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A SOCIAL LIFE PERSPECTIVE ON WORK RELATIONSHIPS

by

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of the requirements for the degree of
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To my family, and to Lance. Thank you.
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Table of contents

Dedication ................................................................. ii
Acknowledgements..................................................... iii
List of tables............................................................. vi
List of appendices...................................................... vii
Abstract................................................................. viii
Chapter.................................................................

1 Introduction: The need for a new perspective. ............... 1
  Roadblocks to understanding.................................... 4
  Conclusion: Missing pieces to the puzzle..................... 18

2 Understanding social life......................................... 20
  What types of groups are “true” groups?...................... 21
  How do true groups come to be?................................. 23
  How shall we see a group? The moments of social life ....... 26
  Stories as method and introduction to the dissertation studies .... 37

3 Study 1.................................................................. 43
  Research sites......................................................... 44
  Specific hypotheses.................................................. 46
  Study 1 overview..................................................... 49
  Sample................................................................. 50
  Instruments........................................................... 50
  Method................................................................. 52
  Analyses and results............................................... 54
  Discussion............................................................ 73

4 Study 2.................................................................. 83
  Study 2 overview..................................................... 84
  Specific hypotheses.................................................. 84
  Instruments........................................................... 87
  Sample................................................................. 88
  Analyses and results............................................... 89
  Discussion............................................................ 97

5 Discussion and conclusion........................................ 103
  Contributions........................................................ 103
  Limitations and future directions............................... 113
  Conclusion............................................................ 121

Appendices.................................................................. 122
References............................................................... 142
List of tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Participant demographics.</td>
<td>50</td>
</tr>
<tr>
<td>3.2</td>
<td>Reliabilities of measures used in Study 1.</td>
<td>51</td>
</tr>
<tr>
<td>3.3</td>
<td>Themes from firefighting stories.</td>
<td>56</td>
</tr>
<tr>
<td>3.4</td>
<td>Factor analysis of the elements of social life and factor loadings.</td>
<td>67</td>
</tr>
<tr>
<td>3.5</td>
<td>Hypothesis 3a correlations between social life and elements.</td>
<td>68</td>
</tr>
<tr>
<td>3.6</td>
<td>Hypotheses 3a and 3b: Means and standard deviations for elements of social life.</td>
<td>69</td>
</tr>
<tr>
<td>3.7</td>
<td>Exploratory analysis correlation results.</td>
<td>71</td>
</tr>
<tr>
<td>Appendix</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>A</td>
<td>Materials, Study 1</td>
<td>122</td>
</tr>
<tr>
<td>B</td>
<td>Coding scheme for firefighting stories.</td>
<td>135</td>
</tr>
<tr>
<td>C</td>
<td>Study 1 Instruments</td>
<td>138</td>
</tr>
<tr>
<td>D</td>
<td>Study 2 Materials</td>
<td>140</td>
</tr>
</tbody>
</table>
Abstract

Although social relationships are rich with feeling, most psychological research on groups and relationships views them more coldly. As a result, there are few studies accounting for the powerful emotional experience of belonging. In this dissertation, I suggest the alternative viewpoint of the social life perspective. The social life perspective considers the connections between people as living, dynamic forms filled with particular tensions. In addition to the three moments of social life recognized by Sandelands (2003), I identify ten elements of social life that characterize its appearance. The two dissertation studies empirically test the validity of the social life perspective, and examine its relationship to other variables.

In Study 1, I survey 167 firefighters about their experiences of loving and hating work. I then code these stories in order to identify the moments and elements of social life. The results indicate that social life is central to the work experience, and that the moments of social life, particularly love and individuation, are identifiably in stories told by firefighters. Through qualitative analysis, I identify ten broad topics firefighters used to discuss social life, and also identify features of the moments of social life in concordance with the theory. I also find support for the hypothesized elements of social life and find that they significantly relate to the moments of social life. Finally, the results of Study 1 indicate that the moments of social life do not predict psychological well-being or work performance, although the negative elements of social life do predict lower scores on measures of affiliation with the organization.

In Study 2, untrained raters read and code each story as a test of whether the social life perspective echoes naïve understandings of relationships. The results support
the findings of Study 1, that the moments and elements of social life are present in stories about work. In particular, the moment of individuation seems visible to naïve readers. Naïve readers’ ratings of the moments and elements of social life largely follow expert ratings. Finally, naïve readers are more able to see social life in more beautifully told stories.

These two studies provide the first empirical exploration of the social life perspective. On the whole, they support the predictions of the theory as to the form and characteristics of social life. At the same time, these studies allow us to examine workplace relationships in a way that privileges their emotional nature. In doing so, these studies contribute to the psychological literature on groups as well as the social life perspective itself.
Chapter 1
Introduction: The need for a new perspective

One time that sticks out for me when I really loved my work was after working at a structure fire. I was on the first due engine with a co-worker with whom I had become very close (we're pretty sure we were separated at birth). We pulled a hose in to the first floor of the house for the basement fire that was extending up into the first floor through a hole in the floor. As we entered the house it was like the smoke cleared and I saw the hole in the floor just ahead of us. We were able to maneuver around the hole and put out the fire and start to overhaul without either of us going through the hole. After we were outside cooling off and drinking some water we just looked at each other and laughed. I'm not sure what we were laughing at, but he commented on how fun it was to work together with someone that you 'just click' with. Few words are needed, we just knew what the other was going to do. It was a great feeling of a job well done; it's a very satisfying feeling after working at a good fire, but there was more to it at that fire. We were so in tune with each other, worked together so well and had a lot of fun doing our job. —“Angela,” firefighter from Amherst, MA

In this story, told by a firefighter participant in Study 1 of this dissertation, a relationship between two coworkers takes on a life of its own. In the face of a difficult and dangerous work task, the closeness between the two firefighters eases possible stress while providing a point of happiness and humor; at the same time, the firefighters’ relationship with one another facilitates their work, allowing them to complete a challenging job well with minimal communication. The storyteller, in relatively few words, communicates many facets of her relationship with her coworker. In this short paragraph, we learn of two people who genuinely like and enjoy each other, who rely on each other to perform life-threatening work, and who share a psychological connection that allows them to coordinate their work. As a result of their friendship, when these two firefighters work together, the task is completed smoothly and well.
There are a few aspects of this relationship that seem obvious from the story. First, this relationship is about more than either of the individual firefighters who are a part of it. There is a connection between the two people that has a life of its own. When two people “just click,” it is not because of something one or the other did; rather, the two share a bond that helps them become, as a team, more than they were as individuals. The two firefighters in the story share such a bond. Their relationship is greater than the sum of its parts.

A second characteristic obvious from this story is that the relationship between the two firefighters is rich with emotion. There is the warmth of camaraderie; the happiness that comes from enjoying an activity; the satisfaction of a job well done. In fact, this story is largely about emotion, rather than about fighting a fire or even about details of the relationship between the two firefighters. What we mainly learn from Angela’s story is how she feels about her coworker, and how these feelings make her love her job.

The third striking thing about the story is how this account resonates with many people’s real experiences of relationships. The story captures a sense of fun and comfort between the two friends, while showing how their interpersonal bond enables them to work effectively together on a team. While Angela can’t quite describe her relationship with her partner, she is able to suggest its intensity through use of metaphor and other descriptive language. In her story, we see the uncertainty that is often a part of relationships; Angela can’t say why they were laughing, and she can’t describe why the two of them “click.” In many ways, this is not a firefighting story, but a story about friendship that could have been told by anyone.
Although a casual read of the story suggests many things about the relationship between the two firefighters, a formal study of this relationship within the current paradigms of organizational research would focus on very different aspects of the relationship. While such an examination might yield different and needed information, it would also obscure many of the dynamics of this relationship that seem so prominent when reading the story. In this dissertation, I suggest a different way of looking at relationships, called the social life perspective, which considers relationships as entities in their own right. By looking at the relationship holistically, and considering it as a dynamic being, the social life perspective overcomes some of the shortcomings of a traditional organizational study of relationships.

In this chapter of the dissertation, I outline three major ways in which a traditional organizational perspective fails to capture some of the important dimensions of interpersonal relationships. Then, in Chapter 2, I introduce the social life perspective, which I argue compensates for these shortcomings of the traditional organizational perspective. In Chapter 3, I present Study 1, a survey of firefighters from across the United States that examines their work relationships through the social life perspective, while also examining ways that the social life perspective can be integrated with more traditional methods. Chapter 4 describes Study 2, which establishes additional validity for the social life perspective by examining naïve perceptions of relationships and demonstrating how these perceptions map onto the social life perspective. Finally, in Chapter 5 I discuss the findings from the two studies and how they enrich our understanding of work relationships, as well as how the social life perspective might be incorporated into our study of interpersonal processes at work.
Roadblocks to understanding

In order to position this dissertation within the existing literature, I briefly review organizational and social psychological research both on groups and collective identities\(^1\) to indicate places where this traditional approach falls short in describing interpersonal relationships (see Brewer & Brown, 1998, for a thorough review of group research in social psychology). The review is organized around three main roadblocks that social scientists have encountered in their examination of groups and group membership. Each roadblock also represents a problem that I believe can be addressed from a social life perspective.

The first roadblock comes from attempting to learn about the nature of groups by studying individual group members. Although individual group members can tell us much about the group, the whole is nonetheless more than the aggregate. A truly accurate understanding of groups requires that we take a more holistic view.

The second roadblock is a difficulty in translating between emotion-based experiences and cognitive and behavioral measures of those experiences. For a variety of reasons, social scientists often ask study participants to self-report experiences, thoughts, emotions, and behaviors using scales or multiple-choice responses. These techniques have clear pragmatic benefits, and are especially beneficial for learning about the cognitions and behaviors associated with group membership. However, because it may be difficult for a person to read and accurately describe his own emotions, these measures do not provide the clearest information about the feelings of belonging to a group. Scale

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\(^1\) I use the term "collective identities" rather than "social identities" for two reasons. First, it helps to avoid confusion with the phrase "social life," which is used frequently in this dissertation. Second, following Ashmore, Deaux, and McLaughlin-Volpe (2004), I choose not to use the term "social identities" because it has been conceptualized in so many ways that its use may have multiple connotations.
measurements may be especially limiting for a study of relationships, since, as the story at the beginning of the chapter demonstrates, they are particularly rich with feeling. To compound the problem, using primarily cognitive measures has led researchers to conceptualize group processes in primarily cognitive terms, which belies the emotional nature of relationships.

The third and final roadblock to an accurate understanding of groups is a simple deviation between the way social life is studied and the way it is actually experienced. Although I will discuss these deviations somewhat here, the full extent of them will not be apparent until Chapter 2, where I discuss the social life perspective in more detail.

**The first roadblock: The problem of the aggregate:** Problems inevitably arise when researchers try to learn about a collective phenomenon by studying its component parts. Yet, psychologists have long approached the study of groups by assessing the behaviors and thoughts of the individual group members. As Sandelands and St. Clair (1993) note, examining groups as aggregates of individuals severely limits our ability to comprehend the group as a whole. Sandelands (1998b) offers a parallel: People easily recognize the geometric components of a smiley-face when they are properly arranged as a whole, but when those shapes are haphazardly arranged, the face is imperceptible. The case is similar with groups. We can examine the people who comprise the group, but without somehow also looking at the whole, we can never fully understand the group. The group is more than the sum of its parts. People are indeed an integral part of groups, but to reduce groups simply to these component parts overlooks that relationships have a life that is **of the group** and not of individual people.
The tendency to focus on individuals to the detriment of understanding groups emerges in the collective identity literature, to choose a prominent example. In the bulk of this literature, collective identities are defined as those parts of the individual's self-concept which are derived from belonging to groups ranging from racial, ethnic, and gender groups to work, family, and friendship groups (see Tajfel & Turner, 1986). The way collective identities are defined in the social psychological literature makes it difficult to understand how people experience participation in group life. Collective identities, despite having group membership as their source, are almost always considered as properties of the person rather than of the group.

The problem of the aggregate can be seen throughout the literature. One example is found in work on social embeddedness, or the extent to which a person's activities and interactions hinge on their membership in a particular group. For example, people whose friendships and leisure activities stem primarily from their involvement in a particular work organization would be highly social socially embedded in that organization. Although social embeddedness is usually examined as an individual-level variable (Ashmore, Deaux, & McLaughlin-Volpe, 2004), it is actually a property of both the person and the group. As Ashmore et al. note, the social embeddedness of a particular identity depends not just on the person's willingness to embrace that identity, but also the opportunity structure provided by the group itself. Without examining both the group and the person, then, psychologists cannot capture the full picture of social embeddedness. When psychologists focus only on individuals, they greatly reduce any possibility of understanding the social whole.
An analysis of Angela’s story using a collective identities paradigm would focus on Angela’s individual impression of her relationship with her coworker, perhaps in tandem with her coworker’s observations. Such a particularistic approach would undoubtedly overlook some of the striking elements of Angela’s relationship captured in her story. For example, it would be difficult for a collective identities study to capture the feeling of “just clicking” that Angela describes, and the accompanying sense of fun, spontaneity, and task competence. A story about the relationship itself incorporates important details that would be lost in a study focusing wholly on individual members of the relationship.

Attempting to understand a complex whole solely through examining its parts provides at best an incomplete conception of the whole. Yet, for a variety of reasons that I discuss at the conclusion of this chapter, psychologists time and again study individuals as proxies for the group. Any study of relationships that does not begin with the whole cannot provide a complete picture of the life the relationship possesses, which is a property of the whole. The focus on individual-level phenomena at the expense of group phenomena is the first roadblock to understanding relationships.

The second roadblock: Measuring feeling: Current conceptualizations of group psychology often overlook the emotional depth of relationships. According to the social life perspective (and, I would argue, our lived experiences), connections with others are known through feeling (Sandelands, 1998b), and emotion imbues all of our experiences as social beings. Yet, research on groups focuses primarily on the cognitive and behavioral aspects of group membership, such as self-categorization or resource distribution. The lack of focus on the emotional aspects of group membership not only
deprives us of a full understanding of relationships, but it also hinders our ability to understand those aspects of group membership which are studied. For example, emotion acts as a filter for cognitive processes by prioritizing stimuli (Hanoch, 2002); therefore, not accounting for emotions gives us an incomplete picture of cognition as well.

