the one that I thought was good and he really liked one that I thought was just okay and it turned
out that most people that heard it liked the one that I didn't think was all that great, they thought it was really great. So it's definitely feeling around in the dark.”

Shawn* generated the kernel idea but he did not have the aesthetic feel to see the novelty of the idea. The idea was selected by creative director Jeff*, who seems to have a well-developed sense of aesthetic feel. Jeff* was not able to articulate how this factor operated, but described it in cognitive and emotional terms. Jeff* stated “I could tell you how I solve problems but I can't really explain it. I generally get as much information as I can, I figure out all the parameters and things that are working against me (laughs) and cogitate for like anywhere from an hour to three days or whatever it is and then it comes completely out of left field and I have no idea where it comes from. It’s usually non-linear for me. It’s not usually ‘if x and x and x are lined with this we have to do this’. I can think big picture strategically what we should do like that, but when we talk about creativity I have no idea where it comes from, I don't know where headlines come from, I don't know where pictures come from they just pop into your head.”

Further research on aesthetic feel is needed. I agree with Stein (1974) that aesthetic feel is likely to be the key factor in the creative process, but it remains ill defined and relatively unexplored. Aesthetic feel may relate to emotional intelligence and intuition. I argue that domain specific experience will impact intuition in terms of salience, possibly enabling a more experienced individual like Jeff* to sense a useful direction or a viable creative idea kernel, as was the case with the story told by Shawn*.
Individual Knowledge and Experience

The creativity research literature points to a five to ten year period of preparation needed prior to producing a successful creative product (i.e., novel and useful). This is consistent with the interview data. Half of all respondents had worked at that organization for less than three years, and at the Ad Agency as little as one year. The only way in which experienced and newer respondents clearly contrasted was the use of “lack of experience” or training as a reason or attributed factor related to a failed attempt at creativity.

When the interviewer asked “what aspects of your job hinder creativity?” senior Ad Agency member Kate* said “The need to be very good with numbers, a true balance of right and left brain people is very hard to find. To have both is rare, because you’ve got to have both. To be a good media person you’ve got to be good with detail, you’ve got to be good with numbers. Okay? And by the time I’ve gotten somebody who’s good with that I would probably say one out of 100 is a creative person, one out of 100 really takes it to the next step and says ‘Let’s not do it that way – let’s do something wacky’ or even has the desire to do that. Because a lot of numbers people love that comfort, you know oh I can do TV because I know that we’d have 95% reach, etc. and you’ve got this all built up and then you literally have to start taking it apart and say ‘Guess what? Throw that away. I know you know that. I don’t care. Let’s have something different’ and it’s a real struggle. It really is.”

In response to the question “Is there anything that I haven't asked that you think I should ask or just anything that you would like to add?” State Agency member Laura* said “I think there are options for developing your interests if the agency will give people
the freedom to do that and sometimes they do and sometimes they don't. I think they are a little hung up on the degree must be from rehab counseling and you know where as they have had excellent VR counselors with good experience that only had an undergraduate degree. I think with the proper mentoring and coaching you can work with folks."

The findings on the number of creative cases in each organization lead to the following questions.

*Is higher education detrimental to creative idea generation?*

*Is the diversity of individuals’ backgrounds or training an enabling factor?*

In the study all respondents held at least a four-year college degree or equivalent. All respondents in the State Agency hold MA degrees in Rehabilitation Counseling. Complexity refers to the number of occupations and training required, and Hage and Aiken (1970) have argued that greater complexity is positively related to higher levels of creativity. In this study the organization where people had greater levels of domain-specific education (e.g., the State Agency) showed a consistently low level of creativity.

The educational backgrounds of individuals in the advertising agency covered a fairly wide range and included Art School, Geography, Psychology, Journalism, and Public Relations. It is impossible to draw conclusions about the relationship of education to creative idea generation due to the many unknown factors which may impact the end results.
Organizational-Level Factors

Organizational-level factors appear to have a greater impact on idea generation and the creative process at work than individual-level factors. Respondents referred to organizational-level factors in both positive and negative accounts. The majority of the negative cases in both organizations involved organizational-level factors. The most common factors were workload, the goals of the organization and the type of organization, and organizational features which includes centralization/autonomy, formalization and production.

Goals and Type of Organization

The goals of the organization are directly linked to the purpose for which they were originally formed or intended to address. Social service agencies are government funded and are to be used for the benefit of the citizenry eligible for their specific services. Ad agencies are service organizations in that they provide a service to paying clients. The goal of the Ad Agency is to create products that help the clients achieve specific goals, such as brand recognition.

The findings of this study related to goals and the type of organization are that while this was not a significant factor in positive accounts, it was a significant factor in negative accounts. In the Ad Agency, the factor goals/type of organization was attributed in 4 out of 12 positive accounts, and in the State Agency it was attributed in 2 out of 12 positive accounts (Table 4.7). In the negative accounts this factor was attributed in 6 out of 12 Ad Agency accounts and 7 out of 12 State Agency accounts.
State Agency counselor Don* stated “what it’s really boiling down to is that we have to show the state legislature every year that we are successfully rehabbing people. We're doing that with good results and getting people to work keeping them at work. And I think the pressure for that increases every year and it’s certainly going to increase in the next two years dramatically and putting with that a poor economy too. Other things that we're up against trying to put people to work that have a lot of strikes against them in the first place because it’s difficult enough right now for the average able-bodied person with many skills and talents who's been displaced in work and trying to help that person get back to work. So I think with that we have all been trying to be more creative as far as how we can help people throughout the entire process.”

**Organizational Features**

Organizational features were consistently a positive factor in accounts in both organizations, attributed in 7 out of 12 positive accounts for the Ad Agency and 9 out of 12 positive accounts at the State Agency. It is also interesting to note that even in accounts of failed attempts at creativity at least one respondent in each organization felt that the organizational features were a help rather than a hindrance (Table 4.8).

Organizational features were attributed more frequently in negative accounts by State Agency respondents than by Ad Agency respondents. In the Ad Agency 4 out of 12 respondents attributed organizational features as a hindrance or problem. In the State Agency 6 out of 12 respondents attributed organizational features as a hindrance or problem in their specific cases.
It was not possible to code for the organizational features as separate sub-categories because of the broad references respondents made to aspects of the organization and in part due to liberal and flexible use of these terms by respondents. I would not expect the respondents to know the terminology used by organizational theorists, so I think that it is understandable that they would misuse terms and lump many aspects of the organization under only a few labels (e.g., management support, how we do things, etc).