Generally, research on groups and group membership either does not consider the role of emotion in group processes, or it considers emotions on a superficial level. Emotions are most often measured by means of self-report response scales, which require research participants to translate their feelings into cognitive expressions. Asking people to introspect and report their emotions presupposes not only that people are aware of their own feelings at a given point in time, but also that they are able to accurately communicate them. Yet, we know that emotions are complex and tangled (Mehrabian & Russell, 1974), and that people vary greatly in how they interpret emotional words and apply them to their own experiences (Feldman Barrett, 2004). Therefore, using self-report scales to assess emotions further limits our ability to accurately capture and understand the affective components of group membership. Rather than extensively reviewing the ways in which emotions have been left out of the study of groups and collective identities, I provide a general overview and one specific example.

Social or collective identities refer to those aspects of the self that are derived from group membership (Tajfel & Turner, 1986). When social psychologists originally turned their focus to collective identities, they theorized a tripartite division: affective, behavioral, and cognitive aspects of what it meant to be a group member. However, researchers have investigated mainly the behavioral and cognitive aspects of collective identity. Recently, Bergami and Bagozzi (2000) called for greater attention to be paid to
the affective component of collective identities, and have even demonstrated that this component is distinct from the behavioral and cognitive components of collective identity. However, the bulk of groups research continues to focus on the behaviors and thoughts that result from group membership.

As previously mentioned, measuring emotional experience through self-report scales also introduces problems into our understanding of group life. The experience of emotion is complex and dynamic, but most measures of emotion collapse the experience into flat, colorless descriptions which people are asked to endorse on a Likert-type scale. Assuming that people are able to accurately translate their felt emotion to these cognitive representations, this way of assessing emotion still leaves much to be desired.

For example, attachment/interdependence refers to a person’s feeling of belongingness or closeness to a group (Ashmore et al., 2004). It is often defined in explicitly emotional terms. For example, Ellemers, Kortekaas, and Ouwerkerk (1999) call this the affective component of collective identity, where a person feels affiliated with a group or not. However, attachment/interdependence has often been assessed cognitively. One measurement technique, which will be discussed in more detail below, is to have participants indicate the degree of overlap they perceive between themselves and their group (e.g., Mael & Ashforth, 1992); these instructions explicitly circumvent feeling. Another is to ask participants the degree to which they feel accepted or respected by the group (e.g., Tyler & Blader, 2001). At best, these cognitive measures require respondents to translate their feelings into thoughts about their feelings. This translation is problematic because thoughts and feelings take very different forms. Feelings must be captured not in the same ways that thoughts are, but by means which can express their
forms (Sandelands & Boudens, 2000); Sandelands (1998b) suggests that feelings are best expressed by art. The preoccupation of psychologists with thoughts has thwarted our understanding of feelings.

Imagine what we would know about Angela’s relationship with her coworker if we saw her responses to such scale measures instead of her story. We would probably see that she selects two circles with a high degree of overlap to indicate her identification with her coworker; she would select responses that indicate she feels highly accepted and respected by other members of her group. These measures would tell us that Angela is deeply enmeshed in the group, but they would not capture the nature of that enmeshment the way her story does. We would not see her loving feelings toward her coworker, or how her relationship offers her relief from the perils of work. Angela’s story provides a powerful example of how using solely scale-based measures deprives us of a full depiction of emotion in relationships.

It is worth noting that many organizational researchers do choose methods of investigation that allow a reasonable examination of feeling and emotion, such as interviews, observations, or the collection of stories (see Worline, 2003 and Kanov, 2005 for examples). However, at least within the realm of psychology, studies using these methods do not typically examine the structure and form of relationships, which is one of my goals in this dissertation. In fact, studies using these sorts of methods are in the minority in the psychological literature.

The third roadblock: A poor mirror for experience: A final overarching criticism of research on groups is that the processes described in this literature often ring false when compared with lived experience. In this section of the chapter, I use two examples
to illustrate the disconnect between research and experience. First, I show that the way
groups are discussed in the literature does not capture their dynamism, nor the special
connection that exists between group members. Second, I discuss how research on
organizational identification fails to explain why people remain members of negatively
evaluated groups. Both of these examples demonstrate the deviation between research
and experience. Finally I will return again to Angela and her story, which does echo our
lived experience.

Groups as alive: Groups generally are not studied as living forms, even though
stories such as Angela’s suggest that they do have a life of their own. As I discuss later
in this dissertation, groups are living forms, and like any living form, they must be
examined as irreducible entities. As living forms, groups are also dynamic. They move
and act as living beings. Sandelands and St. Clair (1993) suggest five properties of
groups that acknowledge the dynamic vitality of groups: 1) groups have supervening
qualities which are more than an aggregation of member qualities; 2) group members are
changed by their participation in the group; 3) groups exhibit life-like movement and
behavior; 4) the group is intuitively understood as a complete entity; and 5) groups are
known through feeling. However, most work on groups to date does not account for the
living nature of groups.

For example, the empirical research within this domain does not sustain the idea
of relationships as dynamic and alive. Much of this work has involved minimal groups
(Abrams, 1985; Brewer, 1979), which are formed on the basis of meaningless
categorizations. Members of these groups meet each other for the first time at the time of
the study, if at all, and are classed together by random assignment or on the basis of
minor personal details such as a shared preference for a particular artist. The circumstances under which the “group” is formed do not allow for the development of emotional bonds between members. Minimal groups research has taught us that people will favor their own category and discriminate against members of other categories when distributing rewards or making ratings; it has not taught us much about the life of groups and relationships.

Researchers’ failure to consider groups as dynamic entities is most evident in group process research (see Weingart, 1997, for a review). For example, group process research often reduces its consideration of “process” to an examination of inputs and outputs (Weingart, 1997), without accounting for the actual interactions between group members. Examples of the tendency to limit the study of group process to easily observable, static variables can be found across social psychology. For instance, Dépret and Fiske (1993) define power simply as control over another’s outcomes, and state that power relations occur whenever outcome dependency exists. Although this definition captures some key aspects of power struggles, it does not begin to evoke the emotional intensity of even routine office politics. By defining power in easily observable terms, this definition loses sight of the actual group process involved. Similar examples abound in the psychological literature.

Problems also emerge as a result of the imprecision with which the term “group” is used. In fact, different groups may take qualitatively different forms. For example, the group consisting of Angela and her partner is characterized by emotional warmth, affection, and a shared commitment to working as a team. However, Angela belongs to another group at work that takes a markedly different form:
Two of my co-workers have a hard time dealing with a woman in charge, especially one who is younger than them and who has no military experience. So that night they did everything possible to make it a difficult shift and they were just mildly rude in general. They’re very good at subtle annoyances. The moment when I really hated my job was when one of the guys got back from an ambulance call I had assigned him to, and he decided to show his displeasure with the after-midnight call by coming back and slamming his door 5 or 6 times in a row. I knew if I got up to confront him at the time he would deny that anything was wrong (as he has done in the past), so I stayed in my room and seethed. The feelings of anger and disrespect just built on each other. When I asked him the next morning if there was anything wrong or something he wanted to talk about he denied ever having slammed the door and he said there was no problem at all.

While many researchers would consider Angela’s group in the first story equivalent to her group in the second story for purposes of investigation, it is clear in reading the stories that these groups are in fact very different, despite their many similarities. Both of Angela’s groups are the product of long histories; both groups share task responsibilities; and both groups elicit strong feelings from Angela. However, the members of the first group “just click”; their interactions are marked not just by shared duty but by the pleasure they take in each others. In the latter group, the members interact because the circumstances of their work require it. Angela makes an effort to smooth the conflict in the group but is rebuffed. Unlike in the first group, the members of this group are not motivated to work for interpersonal harmony, but are instead distracted by displeasing circumstances (having a woman civilian as their superior officer). Because of the differences between the groups, Angela’s experiences of membership also differ greatly—while both groups are the source of powerful feeling for her, in the one case they are overwhelmingly positive, and in the other, negative. Many of the
qualities that make these groups different would be overlooked by traditional approaches to studying groups.

The qualitative difference between true groups and aggregates is also ignored by research to date, because while true groups are vital and dynamic, psychologists apply the term “group” to almost any co-located collection of individuals. For example, in an early study of leader influence on group productivity, Bales (1940) defined groups as “any number of persons engaged with one another in a single face-to-face meeting or series of such meetings” (p. 33). Even when co-location is not explicitly included in a researcher’s definition of a group, the requirement that group members interact on a frequent basis suggests physical proximity (see Homans, 1950; Merton, 1957). With the popularization of Internet communication, some researchers have come to acknowledge that groups can also exist across geographical distance (e.g., McKenna & Bargh, 1998; Spreitzer, Shapiro, & Von Glinow, 2002). However, these groups still share immediate task concerns which drive their interactions. As we shall later see, true groups can exist across distances, even in the absence of pressing task requirements, although most conceptions of groups in the literature do not support this idea.

In addition to co-location, groups researchers also frequently claim that in order to comprise a group, people must either work interdependently or share task goals (e.g., Argyle, 1991; Ross, 1989). However, our daily experiences demonstrate otherwise. Families and friends are two examples of groups that do not necessarily share task goals. Often these groups are not even highly interdependent in any economic sense. Rather, groups such as families and friends are bound by shared emotions and psychological
unity. Researchers who require their groups to share concrete task goals cannot account for the experience of belonging to a family or a close-knit friendship group.

Many definitions of groups also require that members perceive themselves and others as belonging to the group (see Hogg & Abrams, 1988; Merton, 1957). However, this stipulation introduces difficulties for studying groups. For example, there is the case of people whose group membership is ambiguous, such as temporary workers (Bartel & Dutton, 2001). Whether or not these people are perceived as group members may depend on the context; for example, a temp worker may be considered a group member in terms of completing a project, but not in terms of the social milieu of the office (Bartel, 2004). Ambiguous membership is aversive and unpleasant for many temporary workers, who perceive that they should be part of the work group but do not feel part of the life of the group (Bartel & Dutton, 2001). In fact, the experience of being on the boundaries of a group prompts attempts to reconcile the ambiguity by claiming membership through a variety of behavioral and relational tactics (Bartel & Dutton, 2001; Bartel, 2004). The fact that conflicts may exist between cognitive categorizations of group membership and emotional claiming of group membership hints at some of the problems that arise when researchers require people to be categorized as group members in order to be studied as such.

As this section demonstrates, the ways groups are conceptualized in the research differs significantly from the ways they are experienced. While groups are experienced as living, dynamic entities, with emotional underpinnings and sometimes ambiguous boundaries, they are often studied as stable, unchanging entities with easily recognizable
task goals and clear membership boundaries. We must expand our understanding of what a group is in order to understand social life.

Organizational identification and membership in stigmatized groups: Researchers often use organizational identification to explain why people choose to join and remain members of particular work organizations or groups. The factors theorized to affect organizational identification usually include both features of the group and some sort of measure of how group membership makes the person feel. For example, Dutton, Dukerich, and Harquail (1994) posit that organizational identification is based both on how attractive the organization’s image is to outsiders, and to the person herself. The person makes a judgment of how attractive the organizational image is based on how well it reinforces a positive and distinct self-image. Similarly, Mael and Ashforth (1992) hypothesize that people are more likely to identify with prestigious organizations, which ostensibly have attractive images, and Bartel (2001) found that people feel more organizational identification when they make positive inter-group comparisons. Yet, the image attractiveness hypothesis of organizational identification cannot account for people in stigmatized professions. Grave-diggers, meat-packers, and sex workers recognize the ugly image that society has of their work, and often agree with these negative evaluations, yet remain committed to their profession and their organization (Ashforth & Kreiner, 1999). These examples indicate that identification with an organization depends on more than the attractiveness of organizational images.

Another theory of organizational identification posits that people will perceive a group to be an important contributor to the self-concept only if they first have positive self-evaluations based on belonging to the group (Kinket & Verkuyten, 1997). That is, if
belonging to a particular organization makes a person evaluate himself more positively, he will subsequently also be more likely to report a high degree of overlap between his personal identity and the organization’s identity. Indeed, empirical research confirms that satisfaction with an organization is related to higher levels of organizational identification (Mael & Ashforth, 1992). Again, while this theory recognizes the emotional impact that belonging to a group can have on a person, it cannot account for people who persist in belonging to negatively evaluated groups. People who work in stigmatized professions actively combat the potential damage to their self-esteem from belonging to a negatively viewed group (Ashforth & Kreiner, 1999); something more than the attractiveness of the group allows them to maintain their membership.

The fact that work on organizational identification cannot adequately explain the decisions of tens of thousands of people to join and remain members of widely stigmatized professions indicates yet another rift between research and experience. I suggest that many people choose stigmatizing professions in large part because of the relationships they build at work. If researchers focused more on the interpersonal aspects of organizational membership, this aspect of group membership might emerge more clearly in their work. This example provides further evidence that how groups are studied does not align with how they are experienced.

Finally, looking at Angela’s story provides a telling counterpoint to examples which deviate from lived experience. Angela’s story is her lived experience, told in words she chose herself to reflect the most important aspects of the experience. Woven throughout Angela’s story is a sense of how the feelings the two firefighters have for one another—the kinship they’ve developed over the course of working as a team—drive
their performance, their assessments of the situation, and their reactions to the life-threatening tasks they perform. Even though Angela’s story does not follow the form that most organizational research takes, it is also possible to glean much of the same information from the story. For example, the story strongly suggests that Angela highly identifies with her work organization, that she is committed to her work, and that she considers herself an effective firefighter. In fact, all of these are borne out by the survey data Angela provided. Angela’s story demonstrates how an adequate reflection of actual experience might provide some of the same information as investigations that deviate from that experience, while providing a more vivid glimpse into the life of relationships.

**Conclusion: Missing pieces of the puzzle**

In this chapter, I reviewed work on group dynamics and social identity in an attempt to show that this research does not quite capture the vitality of relationships. The failure of these approaches to understand relationships as a living and dynamic reality comes from at least three major roadblocks: 1) Researchers try to learn about groups by studying individuals; 2) Emotions are either overlooked or reduced to cognitive measurements; and 3) Research on group membership does not echo our lived experience as group members.

These three roadblocks are highly related to and at times difficult to distinguish from one another, because they all stem from the same source. Namely, psychologists and other organizational scholars’ desire for scientific credibility leads them to attempt quantify the phenomena they study. In the name of scientific rigor, scholars impose rigid categories upon what is in actuality dynamic and highly emotional. These impositions are not unique to psychology; Kass (2006) has noted a similar problem in biological
sciences, while novels such as Vonnegut's (1963) *Cat's Cradle* touch on the growing rift between science and the natural order. Such attempts to create order from chaos may provide successful portraits of many psychological processes, but do not provide a clear picture of relationships. At the same time, it is a mistake to try to locate the life of relationships within individuals, or within groups; the relationships themselves must take primary focus. Yet, scholarly conventions demand that we focus on what is visible before us. Individual people, salient in their separate skins, earn the bulk of our research attention, while the life of relationships, invisible and known only through feeling, remains ignored.

Of course, these three problems I have identified are neither the only flaws in the typical approach to studying group life, nor are they fatal ones. However, they are particularly important errors because all three indicate that we are not quite studying what we intend to when we approach group life through the usual avenues. When we focus on individuals at the expense of the group, when we overlook the role of feeling or examine feeling in ways that does not adequately capture it, and when we deviate from our own personal experience of group life in our study of it, we lose focus on the real subject of our inquiry. Addressing these three issues may not create a perfect study of groups and group life, but it will recalibrate our vision toward the phenomenon of interest. As Sandelands and Boudens (2000) have noted, we must advance our theory of workplace relationships as well as our methods of studying them to better account for the experience of feeling. In the next chapter, I describe the social life perspective, which I believe represents such an advance.
Chapter 2
Understanding social life

"The individual is not separable from the human whole, but a living member of it, deriving his life from the whole through social and hereditary transmission as truly as if men were literally one body...And, on the other hand, the social whole is in some degree dependent upon each individual, because each contributes something to the common life that no one else can contribute. Thus we have, in a broad sense of the word, an "organism" or living whole made up of differentiated members." Cooley (1902/1998), p. 131.

In this chapter, I introduce the idea of social life as a dynamic, vital whole—a living form that is more than the aggregate of its members—with four goals in mind. First, I offer the idea of social life as a dynamic and living form as a complement to other approaches to studying group life, such as those discussed in the previous chapter. Second, I distinguish between groups where social life is present and groups where it is not, and discuss how it may be that social life becomes manifest in a group. In the process of discussing how a true group can be recognized, I emphasize the importance of love, play, and individuation, the three moments of social life. Third, I contribute to the theory of social life as a living form by drawing it into a workplace context. This highlights the relevance and importance of considering social life as a living form. It also segues to my fourth goal for this chapter, which is to establish the frame and introduction for my empirical work. Accordingly, I connect my discussion of social life to the coding and analysis used in Study 1 whenever possible.

Social life is omnipresent. Social life connects us to others and makes us more than individuals; it makes us groups. Yet, I argue that social life does not flow through
every group. Rather, only some groups vibrate with social life and can be considered a true group or community. Others are mere collections of individuals, superficially connected but without the growth and dynamism that signal social life. As previously discussed, one limitation of existing research on groups in organizations is that it does not consider differences in the realness or vitality of these groups. Yet, we also know that not all groups are equally alive. For example, we know that people can spend significant amounts of time with others and nonetheless feel lonely (Hawkley, Burleson, Berntson, & Cacioppo, 2003); this indicates that the groups of people with whom these lonely individuals spend time are not conduits of social life, at least not in that particular group context.

What types of groups are “true” groups?

Sandelands’ theory of social life posits that communities are alive. This sentiment has been echoed by other theories. For example, Toennies (1957) claims that real groups possess “real and organic life” (p. 191), and that groups can be categorized dichotomously: gemeinschafts are real groups or communities, and gesellschafts are societies or collections. According to Toennies, gesellschafts are mechanical structures, artificially created and lacking life or vitality. Gemeinschafts, however, vibrate with their own organic life. Cooley (1909b/1998), on the other hand, calls the true group the primary group. Cooley writes, “Perhaps the simplest way of describing this wholeness is

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2 I introduce a vocabulary to distinguish between true groups—similar to what Toennies (1957) calls gemeinschafts—from disconnected collections of individuals (gesellschafts). Following Toennies (1957), I speak of the true group as a community, a living and vibrant gathering of people that is psychologically real and living in its own right. Members of this community are to be called people, rather than individuals, because their connection to the group prevents them from being truly divided from others. On the other hand, I use the word collection to discuss the “unreal” group, the gathering of individuals who share space and purpose but not vitality. Members of a collection are individuals who act in proximity to others but remain divided from them. The use of these terms in my dissertation to distinguish between groups with social life and groups without will hopefully minimize confusion and repetition.
by saying that it is a "we"; it involves the sort of sympathy and mutual identification for which "we" is the natural expression. One lives in the feeling of the whole and finds the chief aims of his will in that feeling" (p. 179).

Both Toennies and Cooley describe several features of communities. Both theorists describe communities as being somewhat permanent; Toennies (1957) claims that gemeinschafts consist of people who remain fundamentally connected even when circumstances conspire to keep them apart, while Cooley (1909b/1998) writes that primary groups are both long-lasting and the source of most interpersonal relationships. Toennies (1957) additionally notes that members of a community share a psychological reality which maintains the group across physical distance. This suggests what Sandelands (2003) calls individuation, a moment of social life in which an individual takes the group into him or herself. During individuation, the individual's actions are informed by the needs and desires of the community, and cannot be separated from the larger good they serve.

One dimension on which communities and collections differ is the goals which their members strive to meet. According to Toennies (1957), people who belong to communities assume group goals as their own; because these people are of the group, these actions serve themselves through benefiting the group. Members of collections, on the other hand, behave most often out of self-interest (Toennies, 1957), and do not necessarily address the needs of the group. While a member of a collection may further group goals through his or her actions, it will only be as a side effect of furthering individual goals. This distinction between communities and collections is reflected in my
coding scheme for Study 1 and informs my hypotheses that stories of community will reflect that the story teller assumes group goals as his or her own.

Another difference between communities and collections is the level of comfort members have with being separate from the group. Toennies notes that all members of a community have equal standing with one another, while collections may impose a value on members based on their perceived usefulness to the group. The assignment of value to group members impedes communion between them by introducing concern over one’s relative standing in the group. This difference between communities and collections also appears in my coding scheme and informs my hypothesis that stories of community in the workplace will reflect that the story teller, even when he or she succeeds in the name of the group, does not view him or herself as an exceptional group member, and resists such separation from the group.

None of this is to suggest that community is without downside (although Toennies [1957] would disagree) or the collection without purpose. Everyone has experience with intimate groups that become toxic or claustrophobic, or with utilitarian groups that enable the completion of necessary tasks and duties. However, when considering the social vitality of a group, the community possesses a greater life force than a collection, and is thus considered a more desirable type of group.

**How do true groups come to be?**

It is not clear why social life flourishes in some groups and withers in others, although it is clear that some true groups come into being naturally. For example, gender groups are among the earliest and most essential divisions of social life (Sandelands, 2001); members of these groups both physically and psychologically complement each
other, suggesting that men and women are natural companions. Families are another type of natural group which is likely to be a conduit for social life (Toennies, 1957).

Obviously, however, not all true groups are ready-made. People find social life in their schools, neighborhoods, and workplaces, where group membership may rapidly shift. How does social life come to be known in these groups?

For the most part, how social life develops remains a question for future research, but we do have some insights from past work. For example, in his discussion of communities, Toennies argues for three fundamental types with unique qualities and etiologies. Meanwhile, Cooley (1909b/1998) identifies three universal communities: the family, the childhood playgroup, and the neighborhood elders. All of these bonds require time to develop; the relationship between people must incubate and strengthen between shared experience before the relationship takes on its own life.

Other mechanisms through which community develops include by blood, as in the case of family; of place, as when neighbors come to forge a bond with each other; and of mind, as when people who share intellectual passions become friends (Toennies, 1957). This latter type of community signifies a sharing of values and interests and comes about entirely through the free will of its participants. This latter type is also of the greatest interest for this dissertation, as it is the most likely type of community to emerge in a workplace environment. As Toennies writes, a community of the mind “comes most easily into existence when callings or crafts are the same or of similar character” (p. 195). This may often be the case with people who have chosen to work in the same organization or on complementary aspects of a project. As their shared work and mutual
understanding continue over time, these people may forge the connections that allow social life to flourish.

A more sociological explanation for the development of true groups comes from Durkheim (1893/1932) and is supported by Cooley (1909a/1998). According to Durkheim, the movement of people from rural areas into urban centers, along with advances in travel and communication technologies, has also led to a change in the way people relate to one another. Previously, they interacted in mechanical solidarity, an arrangement similar to community and informed by shared values. However, once people moved into cities and the division of labor created economic interdependence, people began to interact in organic solidarity, more closely resembling the collection. Organic solidarity imposes a system, such as laws, through which the individual relates to society.

Given that the imposed social order of a workplace is more consistent with organic solidarity than mechanical solidarity, how might true groups come into existence at work? Although the exact mechanisms through which a community develops remain a question for future research, both Toennies and Durkheim indicate that people who share values or mindsets will more easily forge a bond that enables social life to flourish. Moreover, Cooley (1909a/1998) notes that increased communication between people of different backgrounds enlarges participation in social life by cultivating an awareness of alternative viewpoints. Although Durkheim hypothesizes that economic interdependence creates more cleavages between people, it also brings some smaller groups together to fulfill similar functions or roles, such as co-workers in an organization or members of a project team.
Most likely, people who spend more time together by virtue of their placement in the organizational hierarchy are also more likely to develop into a true group. Not only do they spend more time together, which Toennies identifies as a factor in the development of community, but they also have more opportunity to uncover any likenesses of mind that exist. A work organization may therefore allow a collection of individuals who do not share psychological bonds to develop those bonds—to become a community—by compelling them to spend sufficient time together to fulfill task requirements. As a result of this prolonged interaction, the members of the collection can forge the psychological bonds that characterize community, provided that they encounter common interests during their time together. In this way, a collection—the mechanical solidarity of the workplace—may in fact enable the development of a community.

Moreover, the moments of social life discussed in the next section are characterized by tensions and rhythms. It may be that co-participation in the rhythms of a workplace bond people through repetition and routine, which then resurface in the social form. Although this dissertation does not speak directly to the question of how true groups develop, the data will provide some insight into the process for future research.

**How shall we see a group? The moments of social life**

Community is made manifest in the moments of social life: love, play, and individuation (Sandelands, 2001, 2003). These moments of social life are not social life itself, but rather, instances in which social life becomes known. In the moments of love, play, and individuation, we feel our connection to others most keenly. In this section, I discuss each moment and how it reveals social life to us, especially in the context of the workplace.
Love\(^3\): Love is the primary moment of social life, and the one from which both play and individuation sprout. According to Sandelands (2003), love occurs in the tension between unity and division; our desire to transcend our separate skins balanced against our human quest for independence (Sandelands, 2003; Sandelands & Worline, 2004). Love reminds people of their double nature, both as individuals packaged in discrete skins, and as fundamentally social beings living in communion with others. There is a tension between unity and division because of human bodies, which enforce physical division even in psychological unity. Although such tensions are not typically examined in organizational literature, scholars within the collective identity paradigm have recognized the tension between unity and division that is found in social life (see Hogg & Abrams, 1998). When people talk about belonging to a community at work, we expect to see the pull of both unity and division.

In the moment of love, people subsume themselves in the group, sacrificing their personal desires for the greater good of the social whole. They become caught up in the rhythm of the group, whether this be a subtle biological rhythm such as the synchronization of menstrual cycles in co-residing women (McClintock, 1971, cited in Sandelands, 2003), the coordinated movements of soldiers practicing a drill (McNeill, 1995), or the violent pulse of an angry mob (Canetti, 1963). People experiencing moments of love, moments of being lost in the unity of others, behave in ways that would normally seem unnatural or odd. Some mundane examples include cheering for sports teams and laughing out loud at jokes that might otherwise elicit only a smile. One reason why people behave different in moments of love than at other times is that these actions

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\(^3\) In naming this moment of social life, Sandelands (2003) uses the word “love” differently from its colloquial usage. In this dissertation, I speak of love consistent with Sandelands’ use.
are dictated not by thought, but by feeling. While feelings are always intertwined with behavior (Sandelands, 1998b), when we are caught in a moment of social life they drive us. The overwhelming importance of feelings in determining our social behaviors demands that social scientists begin to consider them more seriously.

Social science does not often address love in the sense that Sandelands (1998b) speaks of it, even though it is inarguably central to human existence. When the tensions that characterize love, such as the tendency for people to find unity in groups while finding division in intergroup competition, do appear in psychological research (see Jackson & Smith, 1999), they are reduced to cognitive assessments of group standing. Sandelands (2003) attributes social science’s reluctance to address love to the fact that love cannot be broken down into discrete, analyzable components, nor does it appear to adhere to any rules. Love has no clear beginning, and is neither entirely about individuals, nor entirely about groups. Social scientists feel compelled to reduce phenomena to component parts, but in fact love is an irreducible moment. Love can only be understood as a glimpse of the living form of social life, which grows and is sustained by rules different from those that govern individual people.

Cooley (1926/1998) and Sandelands (1998a) agree that social connections to others are known through feeling. When we experience love, the feeling overwhelms us, driving us to behave in ways that are otherwise foreign to us. It is love that compels the mother to sacrifice for her child, even giving her life if her child requires it. It is love that inspires normally reticent people to make themselves vulnerable with a declaration of affection. It is love that leads an unhappy worker to remain an employee at a particular organization, for the sake of the colleagues he would leave behind. These actions cannot
easily be explained without drawing upon the power of feeling; cognition alone does not suffice.

Another feature of love, to be discussed in more detail later in this chapter, is that people express it through art. Sandelands (1998a) explains that only art can capture something as complex and dynamic as feeling; accordingly, people express love through forms of art such as stories. The connection of social life to art is one reason to explore social life through a data form such as stories.