The term “environment” did not bear up well as a distinct code. Several examples from that category could be placed under organizational features (e.g., referring to workspace and physical resources) and other examples could be coded as communication or interaction-based (e.g., a supervisor who is “open” to ideas).

Organizational features that enable creativity include lower stratification and decentralized decision-making, particularly when individuals are clearly instructed what they are to do but not how they need to complete those tasks. Two aspects of organizational structure which had the most pervasive negative impact in the stories of creativity were formalization and stratification.

Formalization

Formalization in the form of paperwork was a significant obstacle in the State Agency. In the Ad Agency certain aspects of the operation had been formalized in the creation of forms and very specific guidelines for the preparation of documents. Caryn* stated “the advertising side has a much different goal and perspective than the public relations side does. I feel like we are kind of inhibited in our creativity because we are locked down, so much more with say for example just general media relations and doing
there's like a form, a set process for everything. You develop a media list, you make media calls, you develop a pitch - and of course there can be creativity in that pitch you know targeted toward specific publications but I feel like on the public relations side it's a little bit more inhibited.”

Stratification

The most significant negative aspect of stratification in the State Agency was the distance between the goals setters/ policy makers and the offices working to achieve goals. The interviewer asked State Agency counselor Laura* “how might top management discourage new ideas?” She stated, “There is always that discussion and I am sure that it's that way in any large company that Central Office staff is so far removed from the field and many times that is reflective in judgments and some of them you have to laugh at.”

Laura* elaborated by saying “There is a big variance in supervisors. Some supervisors, well I'll give you one little silly example. We try to educate people about deafness/hard of hearing. So we have wonderful training set up. People on one side of the hall went, people on the other side of the hall wanted to go and their supervisor told them ‘well you are not working with deaf folks you are not allowed to go to the training.’ So we had a whole group of people, by the way who some of them are buying hearing aids for their clients were not allowed to go to the deaf awareness training. Frankly I was appalled. So you just eliminated an opportunity not to mention that RSC had an investment in the training, they had an investment in the agency doing the training, they had an investment in their staff and they let one supervisor decide to tell their staff they
weren't allowed to participate. So I mean they (the Agency) let silly things like that go on.”

The relatively loose structure between the agency administrative office and the service-providing area offices can be both positive and negative to idea generation. At best it allows area office supervisors to create a supportive environment where counselors are encouraged to try new things and are not harshly penalized for poor performance when an attempt at creativity is not successful.

At worst, it allows other area supervisors to create an environment hostile to creativity, focusing on the production of closures and condemning “wasted” time and resources spent in crafting and implementing creative resolutions. For example, some clients have been served multiple times (e.g., eight or ten times). This means the counselor “closed” them after vocational placement but the individual did not keep the position and returned to the agency for further assistance. One might argue that allowing counselors to either “weed out” poor candidates or allowing counselors to investigate further and try new and creative solutions could result in fewer returning clients. Supervisors who press for quantity of closures are not concerned about the repeating of services, which increases agency costs significantly.

**Rewards**

Rewards were not mentioned in any negative accounts in either organization. In the positive accounts 7 out of 12 Ad Agency respondents attributed rewards as an enabling factor and 8 out of 12 State Agency respondents indicated that rewards were an enabling
factor. In both organizations the “reward” was primarily recognition by one’s peers and immediate supervisor, not a tangible or financial reward.

To say that management supports creativity is not enough. The top management at both organizations voice “support” for creativity, and at the Ad Agency they state that is “what (they) do” and what they are striving to be known for, yet there is considerable consensus (new and more experienced employees alike) that only the “creative” department is actually rewarded and acknowledged for creative efforts. There is a sense of envy of this team and what is coveted is primarily praise and recognition. Few people outside that department seem to know that monetary rewards are given at all for creative ideas.

Senior counselor from the State Agency, Carol*, said “There is a negative reward because we lose our jobs if we don't get enough people to work and that's all that happens. Kind of like doing a sales job - you lose your job if you don't sell enough product and that's all there is. If we don't get enough people to work - we are out of here plain and simple. There is no real reward for doing creativity. It doesn't matter - I have 25 people that all go to work for the same employer and in the same way or whether I have 25 people that I worked with very creatively - nobody is interested in that respect. They keep track of what we do with computer statistics and a printout and that is what the agency is interested in - dollars and cents.”

**Workload and Standards of Success**

The issue of workload was significant in both organizations and this topic warrants further study. Workload was a negative attribution in 7 out of 12 accounts in the Ad
Agency and in 7 out of 12 accounts in the State Agency (Table 4.15). The fact that workload impact on potential creativity was equally important in both organizations points to a possible general trend that is not industry or organization-type specific.

State Agency counselor Becky responded to the interviewer’s query “describe how creativity is maybe not rewarded or discouraged in your organization” by saying “I wouldn't say that it’s necessarily discouraged but not rewarded in the sense that we carry pretty high case loads and people get really bogged down with paper work here there's a lot of paperwork with this job. Lots of typing and things of that nature, and it takes a lot of time to develop new sources and new ideas and things of that nature and to try new avenues and I think that people just kind of get in a rut because it’s easier to just go with the way you do everybody else, yah know refer to the same vendors, referring people to doing the same kinds of jobs. I think that in that sense it’s discouraged because we do carry high caseloads.”

**Autonomy**

Autonomy is part of the larger structures of the organization. As stated in the previous chapter, autonomy is permitted by the management and leadership of the organization. Greater autonomy in carrying out tasks is tied to the definitions of worker rights and responsibilities in a specific organizational context. While greater autonomy was hypothesized to be a significant enabling factor in creative idea generation at work the findings did not support this assumption.