Love in the workplace may not resemble the romantic love that first springs to mind when one mentions the word. However, it is no less love for the lack of romance. We still see the hallmarks of love: a drive toward unity with others, participation in rhythmic behavior, and the creation of art (especially stories) to give voice to the social life of the workplace. We see love in the workplace when colleagues gather to touch base; when coworkers linger after the business of a meeting has been completed; when people offer help to one another that goes beyond work requirements and into the zone of friendship. We see love in the stories coworkers tell to each other, as friendship-building tools, as well as in the stories they may tell about each other.

Play: Play is the second moment of social life and is a derivation of love (Sandelands, 2003). Play is found in the tension between fantasy and reality, when a group of players find themselves drawn together apart from the constraints of the everyday (Huizinga, 1950). Like love, play is difficult to describe using precise, scientific language, and does not follow the laws of reason; yet, as Huizinga (1950) notes, play is so universal that no one can deny its existence. In fact, Kets de Vries and Miller (1984)
note that shared fantasies between co-workers form the basis for many of the dynamics of working life. Play, therefore, is found even in the more “serious” domains of life.

Just as people caught up in love and hate behave in ways which would otherwise feel awkward or uncomfortable, people say and do things in the name of play that might be inappropriate in other circumstances. Moreover, people’s reaction to play—the experience of fun—has no compelling psychological explanation other than it is our enjoyment of social life. While play may aid in learning, or in fear reduction, or in the achievement of goals, in the end it need have no clear purpose (Huizinga, 1950). In play, the second moment of social life, we immerse ourselves in the joy of behaving socially, and find ourselves caught in the tension between fantasy and reality (Sandelands, 2003).

Although human play may resemble animal play in many ways (Huizinga, 1950), it is distinguished from animal play in that it is also highly symbolic (Sandelands, 2003). Play has meaning beyond its immediate actions and words; in fact, much of the fun in play lays in these symbols, as in the case of a joke or satire. In the symbolic nature of human play, we can see the tension between fantasy and reality; the symbol is the fantasy, while the meaning is the reality. Play can in fact be a vehicle to changing or progressing a relationship outside of the scope of play, as when a casual joke also delivers a compliment.

Play, like love, has movement and pattern. Play may move players in communion, or opposition, or may hold them back until a sudden cathartic release (Sandelands, 2003), but in all cases play is a movement. Sandelands (2003) describes play as appearing almost choreographed, with the careful coordination of players in relationship to one another. Moreover, often this coordination appears to happen
spontaneously, with no discussion on the part of the players (Sandelands, 2003). Even so, it occurs smoothly as if by agreement. Play, in this sense, is a form of what Weick and Roberts (1993) call “collective mind,” where people construct their actions in light of the social system in which they are embedded without explicit coordination in the moment. This “heedful interrelating” helps to anticipate the actions of others acting within the same system, and allows for coordination of complex behaviors.

Both fantasy and reality are important in play. Not only must certain rules of reality be upheld, but also the rules of the game. Sandelands (2003) points to the indignation with which people react when someone violates the rules of play. We take play seriously even though it is unserious. And because play must balance seriousness and unseriousness, it is easily disrupted when reality intrudes too harshly (Huizinga, 1950).

One especially relevant feature of play is that it is always voluntarily undertaken and never morally or otherwise compelled (Huizinga, 1950). There are a few reasons for this. First, as a moment of social life, play must grow from a genuine feeling of social life. Such a feeling cannot be forced or commanded. Second, play is tightly bound with fun, which also cannot be forced or commanded. Play, and fun, must arise naturally from the coursing of social life. What this implies for this dissertation is that instances of fun in the workplace are genuine displays of social life, and therefore a fruitful point for analysis.

We can also expect a few other features from play at work. First, although it may be extra-role, it does not have to be. It is possible for people to play at their jobs. Consider an army general, whose job it is to lead troops through the motions of war. This
is a serious job, but is also play in its rhythms and its abstraction from everyday life. So, while moments of play at work may appear as extra-role behaviors, it may also overlap with the actual work of the organization. Therefore, it is possible to see moments of play in stories about work.

In examining stories about work, there are several ways that a moment of play can be identified. We can recognize play in the workplace by the tension between reality and fantasy. Especially in the workplace, the players are grounded in some sort of reality, where behavioral rules and norms govern the actions of play. In a work setting, we might see this tension between reality and fantasy where play activities are circumscribed by ideas of proper conduct—no crawling on the floor in the office, for example—yet no less infused with joy and fun for this limitation. Play at work will more often be verbal than behavioral, in order to maintain the propriety reality demands (a notable exception comes from the book *Rivethead*, where assembly line workers engage in a violent game of “rivet hockey” to relieve tension; Hamper, 1992). We see play wherever workers escape from the reality of work, while remaining bound to it by sacred real-world rules of conduct.

We can also recognize play at work because people will report having fun. They will speak of the joy of play, of the immersion that removes them from the pressures and stresses of reality. Stories about play will be include details about laughter, smiling, feeling free of worry. People enjoy play.

Play at work will also be bound up with feelings of community, because, as Sandelands (2003) notes, play is an instance of love. In stories of play, we will see tightly bound units of people playing. The moment of social life fusing the players also in that moment renders them distinct from non-players. There is unity among the players
even as they are divided from the others. The tension between unity and division further replicates within the group of players, as each person plays his or her individual role in the service of the group’s activity.

**Individuation**: The third moment of social life is individuation. Like love and play, individuation is characterized by tensions between opposing forces. Specifically, individuation is a moment of social life when the group and the person stand in opposition (Sandelands, 2003). The person recognizes the group as real and as a part of himself, yet accepts and values his separateness and agency. As in the moment of love, this is a tension between division and unity, but now the group, rather than another individual, is the relevant figure.

Part of involvement in social life is being connected to the whole even as we remain apart. In the moment of individuation, we take the group into our individual minds and become the group (Sandelands, 2003); we internalize group values and norms, and use them to guide our individual behavior. Each individual person is the group, packaged in a smaller skin. The moment of individuation is, like play, uniquely human. Only humans are cognitively capable of maintaining a representation of the group that sustains the presence of the group beyond physical reality. Because we are able to do this, we can live a social life away from the group, in which the group is just as real and present as when we are physically together. We can actually perceive both the parts and the whole; the individual people and the social form from which they come.

People may not even consciously realize the extent to which they have taken the group into themselves, because as the group and the person come to overlap through individuation, it becomes difficult for the person to clearly distinguish between them.
Sherif and Sherif (1953) write, “Group identification and attitudes stemming from it becomes so much a part of the psychological make-up of an individual in a personally experienced way that the fact of interaction in terms of group membership need not always be consciously recognized as such by the individual himself” (p.2). Over time, as we become increasingly embedded in the social life of our group, individuation becomes so great that we may not even realize the strength of the social life within our persons.

The idea that social life persists even when people are alone is not new to social science. Callero (1994) writes about the “role as resource,” noting that once a person takes on a particular role within a group, he or she develops psychological and social resources that enable him or her to perform better at the role. Especially in the case of psychological resources, this can be seen as a sort of taking the group into the self, a development of group principles in the individual mind. Hogg and Abrams (1998) describe the development of the social identity construct as an attempt to explain “the group in the individual” (p. 3); the internalization of group life is another hallmark of individuation.

Individuation is the moment of social life when the person can be physically separate, yet psychologically tangled, with the group. This duality can be difficult to comprehend, but some theorists have attempted to make it more concrete. For example, Cooley (1902/1998) notes that even when a person is physically apart from the group, his or her mind continues to be a product of group life—he writes, “This, and this only, keeps humanity alive in you” (p. 139). Likewise, Guerin (2001) explains that social influences shape even our most private behaviors; the group is always present and close-by in mind, if not in body. Guerin describes how 18 “individual” behaviors are in fact
fundamentally social, such as practicing the guitar (the player usually practices with an audience in mind). Even thinking is social, because it uses language (created and maintained for the sole purpose of upholding a social order), often focuses on people and social relationships, and tends to serve as rehearsal for social situations such as the telling of stories or future interactions with others. Furthermore, many of the actions which people perform alone are done in order to gain distance from others temporarily. This means that the motivation for these “solitary” actions is at base social.

As Guerin’s examples demonstrate, what happens to a person in the course of a day is never about the person alone. Because of individuation, the group is always involved. Personal victories, for instance, reflect on the group, and group victories on the person (Huizinga, 1950). Think of the excitement with which people celebrate the accomplishments of athletes, performers, and research scientists. When Americans rejoice over an Olympic gold for the US team, or Texans cheer Renée Zellweger’s Oscar win, or psychologists gloat over Dan Kahneman’s Nobel prize in economics, we see how the person and the group become intertwined in individuation. It should not matter when others succeed, and yet it does, because we are joined in the same social whole. This feature of individuation is reflected in my coding scheme.

I expect individuation to manifest in specific ways in stories about work. First, storytellers who are highly individuated should show some recognition of separateness from the group. They may report feeling apart from the action, or stepping back in order to assess the group’s needs (see also Boudens, 2005a). Second, individuated storytellers should simultaneously recognize their connection to the group. They may mention the
need to act on the group’s behalf, or reflect on the mutual influence between themselves and the group. Both of these elements should be present in the moment of individuation.

Individuated people should also be reluctant to further separate themselves from the group. Individuation means an awareness of humanity’s dual nature: separate individuals joined in social life. To move further from the social whole toward the individual will be aversive for people who have already achieved individuation. We may speak of them as having found a level of optimal distinctiveness (Brewer, 1991); an ideal level of balance between their individual and social natures.

Because further separation from the group is aversive, storytellers who are more individuated should avoid distancing themselves from the group. For example, individuated storytellers should avoid characterizing themselves as special or different from other group members, even when they have made extraordinary achievements. We see this sort of reluctance in the stories of courage collected by Worline (2003), where respondents were slow to see their own behaviors as exceptional but quick to note the virtue of their coworkers’ actions. Smith (1988), in fact, laments the high level of modesty he finds in firefighters’ stories about work, calling their accounts “restrained descriptions of extraordinary actions” (p. 321). I expect to see that highly individuated narrators will not characterize themselves as “stars” or standouts even when their accomplishments may seem to merit it. They may qualify their accomplishments by explaining that “anyone would have done it,” or diminishing the importance of their actions.

As previously mentioned, because social life is known through feeling, it is best expressed through art (Sandelands, 1998a). Therefore, in the next section, I lay the
groundwork to collect stories about work as a method of examining social life in the workplace. Together, the three moments of social life—love, play, and individuation—give us a glimpse of how social life will reveal itself in stories about work.

**Stories as method, and introduction to the dissertation studies**

In Chapter 2, I identified three roadblocks in current organizational research on groups that prevent us from truly understanding group processes. These roadblocks include a tendency to study individuals as proxies for the aggregate, a reliance on scales and cognitive measures, and a general inconsistency with the way social life is known and experienced. One of my goals in writing this dissertation is to champion stories as an alternative and superior method of studying social life in organizations. In this chapter, I justify the use of stories as data, by demonstrating how they help to overcome all three of these roadblocks to understanding group life. At the same time, I argue that stories ameliorate the disunity of the literature on groups by providing a methodology that applies across contexts and research questions.

Stories are objects or artifacts which provide a fruitful basis for analysis. Worline (2003) explains that stories are snapshots of a particular moment in time, solidified through the process of telling the story. In the telling, a story becomes an object which can be seen and studied.

**Studying the individual as a proxy for the aggregate:** Stories allow the researcher to glimpse group-level functioning, even though respondents are individuals. Each story is a snapshot of the group from the perspective of the individual respondent. Particularly when several of the respondents belong to the same group (as is the case in Study 1), story data then allows the researcher to piece together an impression of the larger group.
Admittedly, stories do not perfectly address this roadblock. Although stories capture a snapshot of the group, they are filtered through the perspective of an individual respondent. Stories may also not reveal all relevant aspects of a group, or even include all members of a group. However, the ability of a respondent to omit such details is an important trade-off because it enables stories to better reflect respondents’ lived experience of group life. While stories do not fully reconcile the issue of studying individuals when trying to understand groups, I argue that they do represent an improvement over more explicitly individual-focused methods.

Translating emotions into cognitive scales: Stories make social life visible through language. People have difficulty explicitly discussing how they feel social life, and it may even be impossible to translate social life directly into language given the differences in form between language and social life (linear and static versus multidirectional and dynamic; Sandelands, 1998). However, the language people use in talking about social life nevertheless provides clues. Toennies (1957) writes that language is an organically evolved tool through which the gemeinschaft or community expressed itself. He characterizes languages as involuntary, the product of “deep feelings” and emotions. Language is tightly bound with emotion (Fineman, 1993), even if that emotion is implicit. And indeed, language is able to reveal social life through means other than direct, literal expression.

Language communicates social life indirectly (Sandelands and Boudens, 2000). One way in which it does this is through figurative language and metaphor (Boudens, 2005b). Narratives, or stories, are another way to use language figuratively or indirectly. The way a narrator constructs descriptions of events, people, and objects expresses
emotion without directly referring to feeling (Burger & Miller, 1999), thereby sidestepping some of the difficulty in translating feeling directly to language. Stories are also rife with metaphors, which serve as efficient but holistic snapshots of reality (Krone & Morgan, 2000). Stories are an appropriate medium for studying feeling, and for studying social life known through feeling, because of their ability to indirectly communicate that feeling. In this way, stories address the limitations of cognitive measures in helping us to understand feelings.

In fact, other researchers have used stories as a way to learn about emotionally charged events experienced by respondents. Holmberg, Orbuch, and Veroff (2004) interview married couples about their relationships and analyze their stories for emotional content, while Surra, Batchelder, and Hughes (1995) perform similar analyses on courtship stories. Other researchers look at more negatively emotional experiences through stories, such as earthquakes (Pennebaker & Harber, 1993) and sexual assault (Harvey, Weber, & Orbuch, 1990). These researchers find stories to be a useful tool for tapping into the emotional background of complex and significant life events.