Other factors such as workload and a focus on production or quantity of solutions or products diminished the utility of autonomy in potential idea generation. Respondents
indicated that they were often too busy to pursue creative ideas. At the outset of this study I hypothesized autonomy to be an important factor in creativity at work and selected two different organizations where autonomy is part of how work responsibilities are structured. The State Agency used in this study is unique from other similar agencies in that the counselors are given a significant amount of decision-making freedom. For example, they can spend up to $10,000 a case without a supervisor’s approval. In the Ad Agency autonomy is part of keeping costs low and using a more flat, less hierarchical structure. Once a task is assigned, the employees have a significant amount of autonomy is carrying out that task, including leaving the office to work at a park or coffee shop.

Organizational Features and Systems Dynamics

In the present study I attempted to identify patterns across individual stories of creativity and mapped “circles of causality” (Senge, 1990). A linear model is not adequate, as has been discussed in Chapters 2 and 3. In Figures 1 and 2 (Appendix D) the elements in the stories of creativity are mapped with arrows that represent the influence on another element. The respondents’ stories of creativity were compared and consistent patterns were used to craft these models. Multiple individual stories were mapped but not all respondents provided adequate information for this and it did not seem appropriate to fill in details to make the stories fit a model. The purpose of these figures is to demonstrate one avenue for using a systems perspective to study how creativity unfolds in an organizational context.
Systems Archetypes are basic and understandable cycles that systems go through. The archetypes applied here from The Fifth Discipline are “Limits to Growth” (Figure 1) and “Eroding Goals” (Figure 2). In the Ad Agency the primary “product” hinges upon freshness and novelty. According to Ad Agency leader Jeff*, “we try to be new and different every time we go out the door I mean it’s tough to do especially when you're in a category that’s crowded with competitors and they’ve all been trying promote their product for umpteen years.” While the stated goal of the Ad Agency is to come up with the “next great idea” this is limited by existing conditions, including the difficulty of that task (i.e., it is hard to be really original) and the measure of success (i.e., if it sells). Because the clients are typically conservative and the market is struggling people are more cautious.

In the State Agency (Figure 2) the need for creativity is also related to product, in the sense that they serve individuals. Although on the surface the clients may seem to have similar disabilities, each person has a different set of circumstances and personal resources. The counselor must therefore essentially “customize” the services provided to each client.

The economic forces present in these archetypes are well known. The value of the present study is framing the issue of creativity in a broader systemic view to see that it is not possible as a long-term goal without restructuring. The quick fix or turnkey solution is not possible, real creativity is about growth and strengthening the system.

Weaknesses of this “mapping” approach, applying systems archetypes, include the fact that an archetype is simply a mental model made visible (Senge, 1990, p. 174). Translating a complex organizational issue into a model that makes sense requires a high
level of skill and Senge’s work has no built-in criteria for distinguishing whether a model is credible or appropriate. The archetypes also seem to focus on the use of systems rather than emphasizing processes within a system. I offer these figures or cognitive maps as one way to frame the findings of this study from a system’s perspective, which may be valuable in suggested future research.

**Communication**

Creative idea generation in both organizations required a combination of isolation and interaction with co-workers and immediate superiors. Data coded under the factors of environment and communication support this general conclusion. Communication with co-workers and supervisors was primarily positive in the accounts offered in this study. For the Ad Agency 6 out of 12 respondents described such communication as a positive attribution in their account of successful idea generation at work. For the State Agency 6 out of 12 respondents also identified co-worker and supervisor informal communication as an enabling factor.

In addition, the respondents’ use of the terms “teams” or “our office” as central to idea generation is consistent with the assertion that it is teams, not individuals that are the primary learning unit in organizations (Senge, 1990, p. 10).

Getting the perspectives of others can be very useful to some creating individuals. For example, in explaining why her Ad Agency colleague Jane’s* approach to solving a problem was creative, Caryn* stated “we have to throw out every idea, whether we think
it’s gonna fly or not. Because if you throw out an idea that’s not going to fly it’s likely to spark some type of creativity within that of your co-worker because we can just feed off each other's ideas and I don't know it helps it helps promote other's creativity. If they see you thinking outside the box I think they'll do that in turn and eventually through all that brainstorming you'll kind of climb out of the mud and come -- you'll be able to end up with this great you know concept that fits everyone's needs. You kind of need to, is what I'm saying, go out in left field.”

Communication can also have a negative impact on idea generation. In an interview with State Agency counselor Ann*, the interviewer stated, “I would like to understand how creativity may be discouraged in your organization. Please recall a specific instance where someone tried to do something creative and how did top management penalize the individual?” Ann said “Well, as you know because you've talked to other counselors, there are the yearly goals, annual goals, you have to get so many successful closures and we've been told (a) we have to do more with less, that is directly from our director*. We have been told directly from the director and assistant-director that we need to sacrifice quality for quantity.”

It is clear that the relationship of communication and interaction with co-workers to idea generation is complex and requires further study. The pervasiveness and importance of this sub-topic lead to the development of the theme of “collaborative idea generation”.
Themes Identified Through Across-Case Analysis

This section of the discussion focuses on research question one regarding the common themes in individual accounts of creative idea generation at work. I was interested in the commonalities across cases and across organizational type. The type of organization has a significant impact on attitudes and behaviors related to production and creativity or novelty. I was interested in seeing if there were commonalities in the positive and negative accounts of creativity at work in both of the organizations included in this analysis.

The term “theme” has been used in this research study to label a pattern of reasoning identified across respondent accounts of creativity at work. Focusing on the initial phase of the creative process, I identified the themes of “non-routine solution needed” and “collaborative idea generation”.

Non-Routine Solution

The theme of “non-routine solution needed” is significant in defining when creativity is likely to occur in organizations. While it has already been established that most individuals are likely to seek new ways of doing something only when the standard solution does not work, in this study that seemed to be qualifier or excuse for breaking certain informal “rules”. The development of new ideas or products is time-consuming and often costly. As stated in Chapter 4, the theme of “non-routine solution needed” was found in all 24 interviews and 786 text units or lines of text. I argue that the norms of
organizational behavior include the use of routine solutions even in the Ad Agency where creativity is the stated goal. How these socially learned rules might be altered by different communication practices is an interesting question. The problem-finding context, including social interaction and organizational culture, frames the response.

In the Ad Agency a “non-routine solution” is called for when either the client is open to suggestions crafted by the agency or when past directions are not satisfactory but a new direction is not clearly defined. In the State Agency a “non-routine solution” is called for when more common solutions will not work due to specific circumstances with that client.

For example, Laura* stated that clients who are both blind and deaf are always non-routine or “not the norm” in that the common forms of testing and placement will not work for them. In addition to the nature of the disability, the vocational goal may be usual, as was the case with a Broadway wig-maker. This individual already had industry contacts and appropriate skills, therefore the collaborative nature of the placement offered a reduced risk and expenditure of State Agency resources. Normally it would very difficult to justify training and support costs for such a narrow vocational goal in such a small niche market.

As stated in Chapter 4, the nature of the problem and its resistance to conventional solutions legitimizes creative action. This does three things: 1) justifies the expense of additional resources including time, 2) justifies greater demand for tolerance from co-workers and immediate supervisors, and 3) allows for temporary suspension of the “rule” of maintaining stability. The circumstances justify unusual action as necessary to “get the job done”. Greater tolerance may be required as people explore options and try new
things. The indulgence shown to the creative team in the Ad Agency is a good example. It is common to observe these people arrive to work late or leave early, or to see them playing pool or riding scooters around the office. Ad Agency leader Jeff* stated that his previous boss had required people to leave the office and see a movie when they were stumped on a particular problem. The standards of office behavior may be relaxed when creativity is a substantial goal.

Creativity can be seen as a substantial goal when it leads to organizational success via revenue. When a problem requires a “non-routine solution” this allows a temporary suspension of the rules of maintaining the stability of the organization. Note that this is only for a short period of time and not an on-going threat to stability. Several individuals in the Ad Agency referred to “reigning in” creativity and the larger criteria of satisfying the client. This reaffirms the value of and commitment to the reproducible, predictable organizational structure.

In this way creativity and the change it embodies is reconciled to the need for stability and control. There is an on-going balance between stability and change and as organizational change theorists have argued the turmoil of change cannot be sustained over time (Gersick, 1991). The findings of this research study are consistent with current perspectives on organizational stability and change.

Collaborative Idea Generation

The second theme identified across the accounts was “collaborative idea generation”. This includes communication across domains and communication with co-workers and supervisors. Often this communication is informal, or what I have termed “coffee pot”
talk. The term “water cooler” talk has been used in the past to describe such informal exchanges, but I observed individuals in both organizations frequently milling around the coffee pot and engaging in work-related discussions. In the State Agency these interactions tend to occur when the individual is “stumped” or having difficulty in generating effective solutions. Many State Agency respondents referred to “bouncing ideas off” their supervisor or co-workers.

As stated in the previous chapter, I differentiate between the theme of “collaborative idea generation” and brainstorming. The respondents used the term “brainstorm” to describe scenarios of formal and informal interactions. The research literature on brainstorming is beyond the scope of this current study.

The pervasive use of informal communication throughout the initial phases of the creative process contradicts the Stein (1970) model of creative process. As stated in Chapter 4, his model depicts an isolated person who experiences creativity as an internal process. While some amount of internal activity is likely, in a professional work context the on-going social milieu impacts all phases of the creative process. There is no “team mind” or “shared consciousness”; therefore, all creative work in an organizational context requires individual and group sense making and interaction.

A combination of intrapersonal and interpersonal communication is essential in the crafting of kernel creative ideas. This presents a significant challenge in terms of research, but not a significantly greater challenge, I argue, than attempting to access the inner workings of an individual’s mind. The informal interactions that may not even seem to be connected to a creative project would be difficult to study. Network analysis, videotaping of office activity, the use of respondent journals and interviews may be one
avenue for addressing the gestation and birth of ideas in an organizational setting. Ebadi and Utterback (1984) looked at nationally funded scientific research projects and mapped the number or frequency of communications between different stakeholders. A more sophisticated approach is needed in terms of grappling with the content as well as the social context of messages related to creative idea generation and development. The collaborative idea generation interactions identified in this study appear to share the following three characteristics: 1) the expertise of the source consulted, 2) the communication is off-the-record or informal, and 3) it is idea generating as well as idea testing. The individuals that respondents reported seeking assistance from were usually immediate superiors and occasionally experienced co-workers. The communications were generally off-the-record and occurred in hallways, break-rooms, parking lots and elevators.

I argue that these informal interactions, also referred to a “bouncing ideas off” of the other person, allow the person to receive a critique of their ideas without the risk of losing face or being “wrong”. Lastly, the testing of ideas is a well-established part of the idea development and implementation process. In this study, however, I found that individuals often engaged in collaborative idea generation, where interactions often yielded not only changes to an existing kernel idea but also the emergence of new kernel ideas. The nature of this interaction makes ferreting out the source of a creative idea particularly challenging.

Individuals are sometimes unable to distinguish exactly when the idea that is used emerged and cannot identify key interactions in specific terms. At best, respondents could identify specific interactions (e.g., a meeting with a co-worker at a coffee shop
where they talked for a couple hours) or they could assess the relative contributions of the parties (e.g., equally the partner and themselves generating a final idea).

**The Limitations of This Study**

Stein’s model (1974) of creativity was somewhat useful in formulating interview questions, but it was not as useful in the analysis of the data. I argue that this is due to the fact that Stein (1974) was referring to the process in terms of a discrete series of actions, thoughts and feelings. Also, in Stein’s (1974) model of the creative process the creative individual selects a problem or project to work on. In this study the problem was presented to the individuals, not randomly selected by them.

**Limits Related to the Nature of Accounts**

The nature of accounts impacts the interpretation of the data. Respondents’ attributions and the reasoning applied in the respondents’ storytelling are useful for getting at what is involved in the start of the creative process.