**Deviation between measurement and experience:** When respondents complete a scale or structured interview, the type of information they provide is constrained by the questions posed by the researcher. When the researcher uses stories as data, however, many of these constraints are removed. Although a story may be elicited with an initial question, the narrative trajectory is determined largely by the respondent. The respondent may choose to highlight or downplay particular details depending on their relevance, to express a version of events using emotionally charged or neutral language, or even to alter factual events based on an idiosyncratic interpretation. This freedom of response
helps to alleviate the divide between measurement and experience created by more structured measures. Prior research has also shown that people instinctively use stories to reinforce their sense of self (Nelson & Fivush, 2004), suggesting that stories are a good mirror for subjective experience.

**Stories as art:** Sandelands (1998a) contends that social life, because of its dynamic nature, can only become known through art. I suggest that stories are in fact a form of art, and it is this status which helps them reveal social life to an audience. Like other types of art such as paintings or sculpture, stories are the product of imagination and creativity. Like these other types of art, stories are displayed in a museum of sorts—a library—for the admiration and consumption of patrons. And like these other types of art, stories also communicate profound feelings that are otherwise difficult to express.

Art in general is especially suited to the expression of social life because it mimics life in its form (Sandelands, 1998a). Like life, art has a beginning and an end, tensions and possibilities, and growth along a trajectory. Stories specifically embody several of these characteristics of art. First, stories have a progression of plot that resembles the progression of melody in song (Sandelands & Boudens, 2000). Stories have a rhythm and pattern that listeners can anticipate; in fact, listeners show a high rate of agreement as to what makes a pleasing and beautiful story (Worline, 2003). If we accept that art captures social life, and that stories are a form of art, it follows that stories capture social life.

**Other benefits of stories:** Stories do not contribute to sampling bias the way other methods can. For example, stories are not constrained by cultural norms or backgrounds (although the themes or topics of stories do vary by culture; see McAdams, 2006).
People from different cultures will have consistent and “appropriate” emotional responses to stories (Ekman & Friesen, 1971), especially those types of stories which represent emotional universals (Hogan, 2003). Stories are also not dependent upon a particular level of experience or intelligence. Even children can learn from, appreciate, and tell stories. In fact, stories contribute to cognitive development for children across cultures (Feldman, Bruner, Kalmar, & Renderer, 1993). Children as young as three years old are able to construct narratives (Peterson & McCabe, 1983), and have mastered this form of communication by between the ages of 6 and 8 (McKeough, 1992). The ability to tell a story does not depend on educational level, income, or other demographic variables. Stories, then, are available as a means of making social life visible for all people.

Because stories are accessible, common, address some of the limitations of previous research, and capture social life more accurately than other methods, I use them in two dissertation studies to learn how people experience social life at work. I harness the advantages of using stories as data in a number of ways.

In Study 1, firefighters tell stories about what their experience at work is like. These stories become objects for interpretation, in which I look for the feelings and forms of social life. The stories are coded and analyzed according to what we know already of social life; at the same time, they contribute to our conception of social life by the details they reveal. I employ an iterative coding scheme that allows the data to inform our understanding of social life at the same time our understanding of social life informs our interpretation of the data.

The firefighters also provide responses to a number of scale measurements commonly used in organizational research. I examine the relationships between the
stories my participants tell and the ways in which they respond to other measures such as self-esteem and self-efficacy. Stories therefore become a way to illuminate the meaning of a number of traditional measures of organizational and individual functioning, as well as to connect the study of social life to other organizational research. This portion of the study also begins to illustrate how listening to the stories people tell about work allow us to predict both personal and work related outcomes, and in this way, open the door for the use of stories in other research projects.

In Study 2, undergraduate participants read the stories told by the firefighters in Study 1 and rate them for the presence of social life. The readers also rate the extent to which the story teller is involved in social life, and provide estimates of the story teller's psychological well-being and workplace performance. I hypothesize that these naïve readers will be able to detect the presence of social life in the stories, and will intuitively understand the relationship between involvement in social life and a variety of organizational and individual outcomes. Furthermore, I expect that well-formed, beautiful stories communicate social life more clearly than less well-formed stories. A high correlation between native participant ratings and expert ratings will provide validation for the use of stories to communicate social life, and illustrate the richness of the information provided by stories. Taken together, Studies 1 and 2 demonstrate the usefulness of stories for learning about social life in a number of ways.
Chapter 3
Study 1

In Study 1, I investigate how social life appears at work, and how workplace environments which are full of social life differ from those which are not. Participants in this study tell stories that they have loved and hated\(^4\) working at their organization. I have chosen to ask about instances of strong feeling because Sandelands (2003) makes the case that we know our involvement in social life through feeling. Therefore, I anticipate that stories about times of strong feeling at work will primarily focus on social life, rather than on aspects of the work itself. In my analyses, I qualitatively explore the ways in which social life is made manifest through the stories, in addition to quantitatively testing whether stories of strong feeling primarily focus on the social.

I also predict that the moments of social life—love, play, and individuation—will be found in stories about work. I both qualitatively and quantitatively examine whether those moments appear in ways consistent with Sandelands’ (2003) theory. Then, I test whether the elements of social life developed in Chapter 2 actually appear in stories about work, with the prediction that the “positive” elements will appear more frequently in stories about loving work, and the “negative” elements will appear more frequently in stories of hating work. I expect the elements, which describe features of social life, to differ between stories of positive and negative emotion. While social life itself should remain constant in its tensions between different situations, I predict that the elements will not remain constant, because different types of situations should elicit positive or

\(^4\) I use the word “love” here consistent with its colloquial usage, rather than its usage in the social life perspective.
negative emotion. Finally, I conduct exploratory analyses to examine whether the appearance of social life in stories about work relates to psychological well-being and work performance variables. While there is some research that suggests that these variables would be enhanced by positive involvement in interpersonal relationships, the social life perspective (Sandelands, 2003) does not predict that individual difference variables are related to the experience or appearance of social life. Therefore it is an open question whether these variables will relate to the appearance of social life in the stories or not.

In this chapter, I first briefly preview Study 1 by describing the research sites chosen and the methods used. Then I outline my specific hypotheses for the study. Next, I describe the instruments used in the study, followed by a detailed description of the study participants and methods. Finally, I outline the results of the study and discuss their implications for our understanding of social life at work.

Research sites:

Theoretically, the elements of social life and of community should remain constant across organizational contexts; they depend neither on the type of work a person does, nor the geographical region in which he or she lives, nor his or her place in an organizational hierarchy. However, some organizational contexts may be more conducive to social life than others. Social life might be expected to especially flourish in my research context, fire departments. I chose to study fire departments with the understanding that any relationship between social life, psychological well-being, and performance variables might be exaggerated due to the unusually interdependent nature of the work involved. Rather than viewing this exaggeration as a limitation, I see it as an
opportunity to observe the effects of social life in a setting where it is particularly vital. Moreover, as discussed in Chapter 2, true groups develop over time as members come to share a community of the mind. The stable working arrangements and lengthy shifts in fire departments provide firefighters with a context where such development is more likely than in other sorts of work.

I have two research settings. The first is a municipal fire department in a large city ("City Fire"). The fire department has approximately 135 employees, who are members of both line groups, which actively respond to emergency calls, and office groups, which work on the administrative aspects of the department. Firefighters are assigned to work at one of the city’s five firehouses, among which are distributed a total of six engine companies and two ladder companies. City Fire also has one tower ladder, an air supply unit, and a regional Hazardous Materials command post. Firefighters are assigned to one of four teams. Each team works a 24-hour shift every fourth day. During a shift, a team responds to all emergency calls for their area, many of which are medical in nature.

As a result of the team-based scheduling, the same group of firefighters is always scheduled to work together. Furthermore, each team is wedded to a particular firehouse, where they are provided with sleeping and living quarters. This arrangement means that any given group of firefighters interact as housemates for a 24-hour period every four days. The firefighters typically share meals, watch television together in the shared living room, and sleep in dormitory-style arrangements. A large portion of the time not spent answering emergency calls and performing station duties is spent socially, with the
other firefighters on the team. This arrangement likely increases firefighters’ abilities to form friendships with their co-workers.

My second research setting was a selection of firefighters from across the United States who responded to my survey through a website. I solicited participation on 15 firefighting bulletin boards. Participants were able to log anonymously into the survey, posted at SurveyMonkey.com, and complete the measures. Specific information is not available about the fire departments in which the Internet respondents work, although most respondents provided the name of the town in which they work.

As previously noted, the nature of the work firefighters do means that fire departments should be a setting where social life flourishes. Fighting fires means being willing to risk one’s bodily health, and in some cases, life. Firefighting teams face moments of crisis together on a regular basis, which we know from previous research helps to cement group bonds (e.g., Sherif & Sherif, 1953; Bartel, 2001). Firefighting is highly interdependent work, and the consequences for failing to adequately meet one’s obligation to coworkers and the firefighting role could be as serious as death (see Weick, 1993 for an example of such a situation). I expect that the nature of the work firefighters do will enhance the development and manifestation of social life among their ranks.

**Specific hypotheses:**

I have argued that social life is the primary form of human life, and that it is found at the center of human experience. Further, because social life manifests as feeling, it should be particularly apparent at times of strong feeling. Because social life, and not the completion of work tasks or the accomplishment of financial goals, is at the core of human existence, and because social life is experienced as intense feeling,
H1: Stories about loving and hating work will primarily involve groups, rather than tasks or other pragmatic/logistical details. These stories will provide a qualitative glimpse into what social life looks like; its features and qualities.

If in fact stories about times of loving and hating work are about social connections rather than task requirements, I expect the stories to reflect the moments in which social life is most vivid, specifically, love, play, and individuation. Because these moments are when social life is most visible, then they should be present in stories about social life. The moment of love should appear as firefighters negotiate the tension between unity and division. Stories from people involved in social life at work will also frequently capture moments of play in the workplace. Finally, stories about work from people involved in social life should demonstrate moments in which the person feels individuated from the group; when he or she most fully internalizes the group and perceives him or herself most as a group member, while being able to act as such in an individual capacity. The social life perspective predicts that times of both strong negative and positive feeling will be times when social life courses through the group. This perspective would not predict a difference between stories of loving and hating work in terms of the presence of the moments of social life.

H2: Firefighters’ stories about work at their fire department will capture the moments of social life (love, play, and individuation); the moments of social life will appear both in stories about loving and hating work.

Similarly, if stories about times of loving and hating work are in fact stories about social life, then these stories should contain the elements of social life described in Chapter 2. These elements of social life represent an addition to the social life
perspective which describe characteristics of social life beyond the tensions identified by Sandelands (2003). Although the social life perspective predicts that involvement in social life leads to both times of negative and positive feeling, and that the moments of social life, with their tensions, will not differ between times of negative and positive feeling, it makes no such distinctions about any characteristics of social life that may lead to either negative or positive feeling. However, in order for social life to inspire strong yet opposite feelings, some aspects of the person’s experience of social life must differ between situations. I propose that the aspects in question may be these elements of social life identified in Chapter 2. Therefore, I differentiate between stories of love and hate in predicting the presence of the elements of social life:

H3a: Stories about loving work will demonstrate the positive features of social life identified in Chapter 2: connection to others, need to protect and preserve the group, connection between group outcomes and individual self-esteem, group events leading to self-appraisal, and an unwillingness to stand separate from the group (for example as a hero). These features will be present in stories of loving work to a greater extent than stories of hating work.

H3b: Stories about hating work will demonstrate the negative features of social life identified in Chapter 2: disconnection from others and the group, a focus on self-preservation, little or no concern for group well-being and outcomes, less self-appraisal based on the group, and a willingness to separate the self from the group (for example as a hero). These features will be present in stories of hating work to a greater extent than stories about loving work.
I also conducted exploratory analyses to examine the relationship between storytellers’ experience of social life and their self-reported levels of work performance and psychological health. The social life perspective does not speak directly to the relationship, if any, between involvement in social life and these other variables, although the perspective does suggest that social life’s form and appearance does not depend on characteristics of the person involved in it. As previously mentioned, however, some research suggests that interpersonal relationships can provide both network and psychological resources that improve performance and well-being. Therefore, there are two goals of the exploratory analyses:

1. To determine whether the appearance of the moments and elements of social life in stories told by firefighters is related to their self-reported performance and well-being

And

2. To investigate whether the form and appearance of social life, as measured by the moments and elements of social life, remain stable even when individual performance and well-being variables are taken into account.

Study 1 Overview

Prior to distributing surveys to my primary respondents, I interviewed ten people with diverse work experience in order to clarify my hypotheses and refine my analytical framework. I used these interviews as an opportunity to refine my story prompt so that it reliably elicited true stories, rather than lists of qualities a person loved or hated about work. After developing the materials, I recruited participants from City Fire and through
Internet message boards. The recruitment procedures are described in more detail in the methods section.

**Table 3.1: Participant demographics**

<table>
<thead>
<tr>
<th></th>
<th>City Fire sample (N=57)</th>
<th>Internet sample (N=110)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>51 (89.5%)</td>
<td>74 (67.9%)</td>
</tr>
<tr>
<td>Female</td>
<td>0 (0%)</td>
<td>17 (15.6%)</td>
</tr>
<tr>
<td>Unreported</td>
<td>6 (10.5%)</td>
<td>18 (16.5%)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>48 (84.2%)</td>
<td>88 (80.7%)</td>
</tr>
<tr>
<td>African-American</td>
<td>2 (3.5%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Latino</td>
<td>1 (1.8%)</td>
<td>2 (1.8%)</td>
</tr>
<tr>
<td>Native American</td>
<td>0 (0%)</td>
<td>1 (0.9%)</td>
</tr>
<tr>
<td>Unreported</td>
<td>6 (10.5%)</td>
<td>18 (16.5%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 20</td>
<td>0 (0%)</td>
<td>9 (8.3%)</td>
</tr>
<tr>
<td>20-29</td>
<td>3 (5.3%)</td>
<td>27 (24.8%)</td>
</tr>
<tr>
<td>30-39</td>
<td>10 (17.5%)</td>
<td>29 (26.6%)</td>
</tr>
<tr>
<td>40-49</td>
<td>20 (35.1%)</td>
<td>16 (14.7%)</td>
</tr>
<tr>
<td>50-59</td>
<td>19 (33.3%)</td>
<td>7 (6.4%)</td>
</tr>
<tr>
<td>Over 60</td>
<td>0 (0%)</td>
<td>3 (2.8%)</td>
</tr>
<tr>
<td>Unreported</td>
<td>5 (8.8%)</td>
<td>18 (16.5%)</td>
</tr>
<tr>
<td><strong>Average department tenure</strong></td>
<td>18.24 years (sd = 9.88)</td>
<td>9.16 years (sd = 8.02)</td>
</tr>
<tr>
<td><strong>Average company tenure</strong></td>
<td>8.34 years (sd = 8.22)</td>
<td>5.6 years (sd = 0.85)</td>
</tr>
</tbody>
</table>

**Sample:**

My sample includes 57 respondents from City Fire for a 63% response rate; 50 of these respondents provided complete, usable stories in addition to responding to the scale measures. An additional 110 respondents participated using the Internet survey at SurveyMonkey.com. Demographic characteristics for all participants may be found in Table 3.1.

**Instruments**:  

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5 Copies of all instruments are available in Appendix A.
All participants were asked to provide a story of a time that they loved their work as a firefighter, and of a time that they hated their work. The stories were later analyzed and coded. Participants also completed several measures traditionally used in organizational and psychological research, including the Rosenberg Self-Esteem Scale (RSE), the Collective Self-Esteem Scale (CSE), the Reeder Stress Inventory (RSI), the Positive and Negative Affective Schedule-Expanded Version (PANAS-X).

Table 3.2: Reliabilities of measures used in Study 1

<table>
<thead>
<tr>
<th>Measure</th>
<th>Reliability (Cronbach’s α)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychological well-being measures</strong></td>
<td></td>
</tr>
<tr>
<td>Positive and negative affective schedule, expanded version (PANAS-X);</td>
<td>General negative affect</td>
</tr>
<tr>
<td>Watson, Clark, &amp; Tellegen, 1988</td>
<td>General positive affect</td>
</tr>
<tr>
<td>Collective self-esteem (CSE): Luhtanen &amp; Crocker, 1992</td>
<td>Membership</td>
</tr>
<tr>
<td></td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td>Public</td>
</tr>
<tr>
<td></td>
<td>Important</td>
</tr>
<tr>
<td>Rosenberg self-esteem scale (RSE); Rosenberg, 1965</td>
<td></td>
</tr>
<tr>
<td>Reeder stress inventory (RSI); Reeder, Chapman, &amp; Coulson, 1968</td>
<td></td>
</tr>
<tr>
<td><strong>Work performance measures</strong></td>
<td></td>
</tr>
<tr>
<td>Organizational identification; Bartel, 1999; Bagozzi &amp; Bergami, 2000;</td>
<td></td>
</tr>
<tr>
<td>Mael &amp; Ashforth, 1992</td>
<td></td>
</tr>
<tr>
<td>Organizational commitment; Meyer, Allen &amp; Smith, 1993</td>
<td>Affective commitment</td>
</tr>
<tr>
<td></td>
<td>Continuance commitment</td>
</tr>
<tr>
<td></td>
<td>Normative commitment</td>
</tr>
<tr>
<td>Preference for autonomy at work; Wageman, 1995</td>
<td></td>
</tr>
<tr>
<td>Task interdependence; Pearce &amp; Gregersen, 1991</td>
<td></td>
</tr>
<tr>
<td>Personal efficacy beliefs scale; Riggs, Warka, Babasa, Betancourt, &amp;</td>
<td></td>
</tr>
<tr>
<td>Hooker, 1994</td>
<td></td>
</tr>
</tbody>
</table>

Organizational Identification, Organizational Commitment, Preference for Autonomy at Work, Task Interdependence, Self-Efficacy, and a demographic survey including self-
assessments of work performance. All measures are described in Table 3.3 and included in their full form in Appendix A.

All participants provided one story about a time that they loved their work, and one story about a time that they hated their work. They were asked to provide a written account of a time that best exemplifies these experiences. A page was provided for participants to write each story. I crudely categorize the other measures I administered as either psychological well-being measures or workplace performance measures. Recognizing that this categorization is imperfect, I nonetheless find it helpful to organize the materials and analyses. The scales administered to assess psychological well-being are the Rosenberg Self-Esteem Scale, the Collective Self-Esteem Scale (adapted to refer to the respondent’s home fire department), the Reeder Stress Inventory, and the Positive and Negative Affective Schedule, Expanded Version (PANAS-X). The measures which I have categorized under work performance include Organizational Identification, Organizational Commitment, Preference for Autonomy at Work, Task Interdependence, the Personal Efficacy Beliefs Scale, and a self-rating of performance level at work. The reliabilities for all measures used in Study 1 are reported in Table 3.2, while the measures are described in Appendix C.

**Method:**

I distributed approximately 90 written surveys to City Fire employees in person during their work shifts. City Fire respondents were asked to complete the measures while at work, and were also instructed that they did not need to complete measures in one sitting. I introduced myself and the surveys in person at each station during each group’s shift. At this time I provided a verbal overview of the research, and emphasized
the confidential nature of participants’ responses, both with respect to their individual identities and with respect to department leadership. All participants were given an envelope at this time containing a detailed letter explaining the study, and the study measures as described above and in Appendix A. I returned to each station during each shift two to three times after my initial visit to encourage participation and collect completed surveys, which participants left in sealed envelopes in a designated area (typically the station’s front office).

Additional participants were recruited via the Internet. I posted brief solicitations on 15 popular firefighting message boards directing respondents to a SurveyMonkey.com address. Participants who logged into the site completed the same measures as City Fire employees, and were provided the same instruction and debriefing materials. All Internet responses were anonymous.

Prior to beginning coding, the two expert coders met to discuss the coding scheme (provided in full in Appendix B) and practice coding on four stories from the Internet sample that were not usable because of missing data. After reaching consensus on the coding system, each coder independently rated each story. Inter-rater reliability was calculated using Cronbach’s alpha, which assesses consistency between raters (Crocker & Algina, 1986). Rather than assessing absolute agreement between raters, I was more interested in assessing whether the ratings patterns each rater used were consistent. After initial reliability was assessed, the raters discussed points of disagreement and each recoded half the variables. A third expert coder was brought in to recode the “elements of social life” variables, following the discovery that Coder 2 has used a highly restricted range in coding those variables. Adjusting Coder 1’s coding in accordance with Coder
2's coding on these variables would have reduced variance too greatly for meaningful analysis. Adjusted ratings from all three coders yielded an acceptable Cronbach's alpha of 0.7019.

**Analyses and results:**

The total story sample includes 313 stories (some firefighters provided only one story, resulting in an uneven number). The average word count of the stories is 163.5 words (sd = 183.2). A t-test reveals no difference in story length between the City Fire and Internet respondents, \( t(312) = -1.254, p < 0.204 \). T-tests also reveal no significant differences between City Fire and Internet respondents in terms of the ratings of social life and its moments assigned in the expert codings, all \( t(312) < 1, \) all \( p < 1 \). Because the samples were not found to significantly differ, they are combined in all subsequent analyses.

The results are divided into two sections. First, I address **Hypothesis 1** with both quantitative and qualitative analyses. In this section, I investigate what social life looks like in a qualitative sense. Then, in the next section, I address **Hypotheses 2-4** with quantitative analyses.

**HYPOTHESIS 1:** **Hypothesis 1** states that the majority of stories will be about social life, whether they reflect the story teller's involvement in social life or the exclusion of the story teller from social life. I addressed this hypothesis with both a quantitative and a qualitative analysis.

**Quantitative analysis:** All stories were rated on a continuous scale from 1-7 as to the extent to which they discussed task-related and group-related phenomena. These ratings were independent, such that a story which focused heavily on task details could
also be rated as containing a high level of information about social aspects of the situation. In order to assess whether the stories in the sample were primarily about social life, I ran a t-test comparing the ratings of group content to the ratings of task content (m = 2.96, sd = 1.06), and found that the stories were rated as significantly more about groups than about tasks, \( t (157) = -8.006, p < 0.001 \). This statistical test provides strong support for the hypothesis that stories about loving or hating work are primarily stories about social phenomena, rather than about other aspects of work. There was no difference in the ratings of group and task content between stories of loving and hating work (all \( t (303) < 2 \), all \( p < 1 \)).

**Qualitative analysis:** I also conducted a qualitative analysis in order to identify the types of topics that storytellers used to communicate about social life. I first identified major topical themes within the stories. Each story could be categorized multiple times, depending on the themes it included. I listed each story’s major themes, focusing on literal interpretations of the stories. After reading all 313 stories, I returned to the first stories and re-read them to see if they belonged to any categories identified later in the analysis. After identifying a total of 68 themes, I then used the method of constant comparison (Glaser & Strauss, 1967) to arrive at ten overarching topical themes summarized in Table 3.3.

After arriving at the ten major categories of story themes, I counted the number of respondents who told stories within each theme. I then calculated the percentage of respondents who told stories containing each theme by dividing the number of respondents who told each type of story by 159, the total number of respondents.
The ten themes I identified from the constant comparison analysis confirm that stories about work will frequently focus on social life, rather than on task aspects of the work. Of the ten themes, only one is clearly about task concerns ("Firefighting specific incidents and task events"). I describe two themes in detail here, connecting the contents of each to the theory of social life (Sandeland, 2003).

Table 3.3: Themes from firefighting stories

<table>
<thead>
<tr>
<th>Name and description of story theme</th>
<th>Connection to social life</th>
<th>Respondents with theme/% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community and coworker dynamics</strong></td>
<td>Interpersonal connections are the focus of these stories, suggesting that relationships are a central aspect of work.</td>
<td>108 (68.5%)</td>
</tr>
<tr>
<td>Description: Stories in this category focus on the relationships between firefighters, as well as how the firefighters position themselves with respect to the community. Examples include feelings of camaraderie and fatherly instincts toward community members.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bringing positive outcomes to others</strong></td>
<td>Stories in this category show how the work of firefighting can be used to forge connections with people in the community.</td>
<td>87 (54.7%)</td>
</tr>
<tr>
<td>Description: Stories in this category focus on the direct positive effects firefighting tasks have on others. Many of the stories specifically speak of how witnessing the joy or gratitude of those they have helped brings satisfaction to firefighters.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Doing a good job</strong></td>
<td>Doing a job well is seen as valuable primarily because of its potential to either help others or minimize the harm to others. The ultimate goals remain social.</td>
<td>82 (51.5%)</td>
</tr>
<tr>
<td>Description: Stories in this category focus not on the task itself, but on the quality of the job done. These stories reflect pride and gladness that firefighting tasks have been completed to the best of the group’s ability, regardless of whether the outcome was satisfactory.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Being recognized for work</strong></td>
<td>To the extent that people in the community or the dept. realize the contributions of firefighters and make their gratitude known, the storytellers feel involved in social life. This experience is universally described as positive and motivating. When the storytellers feel overlooked, the experience is negative and long-lasting.</td>
<td>78 (49.0%)</td>
</tr>
<tr>
<td>Description: Stories in this category feature some form of acknowledgement from people outside of the fire department for the work done by the firefighters. Examples include being recognized by someone who has been rescued, having survivors visit the firehouse to offer thanks, being stopped by members of the community, and having children become excited at seeing firefighters.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Failure to prevent negative outcomes/not doing good enough</strong></td>
<td>Firefighters view themselves as contributing to society in a specific way, as protectors and guardians. When they are unable</td>
<td>67 (42.1%)</td>
</tr>
<tr>
<td>Description: Stories in this category focus on the inability to prevent negative outcomes. In some cases, this inability is due to mistakes on the part of the firefighters, while in others it is</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
due to insurmountable external obstacles. These stories focus on the regret and pain that comes with not succeeding at helping others.

**Firefighting-specific incidents and task events**
Description: Stories in this category focus on the task itself, or on features unique to firefighting. Examples include the beauty of fire and pride in being a member of the firefighting profession.

**Witnessing the effects of emergencies on others**
Description: Stories in this category focus on witnessing the pain, loss, or fear that victims of emergencies face. Many of the stories speak of the firefighters' feelings of helplessness in the face of loss. These stories also describe the difficulties of seeing tragedy firsthand.

**Work's effects on personal life**
Description: Stories in this category focus on how work experiences reach into firefighters' personal lives. Examples include dreaming about particular rescues, and appreciating one's own family more as a result of witnessing other people's losses.

**Politics and resources**
Description: Stories in this category focus on political conflicts, especially as related to promotions and hierarchy, as well as arguments about the use of departmental resources.

**Religion and spirituality**
Description: Stories in this category mention feelings of closeness to God, or of seeing a religious or spiritual influence in firefighting work.

Social elements are present in these stories as the storytellers reflect on the consequences of their training and tasks for others, as well as on the reasons why they love firefighting.

Storytellers in this category vicariously respond to the extreme emotions people experience in emergency situations. It is a sign of their involvement with others that such empathic responses occur, and are recalled long after.

Stories in this category reveal how social life at work can enhance or affect social life in the home, and suggest that the tapestry of social life in which any one individual is involved may be more continuous than it appears at first.

The majority of the stories in the politics and resources category deal with perceived rifts in the social fabric of the fire department. Politics upset storytellers to the extent that they interfere with the integrity of the department.

As Sandelands (2004) notes, the human organization of social life indicates the existence and constant presence of God.

**Community and coworker dynamics (68.5%)**: This was the most frequently occurring theme, with 68.5% of respondents telling stories in this category. Stories in this category are the most clearly connected to social life, as they center explicitly on interpersonal relationships. These stories depict both positive and negative interpersonal dynamics, most often between fellow firefighters but also at times between firefighters.
and members of the communities they serve. For example, many firefighters spoke of the camaraderie experienced between firefighters as a key reason why they love their work. One firefighter wrote about how his co-workers have provided him with the support network he lacked growing up:

[I love my work] realizing that I have a lot of good friends that I can relate to and talk with. I never had many friends growing up in school, so it's nice to know I practically have a second family.