Argyris (1990) argues that his “ladder of inference” is a representation of how the human mind works as people make sense of their experience. A “ladder of inference” is a “common mental pathway of increasing abstraction, often leading to misguided beliefs” (Argyris, 1990, p. 87). The first rung of the ladder of inference consists of observable behaviors. The second rung consists of culturally learned meaning that “individuals with different views or axes to grind would agree were communicated during the conversation” (Argyris, 1990, p. 88). The third rung consists of the interpretations
individuals impose on the second-rung meanings. The fourth rung consists of “the theories of action individuals use to craft their conversations and to understand the actions of other people” (Argyris, 1990, p. 88). Table 5.1 illustrates how a ladder of inference can be applied to the accounts given in this study.

| 4 | Really creative ideas never work because our clients won’t go for it. Therefore, too much creative effort is a waste of time. |
| 3 | We were fresh and creative and they (clients) are too backward and dull-witted to appreciate it! |
| 2 | Clients are viewed as quiet and using negative expressions. Not bad = don’t like the idea because clients are too conservative. |
| 1 | Ad campaign ideas presented to the client. Nonverbal communication includes crossed arms, no smiles and the occasional “um huh” and “not bad”. |

Table 5.1: Sample “Ladder of Inference” (Argyris, 1990)

The evaluations or judgments people make are not obvious or tangible, rather, they are “abstract and highly inferential” (Argyris, 1990, p. 89). Senge argues that the ladder of inference demonstrates how “rapidly we can leap to knee-jerk conclusions with no intermediate thought process, as if rapidly climbing up a ladder in our minds” (1994, p. 237). The highly inferential nature of accounts and assessments is not conducive to using these data in generalizations about the larger population. The stories told by respondents in this research study should be weighed with due consideration given to these underlying assumptions of the nature of accounts.

Some measure of self-report is needed to understand an individual’s experiences with creativity at work. The start of the creative process has been described as a product of an individual mind based upon an individual’s skills, motivations and goals. One cannot
guess what goes on in another individual’s mind but we can record their accounts and compare these accounts or stories and the accompanying explanations with those of their colleagues and other working professionals. This study demonstrates one approach to using a communication-based perspective to examine the creative process as experienced by individuals in professional work contexts.

Sample Organizations

Two different types of organizations were involved in this study, a Midwestern State Vocational Rehabilitation Agency and an Advertising Agency. While these two organizations provide an interesting contrast to one another and an advance in a literature dominated by R&D environments, they do not represent every possible organizational context. The findings of this study are tied to the context, including the economic and social forces acting upon these organizations and individuals at the time of data collection.

I would have liked to do a longitudinal study involving a second round of data collection a year later. However, due to resource constraints this was not possible. The issue of a lack of funding also impacted the study in the reliance on one data coder and the sample size. A few ways I chose to strengthen the research design include the comparison between the two types of organizations and the use of confederate interviews to balance the distortion of self-reports.
**Types of Analysis Possible**

The nature of the sample (purposive rather than random) and the basic goals of this study (descriptive rather than predictive) have resulted in the use of frequencies to track patterns in accounts. I felt that due to the nature of the data certain descriptive statistics would be inappropriate. The respondents have given their assessments based on their own individual definitions. For example, the terms “creative”, “effective”, “supportive” or “hinder” access a similar pool of ideas as all of these individuals are from the same culture, same organization and often share the same background in terms of education and training. That does not mean that they are equivalent in the sense that they can be mathematically calculated to estimate an average score (e.g., z-score or t-statistic). I truly made every attempt to understand the respondents’ experiences as they shared them with me and the interviews were very much an interaction or conversation rather than a survey.
Summary of the Findings

One finding of this study is that across organizational type co-workers are more likely to dispute the creativity of another person’s idea or product than to dispute the effectiveness of that idea or product. A second major finding is that the respondents described themselves as collaborating with others within and outside the organization to craft and implement their creative ideas.

Organizational-level factors have a greater impact on idea generation and the creative process at work than individual-level factors. The most common organizational-level factors attributed with hindering creative efforts were workload, the goals/type of organization, and organizational features including formalization and production.

Respondents consistently attributed organizational features to be an enabling factor in positive accounts in both the Ad Agency and the State Agency. Other organization-level factors that were significant in positive accounts include communication and rewards. While autonomy had been hypothesized to be of central importance to creativity at work, this was not supported by the research results.

Two themes were identified in the across-case analysis involving both organizations (i.e., 24 interviews total). These themes were “non-routine solution needed” and “collaborative idea generation”. These themes address when creativity is likely to occur in the professional organizational context and suggest how creativity may be supported in a limited sense.
The theme of collaborative idea generation relates to a larger issue of how the creative process unfolds in a professional organizational context. As I stated earlier, in organizational practice there is no “lone-wolf”. A new model of creativity in a work context is needed which can address the interrelationships among individuals within and beyond the organization. The birth of new ideas in a specific organizational context and the dynamic interactions among elements of that specific context should be examined from a communication scholarly perspective.

This research study addressed a lower level of creativity, which is often not supported by the organization because from their perspective there is no adequate return on investment. A greater understanding of the stories of both successful and unsuccessful attempts at creativity is one of the major contributions of this present study. These stories reflect the thoughts and feelings of employees regarding creativity in their work lives. These stories reveal how people make sense of their experiences. The organizational factors and individual factors are a combination of measurable, relatively stable realities, such as workload, and more elastic interpretations and assumptions (positive communication), which are the basis for creative action.
Future Directions for Research

One of the unique contributions of this present work is to reframe creativity at work as a communication-based issue. I argue that the relationship between communication and interaction with co-workers to idea generation requires further study. For example, one might look at the evolution of an idea vis-à-vis communication practices, possibly using a combination of interviews and network analysis. Ebadi and Utterback (1984) did a basic analysis on an organizational-level tracking the frequencies of communication between stakeholders and the success of a scientific research project. I feel that applying these ideas within an organization focusing on work groups and individuals within those groups could be a useful way to study the importance and uses of informal communication in idea generation.

I also argue that creativity is not a process that occurs within the mind of one person, as Stein (1974) has stated. Stein (1974) refers to the “mystique aspects of creativity” which include inspiration, intuition, and aesthetic feeling for a potential creative idea. While there is an emotional element to creativity that cannot be divorced from it even in the professional organizational context, these “mystiques” do not seem to accurately represent the essential elements of individual-based creativity at work.

Further research on the complex factor of aesthetic feel is needed. The results of this study have fueled my interest in exploring aesthetic feel in successful idea generation. One possible approach is to use recent patents as a source of external validation of the novelty of an idea and trace the process backward with the individuals.
The connection between divergent production (DP) abilities (Guildford, 1967) and aesthetic feel is also a good avenue for future research. This category of cognitive abilities includes idea generation and types of fluency, including ideational fluency. The cognitive component of aesthetic feel may correlate with measurable DP abilities and thus existing instruments could be used such as Torrance’s (1995) Tests of Creative Thinking, which are based on Guildford’s (1967) instrument.