According to one respondent, the ties between firefighters are so strong that they extend between firefighters who have never even met:

You'll probably find through your research that firefighters are almost a 'different breed' of society. Often times we think alike, act alike, and get along with each other, even if we've never met. Firefighters all seem to have the same feelings about their profession No other job could you find so many employees who actually look forward to going into work. This is truly something special, which all firefighters share... My fellow firefighters have been my rock... No one could ask for a more loving, nurturing, caring family than that of the Fire Service.

Stories in this category repeatedly underscore the strength and durability of the bonds between firefighters and the sustenance that individual firefighters derive from these bonds.

Stories in this category also revealed the pain and frustration that comes from being excluded from the camaraderie of the firehouse. Some firefighters spoke about times when their coworkers behaved childishly, damaging the reputation of their team with other firefighters or even community members. Another recurring theme of the stories in this category is how insubordination or hierarchical dynamics can create a cycle of personal dislike. For example, one firefighter/EMT writes about a lieutenant who takes charge of emergency situations in the belief that his coworkers are less capable. He
writes, “Rather than allow us to handle our patient, along with the two paramedics now on board with us, he had to climb in [the ambulance] as well and effectively push us out of the way. This incident and others have been frustrating as the lieutenant has clearly expressed his feeling that we are incapable in his eyes, effectively pushed us away from the patient when we were assigned to the ambulance that night, and created a chaotic scene out of something that I know my partner and I had well under control.” In these cases, firefighters’ reluctance to respect the hierarchy disrupt interpersonal relationships as well the work of firefighting itself.

A final subset of stories in this category center on the relationships between firefighters and the members of the communities they serve. Like the stories about firefighters’ bonds with one another, these stories depict both positive and negative relationships. For example, some firefighters wrote about feeling fatherly toward people in the community, and therefore compelled to protect them. One firefighter describes this instinct thusly: “We gave it everything that we had, never once thought about the danger that we were placing ourselves into, and for who? Total strangers.” A very few firefighters also spoke about feeling disconnected from the community or not respected by the community. These instances were described as the source of significant pain for the firefighters.

Themes of community and coworker bonds were the most frequently found in the sample, with almost 70% of respondents indicating such dynamics as the source of strong feeling at work. This is consistent with predictions based on the theory of social life (Sandelands, 2003), which suggests that social life is central to daily experience.
Firefighting-specific incidents and task events (42.1%): The stories in this category have the least explicit connection to social life among the ten topical themes I identified. Stories in this category focus on features that are specific to firefighting (as opposed to other professions) and on the tasks involved in firefighting. For example, some firefighters write about the beauty of fire scenes and how much they love witnessing this beauty. Some of these stories focus on the technical aspects of fighting fires, such as the size of the hoses used on a scene or how the configuration of houses prevents a convenient entry to a burning building. Stories in this category may also describe how firefighters’ training prepared them or failed to prepare them to deal with emergency situations, or how firehouse chores, blistering temperatures at fires, or the quality of equipment affect their experience of the job.

One interesting subcategory involves feeling pride in the firefighting profession. Stories in this subcategory reflect explicitly on how the firefighting profession allows storytellers to contribute meaningfully to society. They also may describe how firefighting is symbolic of a positive relationship with the community—the very nature of the job is to help others and to put oneself in danger for the sake of others. These stories show a high degree of connection to others. For example, one firefighter writes, “You feel particularly proud not only of yourself for what you do and stand for, but also for your group who also feel similarly.”

Even the more task-focused stories in this group often contain social elements. One firefighter laments the poorly executed training exercises in his department because they put other firefighters in danger; another bemoans the lack of professionalism by his fellow firefighters because it interferes with their ability to work efficiently. Several of
the stories about firefighters' training also contain social elements, as they discuss the pleasurable feelings when training falls into place and firefighters begin to work effectively as a team. It is notable that even the stories which are most clearly about tasks nonetheless often connect back to social life.

The qualitative analysis indicates that social life can be expressed in a number of different ways through the substantive content of a story about work. This analysis also provides framework for future work on the nature and appearance of social life, which will be discussed in more detail later.

**HYPOTHESES 2-4: Hypothesis 2** makes predictions about the presence of the moments of social life in the stories about work. Specifically, Hypothesis 2 predicts that stories about both loving and hating work will capture the moments of social life (love, play, and individuation). Moreover, Hypothesis 2 predicts that there should not be differences in the ratings of the moments of social life for stories of loving and hating work.

First, I compared the ratings of each moment of social life to zero to examine whether the moments were reliably present in each story. I examined stories about loving work and hating work separately. All moments of social life were present in stories of both loving and hating work, all $t (157) > 20.5$, all $p < 0.0001$. I then used t-tests to investigate whether the moments of social life are more present in stories about loving work than hating work or vice versa. Stories about loving work ($m = 2.732$, $sd = 1.086$) did not have a significantly different rating for the moment of love than stories about hating work ($m = 2.757$, $sd = 1.001$), $t (303) = -0.204$, $p < 0.839$. However, stories about loving work did have significantly higher ratings for the moment of play ($m = 1.99$, $sd = 1.067$)
0.92) than stories about hating work ($m = 1.59, \text{sd} = 0.65$), $t(303) = 4.459, p < 0.001$. Stories about loving work also had significantly higher ratings for the moment of individuation ($m = 2.46, \text{sd} = 1.01$) than stories about hating work ($m = 1.97, \text{sd} = 0.92$), $t(303) = 4.462, p < 0.001$. Hypothesis 2 was therefore partially supported by analyses. All moments of social life are present in both stories of loving and hating work. However, some of the moments of social life are more present in stories about loving work than hating work.

**Qualitative analyses:** In addition to the thematic analysis I conducted for Hypothesis 1, I also examined the ways in which the moments of social life were described in the stories in order to identify the properties and features of social life in a work context. Below, I discuss the commonly identified features of each of the three moments of social life from the firefighting stories.

**Love:** As discussed above, love is marked by the tension between unity and division. I expect that instances of love will feature some sort of rhythm, and that they may be marked by the gathering of firefighters beyond what is directly required by work. In fact, the stories in my sample do reveal that firefighters seek each other out beyond the confines of the department. However, it is the stories about the death of other firefighters which reveal the moment of love most poignantly and clearly.

For example, several respondents from City Fire recalled the recent on-duty death of one of their firefighters. This firefighter retired to his bunk after an incident and died peacefully of a heart attack. His death was unexpected and elicited shock and sadness across City Fire. The death of this firefighter also provoked a clear instance of love that is revealed in several stories. Many of the firefighters who wrote about the death noted
the division present in the event—not just the obvious division of the deceased firefighter from the living, but also the separation between the workers of City Fire and non-members, who could not feel the loss nearly as keenly. At the same time, the firefighters recount a remarkable instance of gathering together for support.

One firefighter, for example, writes that “The department rang the bells to announce the death of my brother firefighter. It finally hit home that we lost one of our own. I went to my room and cried.” In his story we see the tension between division and unity. It is when the storyteller most acutely feels his unity with the others—with his “brother” firefighters—that he seeks division by mourning alone. Another firefighter, however, experienced the tension between division and unity differently. He says:

I can remember feeling so sad that day, and I cried a lot, but by that very afternoon and evening we were all gathered at Headquarters and we were talking about how great Joey was, and how he was such a super fireman. Before long we were laughing and joking about him. It was then that I knew I wanted to live up to the high standards that Joey had for his job and coworkers. I think about my friend Joey a lot and I miss him.

This firefighter, feeling the division between himself and his late friend, sought out the comfort and company of the other firefighters.

We can also see the moment of love in other instances of mourning for fellow firefighters. One firefighter recalls attending a funeral for a firefighter killed during the September 11th attacks, and feeling both division and unity with the deceased firefighter’s family. As he watched her push their infant in a stroller, surrounded by the family’s ten other children, he wept, feeling both helpless but also “proud of [myself] for what [I] do.” Memorials and vigils emphasize the firefighters’ membership in a larger community,
while underscoring their separation from others who do not do risky work in the service of others.

Several firefighters who witnessed the death of coworkers also speak of a desire to achieve division by leaving the force after the tragedy. In all cases, this desire eventually translated into a need for unity and a pledge to remain a firefighter. For example, one respondent recalls when his brother who worked for the same department was killed. He writes, “I was developing feelings of not being a firefighter anymore . . . I did some soul searching and decided it would do nobody (especially me) any good to give up. I am still on the job today, and I plan to be here until retirement.” These stories of tragedy reveal the moment of love at its most powerful, perhaps when the survivors need it most.

Interestingly, love is revealed literally through desires for unity and division. Unity in this case is often represented by gathering together in a common location, or remaining a member of a particular department or team. Division, on the other hand, is represented by physically removing oneself from a situation, or wishing to leave the fire department entirely. We also see rhythms, in that the firefighters tend to move as a body through these rituals. For example, we see the firefighters of City Fire spontaneously gathering to remember their brother Joey, or firefighters from across the United States coming together to attend the funerals of their brothers killed on September 11th in New York and Washington, D.C. The concrete incidents that occur in the moment of love reveal movement and tension in the face of difficulty.

**Play:** Play is characterized by the tension between fantasy and reality, as described above. It is undertaken spontaneously and is experienced as fun. Perhaps
unsurprisingly, instances of play were not frequently found in the stories of loving and hating work. Because the stories often focus on tragic or emergency situations, the storytellers usually adopt a serious tone. The focal events of the story also often inhibit fun or joking by their very nature. Nonetheless, a few of the stories in the sample do describe moments of play, particularly in terms of firehouse interactions and friendships with coworkers.

One firefighter writes about an afternoon when she and her partner were asked to check the hydrants in a particular neighborhood. On this day, they happened to encounter two unusual and highly humorous events. The first was two topless women fist-fighting in the street. The storyteller asked her partner to monitor the situation until the police arrived while she continued the hydrant check, and found that one of the neighbors had a baby lion on his porch. The storyteller delightedly jokes that her partner was especially thrilled with the topless fight and the lion because, as a Mormon, he rarely gets to see such an exciting show. This incident reveals the tension between fantasy and reality. While the storyteller recounts the story with a light and humorous tone, she also maintains the thread of reality by noting the need to contact the police, and the possible dangers of encountering a lion. The story also clearly contains elements of fun and spontaneity.

It is interesting that there is a dearth of play in these stories. The storytellers’ ties to reality are unbalanced by tension with fantasy. As I discuss later, this may be due to the interaction between the questions asked and the type of work firefighters do.

**Individuation:** Individuation is the moment of social life marked by tensions between the group and the individual. In this moment of social life, individuals may act
on behalf of the group that they belong to. As previously discussed, another feature of the moment of individuation may be an individual’s reluctance to step apart from the group, for example by accepting a label of heroism. In these stories, we see the tension between the individual and the group both in terms of storytellers’ separateness from the group, and their connections to it.

One very interesting story about individuation, for example, shows the individual feeling apart and separate when his fellow firefighters reach out to show him that he is in fact not alone. This firefighter attended alone at the death of a child, and reached out to his coworkers for support. He writes:

When I got outside and saw my partner, I lost it. We both had a good cry together. My chief showed up and offered some great non-judgmental support . . . Another ambulance pulled up with a friend of mine on board, and as I relayed the story, she started to cry with me . . . We had a debriefing later that day and as other people heard about the story, they let go of some of their stories. It was bonding with your fellow human being at its best.

In this story, the individual storyteller begins feeling very alone and like others will not be able to relate to his recent experience. However, he finds as he begins to share the story with others that he is not alone in his feelings. Over the course of the day, as he connects with more people, the storyteller gradually is swept into a growing group of sympathetic others. This story demonstrates that the moment of individuation can begin with tensions pulling the individual from the group and then later back in, rather than vice versa.

We also see the moment of individuation in firefighters’ reluctance to be overly recognized for actions that are all in a day’s work. One firefighter writes about how his group was especially effective at a massive fire involving several houses. Although his
group was instrumental in extinguishing the fire, the news accounts did not identify them. He writes, “No one other than the other crews at the fire knows what we did. The funny thing is, that’s enough.” For this firefighter, it does not matter that members of the community are unaware of his contributions to the fire effort. Such recognition might pull him from the larger group of firefighters who worked the fire.

One of the thematic categories discussed earlier was being recognized or acknowledged for firefighting work. As the thematic analysis revealed, most firefighters perceived such recognition as positive. However, interestingly, many of those stories also show that the firefighters psychologically perceive the praise as being for themselves as representatives of a group, rather than as individuals. One officer, for example, writes that when he was thanked by a person he had earlier saved in a car accident, “it was a gratifying moment for myself and my men” (emphasis added). In some cases, the firefighters are actually being recognized as a group, as when one medical victim’s granddaughter thanks the team of firefighters for responding to the call. Therefore, while many of the stories do contain themes of being thanked or recognized, at the same time the storytellers retain a strong and explicit connection to their group.

**Hypothesis 3a** states that stories about loving work will contain the positive elements of social life identified in Chapter 2 to a greater extent than stories about hating work. Specifically, the stories about loving work will demonstrate connection to others, need to protect and preserve the group, connection between group outcomes and personal self-esteem, group events leading to self-appraisal, and reluctance to separate the self from the group. At the same time, **Hypothesis 3b** states, stories about hating work will contain the negative elements of social life identified in Chapter 2 to a greater extent than
stories about loving work. Specifically, stories about hating work will demonstrate disconnection from others and the group, less concern for group well-being and outcomes, less self-appraisal based on the group, and a willingness to separate the self from the group. Stories about hating work may involve group outcomes impacting the individual, but these will be pragmatic, rather than self-revelatory, concerns.

Table 3.4: Factor analysis of the elements of social life and factor loadings

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reluctance to separate self from group (0.765)</td>
<td>Concern for personal outcomes (0.838)</td>
<td>Disconnection from group (0.826)</td>
</tr>
<tr>
<td>Group events lead to self-evaluation (0.863)</td>
<td>Assessment based on personal accomplishment (0.887)</td>
<td>Protecting self over group (0.837)</td>
</tr>
<tr>
<td>Connecting group outcomes to self-esteem (0.861)</td>
<td>Willing to separate self from group (0.814)</td>
<td></td>
</tr>
<tr>
<td>Preserving group (0.729)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection to group (0.760)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

First, in order to test the idea that particular elements of social life will co-occur, I ran a factor analysis on the ratings of these elements. Factor analysis with varimax rotation⁶ yielded a three component solution, with each element loading on its factor greater than 0.75 (see Table 3.4); the three-factor solution explained 71.9% of the total variance. Component one consisted of the five hypothesized positive elements of social life: connection to the group, preserving the group, connecting group outcomes to self-esteem, group events leading to self-evaluation, and reluctance to separate self from the group. The second factor consisted of three of the negative elements: concern for personal outcomes, assessment based on personal accomplishment, and willing to separate self from the group. The third factor consisted of disconnection from the group.