There is clearly an emotional element to aesthetic feel that may or may not be tapped by such measures. It seems that the creating individual themselves cannot provide an adequate description of this aspect of the creative experience, so how can researchers access it? I argue that the field of creativity research would benefit from a diversity of research approaches to this question.
In this final chapter I reflect on the research journey and what I have learned about creativity at work that constitutes a useful contribution to the organizational creativity research literature. The central issues addressed in this chapter are: how my own definition of creativity differs from the prevailing definition, constructive theory, stories of creativity and the phenomena of interest, aesthetic feel and the creative process, and separating creativity from innovation.

A Definition of Creativity and Constructive Theory

I argue that creativity at work is based on the co-creation of meaning, and this co-creation of meaning is based on interpersonal communication. The perspective that creative ideas are actually born within a specific conversation is perhaps hinted at in Rogers process definition of creativity as “the emergence in action of a novel relational
product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of his life on the other” (Rogers, 1954). While I agree with Rogers I argue that creativity in the organizational context will be shaped primarily by organizational rather than individual factors.

Amabile’s (1988) social-psychology model of individual and group creativity consists of 1) task presentation, 2) preparation (information and resource gathering), 3) idea generation (brainstorming), 4) idea validation (checking ideas per task criteria), and 5) outcome assessment (success/ failure of solution).

The social psychology models of creativity (Amabile, et al., 1996; Woodman, et al., 1993) do not adequately address the notion that creative ideas emerge within the social milieu of the professional work environment. Interactions occurring in particular contexts (e.g., social, economic and political contexts) involve the co-creation of meaning. The communication perspective I propose as a conceptual framework is based on interpretive theory (Blumer, 1969; Giddens, 1979; Weick, 1979).

Meaning is viewed in this interpretive perspective as “arising in the process of interaction between people” and the use of meanings by a social actor “occurs through a process of interpretation” (Blumer, 1969). Social structures, and organizational structure, are instantiations of social practices (Giddens, 1979). Weick (1979) contends that human reactions “enact” the organizational environment through information exchanges and active creation of meanings. Weick (1979) views both the environment and the organization as socially constructed, and he argues that the organization exists moment to moment as instantiations of social interaction, or social practices “sedimented” in time and space.
Giddens (1979) argues that organizational structure exists only in how it is enacted and experienced in social practices, and as cognitive schemes used by individuals in orienting their behavior. Giddens asserts that structure is both the medium and outcome of the reproduction of practices, and so structure is both made possible by and maintained through the patterns of communicative behavior within organizations.

Based on an interpretive framework I forward a conception of the creative process as based on the communication processes that enact the organization and its structures, including work relationships and organizational member roles. I argue that communication processes play a pivotal role in constituting “spaces” in the organization, making creativity possible. Communication that enables creativity within organizations includes informal communication, involving an individual’s social network that extends to co-workers and contacts outside the organization (Ejadi & Utterback, 1984; Albrecht & Hall, 1991a).

I argue that Giddens (1979) “theory of structuration” should be applied to creative idea generation at work and the creation and maintenance of structures. Giddens describes the generative and constraining aspects of structure as “the duality of structure”. I argue that an adequate definition of “creative” from a communication perspective must convey the notion that the tapestry of creative ideas is woven in a specific context by the participants.
Stories of Creativity

The phenomena of creative idea generation, in its pure form, has not been accessed in this study. Rather, I have accessed individuals’ versions of events that they have identified as “creativity stories”. The stories shared by respondents represent a high level of abstraction, or the top rung of the “ladder of inference” (Argyris, 1990). Direct observation of the phenomena was not possible, although I may have improved the results by asking respondents to “show me examples of working toward a creative goal”.

What may be called “the struggle” to articulate or complete a creative idea or product is an essential part of the creative process. Individuals must labor, often trying different things, until finally achieving the result they desire. This process is not an unpleasant one; it can be thrilling and truly engaging to the individual mentally and emotionally.

One State Agency respondent stated that the creative process was like being a detective and piecing things together. Joan* indicated having a sense of satisfaction in the completion but also a “down” side of not being engaged in the process anymore. This “down” will possibly persist until one is “wrapped up” in the next project.

The “struggle” involves what I term the “world of feeling”, which exists beyond the world of words. This realm is constituted by our “gut reactions” and “internal sense of knowing” as well as our sensory and emotional experiences. The visual appeal of an advertisement, the sense of motion conveyed and even scents used in its production call forth a response. This aspect of the process corresponds to the notion of aesthetic feel as the kernel of the creative process.
Aesthetic Feel and Creativity

Stein (1974) argues that the creative individual senses, feels with, and follows the lead of the stimuli in his/her problem or environment “through bodily or kinesthetic sensations” (Stein, 1974, p. 27). The term “kinesthetic” is problematic because it refers to the movement of the body. The correct term would be “poly-esthetic” as all of the senses are involved. I define “aesthetic feel” as the ability to effectively attend to any sensory cues as well as emotional and instinct-based reactions. The word “effectively” is used because arguably all human beings are able to feel or experience these sensations but it is used in a creative sense only by those individuals who attend to these feelings and interpret them accurately.

The difficult concept of aesthetic feel has been ignored in the current organizational creativity research literature yet this is clearly a part of how individuals experience creativity at work. Creativity is not a purely cognitive process taking place inside one person’s mind as Stein (1972) has suggested. Creativity involves ways of knowing or sensing that go beyond the world of words. Feelings deeply involved in the process of “true inventiveness” have been lumped under the category of aesthetic feel in this study. The complexity of the phenomena and the aspects of the creative experience that involve worlds of feeling and sensing rather than words have made it difficult to “analyze” these feelings.

The emotional nature of the creative experience points to a seemingly insurmountable obstacle to our research of creativity. Some portion of the creative process involves non-linguistic domains of all types of sensory cues and emotion or instinct. Individuals
essentially distort this experience by even attempting to distill it into an account at the request of researchers, such as myself, because there is no clear translation between the world of feeling and the world of words.

**Creativity and Innovation**

In the course of this study I have learned that creativity is not always connected to innovation. This is particularly true of the lower level of creativity focused on in this study. There are two issues here: 1) individual creativity may not be adopted as organizational-level innovation, and 2) innovation can be based on lesser forms of creativity.

The first issue I have identified is that creative ideas and resolutions created and applied by the individual in carrying out their assigned tasks may not result in any other changes in the system, particularly system-wide change such as innovation. Respondents in the State Agency stated that top management would not even know about their successful creative resolutions. Yet the organizational creativity literature often assumes that individual creativity is directly connected to innovation and depict this in a linear fashion in models of the processes (Amabile, et al., 1996; Woodman, et al., 1993). Based on the data analyzed in this study I argue that grass-roots creativity will have minimal impact on larger structures, allowing for larger system stability.

The second issue I have identified is that innovation at the organizational level may be based on what Stein (1974) has referred to as “lesser cases” of creativity such as trial-
and-error and recombination of existing materials or resources. I disagree with Stein that the term “creativity” should be applied to these cases.

I argue that innovation is not always based on “true inventive creativity” but rather is a result of the lesser processes of trial-and-error or recombination. Recombination of existing practices or ideas is very common in organizations and was a common basis for “creativity” in the Ad Agency. While such recombination does show the kind of mental flexibility associated with creativity (Guildford, 1983) it does not show the “radical-ness” which, I argue, is a hallmark of true “inventive creativity”.

**Resistance to Creativity**

I have also learned that creativity may not always be positive. Organizational resistance to creativity serves the purpose of protecting the organization from change and not only sustains existing structure but also reduces the stress of organizational members. Resistance to creativity also serves as a stringent test of the strength of the ideas. From a biological systems model only the “fittest survive” meaning that individual ideas or projects that do not survive organizational resistance might be poor ideas – poorly conceived or poorly timed.

The success of creative ideas is also dependent upon the political and communication skills of those who support the creative idea (Woodman, et al., 1993). The “elites” of a system will have more power to influence change including the development and implementation of new ideas (Albrecht & Hall, 1991b). As stated in Chapter 2, Ford
(1996) has argued that “knowledge regarding the content and structure of different domains, trustworthy contacts from multiple fields, and communication skills that facilitate exchanges within and across fields can be considered as capabilities that are perhaps uniquely important to organizational creativity” (p. 1124).

Senge (1990) argues that many service industries suffer from outdated mental models, which has led to a focus on cost-savings at the expense of the quality-of-care (p. 177). This is part of the problem with the State Agency in this study, and this focus on cost-savings relates to organizational change and the concept of inertia. The constraints that hinder individual level creativity are often created unintentionally through the communicative behavior of others (e.g., supervisors and coworkers). We rarely achieve what we set out to achieve and our actions often create the opposite of what we intend.

Laura* of the State Agency said “it's a lot more political than it used to be. So if a counselor was coming fresh out of school and, you know, have I think it's almost no counseling yet the client's still expect to be counseled. They are still calling us and looking for the counseling and vocational guidance and the agency really has pressures for numbers not necessarily the counseling.”

Angle and Van de Ven (1989) have stated that their experience in working on the 12 longitudinal Minnesota Innovation Research Project Studies revealed that many of the factors that influence the success of a project were not within the control of the innovators (p. 664).

Organizations select and reinforce shared understandings that enhance their legitimacy (in a specific domain) and increase their chances for survival. “Institutional forces
represent an evolving process that limits and shapes basic choices and actions” (Ford, 1996, p. 1130).

**Organizational Change and Interaction**

The research literature on resistance to organizational change briefly addressed in Chapter 1 emphasizes stability and comfort with the status quo. However, organizational structures are created and recreated via interaction and change needs to be part of the “on-going conversation” (Ford, 1999) of the organization. Ford (1999) argues that conversations in professional organizational contexts are “both the medium and product of reality construction” (p. 480) and that organizational change requires new on-going conversations. I argue that in order to foster greater creativity, managers and others in a position to advocate change need to craft a supportive environment through communication. One example of this would be a manager discussing the benefits of a tried-and-failed attempt at creativity, focusing on the lessons learned rather than placing blame. The manager could praise the initiative and open a discussion on new versions of the creative idea.

The larger goal of serving clients will not change, but the view of how one fulfills that goal can be changed. “Since constructed realities provide the context in which people act and interact, shifting these realities opens new possibilities for action and the realization of new orders of results” (Ford, 1999, p. 480).
Such a shift could create the needed “safe space” (Nutt, 2002) for a culture that values and enables creativity. One of the unique contributions of this present work is to reframe creativity at work as a communication-based issue. I argue that creativity is not a process that occurs within the mind of one individual; rather, it is part of the on-going conversational reality of certain organizations. Existing models of organizational creativity emphasize intra-individual processes and stable characteristics (e.g., personality and intelligence). I argue that an effective model of creativity in professional work contexts must emphasize inter-personal processes and the type of problem addressed (i.e., an advertising campaign versus a new theatrical play)
Conclusion

Interpersonal communication is the basis for creativity in organizations as it is the means by which organizations are created and sustained (Giddens, 1984; Weick, 1979). The every day interactions of organizational members that give rise to the birth of new ideas are most appropriately addressed from an interpretive communication theory perspective. The dialogic approach to communication and efficiency at work emphasizes mutual, two-way communication between managers and employees working to accomplish complex tasks (Eisenberg & Goodall, 1993). Dialogue refers to the communicative practices that provide individuals equal opportunity to contribute (e.g., forward new ideas and offer critique of ideas), and it involves securing the conditions necessary for full egalitarian exchanges. A communicative climate that enables creativity must include dialogue.

I propose that a positive creative climate is based on perceptions of being able to trust management and the establishment of “dialogic” communicative practices. The previous research on “creative climate” applying communication theory (Scott & Bruce, 1994) is more than 10 years out of date and the rapid changes associated with technology have changed the professional work environment significantly in that amount of time. For example, work is often more collaborative and work-loads are generally higher.

The balance between organizational creativity and stability is an important issue. The popular social-psychology models of creativity (Amabile, et al., 1996; Woodman, et al., 1993) do not address the important notion of aesthetics and the co-creation of meaning.
This present study is one step toward the larger goal of accurately modeling creativity in professional work contexts and understanding how it may be enabled or constrained.

Is it possible to be “too creative”? Yes. According to the respondents in this study, the radical-ness of the idea needs to be tempered in order to successfully address needs. The criteria applied by most individuals in the Advertising Agency was “something fresh that is accepted by the client”. One must also bear in mind that the “productive chaos” advocated by Gryskiewicz (2000) is not sustainable due to the need for stability in the reproducible structures of the organization and for the psychological well-being of the organization members. Change can be exciting but it is also stressful and the creativity which may lead to rewards for the larger organization necessarily involves significant change.


CONSENT FOR PARTICIPATING IN SOCIAL AND BEHAVIORAL RESEARCH

Protocol title: Creativity at Work

Protocol number: 02B0202

Principal Investigator: Dr. Felecia Ross (Advisor)
Assistant Investigator: Brenda Lynch (Doctoral Candidate)

I consent to my participation in research being conducted by Dr. Ross of The Ohio State University and her assistants and associates.

The investigator(s) has explained the purpose of the study, the procedures that will be followed, and the amount of time it will take. I understand the possible benefits, if any, of my participation.

I know that I can choose not to participate without penalty to me. If I agree to participate, I can withdraw from the study at any time, and there will be no penalty. I consent to the use of audiotapes. I understand how the tapes will be used for this study.

I have had a chance to ask questions and to obtain answers to my questions. I can contact the investigators at (614) 292-3798 or (740) 927-5564. If I have questions about my rights as a research participant, I can call the Office of Research Risks Protection at (614) 688-4792.

I know that a copy of the final report will be released to the organization where I am employed, and that this brief report will not contain any names or direct quotes from respondents.

I have read this form or I have had it read to me. I sign it freely and voluntarily. A copy has been given to me.

Print the name of the participant:

Date: ___________________________ Signed: ___________________________

(Participant)

Signed:

(Principal Investigator or his/her authorized representative)

Signed:

(Person authorized to consent for participant, if required)

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APPENDIX B

Primary Respondent Interview Schedule

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>Highest level of Education:</td>
</tr>
<tr>
<td>Place:</td>
<td>Emphasis/specialty:</td>
</tr>
<tr>
<td>Time:</td>
<td>Occupation:</td>
</tr>
<tr>
<td>Gender:</td>
<td>How long employed by this organization:</td>
</tr>
</tbody>
</table>

**Preamble:** I am interested in situations where an individual has tried all existing methods to address a problem and has come up with a new (novel to that organization) idea to resolve the problem. This process of coming up with a new idea is what I define as creativity for the purposes of this study. I am trying to gain a better understanding of how people come up with creative ideas at work. Therefore, I would like to hear about your experiences. Please answer the questions completely and feel free to ask your own questions. There are no right or wrong answers to these questions. I will summarize your answer at the close of the interview to verify I have heard you correctly and have accurately reflected your experiences.

Q1: Tell me a story about when you had a creative (new) idea at work and things went well.
   1a. What happened?
   1b. Who was involved?
   1c. When did this happen?

Q2: To what do you attribute the success in that particular example?

Q3: Please tell me a story about when you had a creative idea at work and things did not go well.
   3a. What happened?
   3b. Who was involved?
   3c. When did this happen?

Q4: To what do you attribute the lack of success in that particular example?

Q5: Describe how creativity is rewarded in your organization.

Q6: Describe how is creativity not rewarded or discouraged in your organization.

Q7: Is management supportive of trying new ideas? (no – a., yes – b.)
   7a. i. Describe how top management might discourage new ideas.
   7a. ii. Describe how your immediate supervisor might discourage new ideas?
   7b. i. Describe how top management might encourage new ideas.

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7b. ii. Describe how your immediate supervisor might encourage new ideas.

Q8: What aspects of your job enable you to be creative?

Q8: What aspects of your job hinder your potential creativity?

Q9: Is there anything that I haven't asked that you think I should have asked or anything you would simply like to add about creativity at work?
APPENDIX C

Confederate Interview Schedule

Respondent's Name:
Sex:
Age:
Highest level of Education:
Emphasis/ specialty:
Occupation:
How long employed by this organization:

Interview Schedule Preamble: I am interested in situations where an individual has tried all existing methods to address a problem and has come up with a new idea, one that is novel to that organization to resolve the problem. This process of coming up with a new idea is what I define as creativity for the purposes of this study. I have interviewed your colleague (X) and today I would like to hear your perspective on a few aspects of creativity at work identified by your colleague.

(Positive Case)
1. Your colleague told me about a case where __________________________
   a) In what way is that typical of work in your office?
   b) In what way is that creative?

2. He/she felt that the success of that case was largely due to ________________
   a) To what would you attribute the success in that case?

(Negative Case)
1. Your colleague told me about a case where he/she ________________________
   a) In what way is that typical of work in your office?
   b) In what way is that creative?

2. He/she felt that the lack of success in that case was largely due to __________
   a) To what would you attribute the lack of success in that case?

3. I would like to understand how creativity is rewarded in your organization. Try to recall a specific instance where someone did something creative and tell me:
   How was that creativity rewarded (by):
   a) That person's immediate supervisor
   b) By others in authority in the organization

4. I would like to understand how creativity is discouraged in your organization. Please recall a specific instance where someone tried something novel/creative.
   a) How did top management penalize the individual?
   b) How did your immediate supervisor penalize the individual?

5. What aspects of your job enable creativity?

6. What aspects of your job hinder creativity?

7. Is there anything about creativity at work that I have not asked that you feel I should have asked? Is there anything you would like to add?
APPENDIX D

FIGURE 1: Systems Map of the Advertising Agency Stories
FIGURE 2: Systems Map of the State Agency Stories

**Eroding Goals in State Agency**

- **Goal:** To serve the employment related needs of disabled citizens

- **Pressure to adjust goal** – “Just move them through”

- **Gap (delay)**

- **“Side effects”**
  - Creative Abilities Atrophy in a Reinforcing process

**Limiting Conditions:**
- Unemployment
- Unmotivated clients
- Scarce Resources

**Condition:** Lack of successful placements

**Actions to improve condition:** Raise quotas for counselors

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