⁶ I opted to use Varimax rotation rather than another form of rotation because I hypothesized that negative and positive elements of social life would be orthogonal to one another.
and attempting to protect the self over the group. This factor analysis provides initial confirmation of the idea that positive and negative experiences of social life have particular unique features.

There are two ways in which I address Hypotheses 3a and 3b. First, I correlated the overall ratings of the extent to which social life is present in the story with the ratings of the extent to which each property of social life is present in the story. These correlations reveal that for both each individual element (excepting individual success and basing self-assessment on personal achievement) and each composite factor, the extent to which social life is revealed in a story is significantly positively related to the extent to which the elements of social life appear. The results of the correlational analyses appear in Table 3.5. Interestingly, both positive and negative features of social life are more present in stories that reveal social life to a greater extent. This finding is discussed in greater detail later in this chapter.

Table 3.5: Hypothesis 3a correlations between social life and elements

<table>
<thead>
<tr>
<th>Element (positive)</th>
<th>Element (negative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td>0.698</td>
</tr>
<tr>
<td>Preserve group</td>
<td>0.475</td>
</tr>
<tr>
<td>Good member</td>
<td>0.480</td>
</tr>
<tr>
<td>Group success</td>
<td>0.366</td>
</tr>
<tr>
<td>Not a hero</td>
<td>0.446</td>
</tr>
<tr>
<td></td>
<td>Disconnection</td>
</tr>
<tr>
<td></td>
<td>0.219</td>
</tr>
<tr>
<td></td>
<td>Preserve self</td>
</tr>
<tr>
<td></td>
<td>0.298</td>
</tr>
<tr>
<td></td>
<td>Good self</td>
</tr>
<tr>
<td></td>
<td>0.141</td>
</tr>
<tr>
<td></td>
<td>Individual success</td>
</tr>
<tr>
<td></td>
<td>0.097</td>
</tr>
<tr>
<td></td>
<td>Hero</td>
</tr>
<tr>
<td></td>
<td>0.185</td>
</tr>
<tr>
<td>Factor 1</td>
<td>0.609</td>
</tr>
<tr>
<td>Factor 2</td>
<td>0.159</td>
</tr>
<tr>
<td>Factor 3</td>
<td>0.297</td>
</tr>
</tbody>
</table>

* = significant at p < 0.05
** = significant at p < 0.01
*** = significant at p < 0.001

I also used t-tests to compare the ratings of the elements of social life in stories about loving and hating work. First, while connection to the group was significantly
more present in stories about loving work \( (m = 3.85, \text{sd} = 1.44) \) than stories about hating work \( (m = 2.59, \text{sd} = 1.31; t (303) = 8.016, p < 0.001) \), disconnection from the group was significantly more present in stories about hating work \( (m = 2.25, \text{sd} = 1.4) \) than in stories about loving work \( (m = 1.094, \text{sd} = 0.18; t (303) = -10.64, p < 0.001) \). All other elements significantly differed between stories of loving and hating work; means and standard deviations are presented in Table 3.6.

Table 3.6: Hypotheses 3a and 3b: Means and standard deviations for elements of social life

<table>
<thead>
<tr>
<th>Element</th>
<th>Stories about loving work</th>
<th>Stories about hating work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Connection***</td>
<td>3.85</td>
<td>1.44</td>
</tr>
<tr>
<td>Preserve group*</td>
<td>2.62</td>
<td>1.2</td>
</tr>
<tr>
<td>Good member***</td>
<td>3.30</td>
<td>1.31</td>
</tr>
<tr>
<td>Group success***</td>
<td>3.57</td>
<td>1.42</td>
</tr>
<tr>
<td>Not a hero***</td>
<td>2.47</td>
<td>1.07</td>
</tr>
<tr>
<td>Disconnection***</td>
<td>1.04</td>
<td>0.18</td>
</tr>
<tr>
<td>Preserve self***</td>
<td>1.33</td>
<td>0.57</td>
</tr>
<tr>
<td>Good self**</td>
<td>2.08</td>
<td>1.25</td>
</tr>
<tr>
<td>Individual success**</td>
<td>1.82</td>
<td>1.04</td>
</tr>
<tr>
<td>Hero***</td>
<td>1.89</td>
<td>0.94</td>
</tr>
</tbody>
</table>

* = significant at \( p < 0.05 \)

** = significant at \( p < 0.01 \)

*** = significant at \( p < 0.001 \)

Interestingly, and in contrast to hypothesis, the element of preserving and protecting the group was more present in stories about hating work \( (m = 2.93, \text{sd} = 1.42) \) than in stories about loving work \( (m = 2.62, \text{sd} = 1.2), t (303) = -2.072, p < 0.039 \). Three elements hypothesized to be more typical of stories about hating work were also more present in stories about loving work: self assessments based on personal accomplishment ("good self," \( t (303) = 3.143, p < 0.002 \)); feelings of success based on personal accomplishment ("individual success," \( t (303) = 3.148, p < 0.002 \)); and willingness to
separate the self from the group ("hero," $t(303) = 7.542, p < 0.001$). These inconsistencies with the hypotheses will be discussed in more detail later in this chapter.

Finally, I conducted exploratory analyses to examine the relationship of story codings to the results of the other surveys distributed, specifically work performance and psychological well-being measures. In order to test possible relationships, I first created four composite variables for each story. The first composite averages ratings for the three moments of social life to create an overall "social life score." The second composite variable averages ratings for the positive elements of social life, the first factor identified in the factor analysis with varimax rotation. The third and fourth composite variables represent the second and third factors identified in the factor analysis.

Table 3.7: Exploratory analysis correlation results

<table>
<thead>
<tr>
<th>Name of measure</th>
<th>Social life</th>
<th>Elements factor 1</th>
<th>Elements factor 2</th>
<th>Elements factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rosenberg Self-Esteem</td>
<td>0.05</td>
<td>-0.00</td>
<td>-0.09</td>
<td>-0.02</td>
</tr>
<tr>
<td>CSE, importance subscale</td>
<td>-0.06</td>
<td>-0.06</td>
<td>**-0.22</td>
<td>-0.10</td>
</tr>
<tr>
<td>CSE, member subscale</td>
<td>-0.03</td>
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<td>-0.09</td>
<td>-0.15</td>
</tr>
<tr>
<td>CSE, public subscale</td>
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<td>0.01</td>
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<tr>
<td>CSE, private subscale</td>
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<td>-0.09</td>
<td>-0.00</td>
<td>0.09</td>
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<tr>
<td>PANAS-X, general positive emotion subscale</td>
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<td>-0.07</td>
<td>-0.12</td>
<td>-0.09</td>
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<tr>
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<td>0.00</td>
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<td>-0.02</td>
<td>-0.12</td>
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<tr>
<td>Interdependence</td>
<td>-0.11</td>
<td>-0.09</td>
<td>*-0.20</td>
<td>*-0.17</td>
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* = significant at $p < 0.05$
** = significant at $p < 0.01$
*** = significant at $p < 0.001$
To test whether the presence of the moments of social life in respondents’ stories relates to their self-reported performance and well-being, I ran a series of bivariate correlations between the composite social life score, and scores on each of the psychological well-being and work performance measures collected. The results of these correlations can be seen in Table 3.7. I additionally did a median split of the sample based on their average social life score, and compared the scores of the high and low social life groups on the well-being and performance measures using t-tests. None of these tests revealed significant group differences, except that respondents with lower social life scores showed higher levels of general positive emotion (low $m = 3.67$, $sd = 0.62$, high $m = 3.40$, $sd = 0.65$, $t (151) = 2.65$, $p < 0.008$). These analyses indicate that there is no relationship between the presence of the moments of social life in the stories and the work performance or well-being of the storytellers.

Then, to test whether the presence of the elements of social life in respondents’ stories relates to their self-reported performance and well-being, I ran a series of bivariate correlations between the composite elements score, and scores on each of the psychological well-being and work performance measures. These results are also presented in Table 3.7. While Factor 1 (positive elements of social life) is significantly related to self-reported performance only, both Factors 2 and 3 (negative elements of social life) are significantly related to several variables. In particular, both are significantly negatively correlated with normative and affective commitment, and with organizational identification, indicating that experiencing the negative side of social life impairs a worker’s relationship with the organization. These findings are discussed in more detail later in the chapter.
Discussion

Hypothesis 1, that stories about hating and loving work would be predominately social rather than task-focused, was supported by the data. Stories about times of strong feeling at work were overwhelmingly more focused on social phenomena than on other aspects of the job. This finding lends support to the idea that interpersonal relationships are one of the most fundamental aspects of work. I believe this finding to be particularly striking given that firefighters were asked to tell a very general sort of story, with no specific prompt for a social aspect. That many of the stories were social nonetheless indicates the importance of relationships at work.

The qualitative analysis of stories accompanying Hypothesis 1 demonstrates that storytellers can reveal the presence of social life through a number of different topics, ranging from being recognized for their work to not performing their job well enough. The presence of ten different story themes, all of which are ultimately social, provides another boost to the premise that social phenomena are at the root of the work experience.

Hypothesis 2 predicted that the moments of social life would be present in both stories of loving work and stories of hating work. In fact, all three moments of social life were found in both stories of loving and hating work, supporting the hypothesis. The moment of love was not significantly more present in stories of loving work than stories of hating work. However, the moments of play and individuation were more frequently found in stories of loving work than stories of hating work. There are several possible explanations for this. First, because love is the first moment of social life and play and individuation are specific instances of love, it is possible that love is simply more often present in stories of both loving and hating work. Anywhere there is social life, there will
be love, while play and individuation may be more likely to emerge in positive circumstances. Secondly, as described in Chapter 2, love is a tension between division and unity. I hypothesized that exclusion or ostracism would be more frequently present in stories of hating work, yet such an experience, because of its tension between division and unity, would also be coded as love. Therefore, it is possible that the definition of love fits both positive and negative experiences. The fact that play and individuation are significantly more present in stories of loving work while the moment of love is not suggests that play and individuation may be more fruitful departure points for a study of social life as a positive and enabling force than love, as they are more present under such circumstances. However, the presence of the moment of love in both stories of loving and hating work supports the prediction of the social life theory that social life engenders both positive and negative feelings.

The qualitative analysis of the moments of social life that accompanies the Hypothesis 2 analysis provides concrete details about how the tensions of these moments are actually experienced. I found that the moment of love, defined as a tension between division and unity, is often quite literally experienced as division and unity; storytellers use physical distance or gathering to bring themselves closer to or farther from others. Love was also strikingly present in many stories of tragedy, when storytellers wrote of attempts to bridge the division wrought by painful losses by drawing together in fraternal unity. The qualitative data provided by the stories shows that the tension between division and unity is indeed experienced in a workplace context.

The moment of play was less frequently found in firefighters’ stories, perhaps because of the often serious nature of the work they do. Yet many firefighters did talk
about what we traditionally think of as play; joking and playing pranks in the firehouse, or making light of situations encountered on the job. Based on personal interaction with firefighters, I can say that they have perhaps more fun than most people on the job. However, because they were asked to provide just two stories of powerful work experiences, it is possible that they focused more on serious or “important” events than the everyday fun events that characterize life in the firehouse. If a different type of story were told—perhaps a story about a typical day in the firehouse, or about what it is like to work with other firefighters—I expect the moment of play would be much more evident.

The moment of individuation is characterized by a tension between the individual and the group. Although Sandelands (2003) and Chapter 2 of this dissertation tend to discuss individuation from the perspective of an individual separating himself from the group, many of the stories in this sample adopted a different perspective; that of the lone individual moving toward the group or being brought in by the group. Other stories showed a more individual-based perspective consistent with the literature review, such as individual firefighters adopting a group mindset and acting as representatives of the group. The qualitative analysis of the moment of individuation serves as a reminder that the tensions found in the moments of social life are bidirectional. Recognizing the moments requires an awareness that tension may originate from either part, from the individual or the group.

Hypotheses 3a and 3b made predictions that the elements of social life, as identified in Chapter 2, would be more present in stories about loving work than in stories about hating work. In essence, these hypotheses predicted that stories about positive emotional experiences at work would contain more positive elements of social life. A
correlational analysis revealed that the presence of social life in a story was significantly related to the presence of all of the elements of social life, both positive and negative. Because the ratings of the presence of social life do not distinguish in themselves between positive and negative experiences, these positive correlations simply indicate that where social life itself is present, so too are more of the hypothesized elements of social life. The correlational findings support the idea that the hypothesized elements of social life actually describe the experience of social life. Additionally, a factor analysis supported the theoretical co-occurrence of particular elements of social life; three factors were found, with one perfectly corresponding to the “positive” elements of social life, and the other two corresponding to the “negative” elements.

Additionally, while many of the positive elements of social life were significantly more present in stories of loving work, and many of the negative elements in stories of hating work, there were some exceptions. Specifically, the element of preserving and protecting the group was more present in stories about hating work than in stories about loving work. Three elements hypothesized to be more typical of stories about hating work were also more present in stories about loving work: self assessments based on personal accomplishment; feelings of success based on personal accomplishment; and willingness to separate the self from the group. These inconsistencies suggest a more nuanced understanding of social life.

Specifically, the inconsistencies about where elements of social life are more present suggest the ways in which different circumstances can shape the experience of social life. Needing to protect and preserve the group, hypothesized as a feature of someone enmeshed in social life, could be elicited as the result of a threat. For example,
a group member violating norms or external political factors might threaten the integrity of the group, awakening the protective instincts of involved members. The presence of such a threat might be experienced as highly negative, even as the response of protecting the group remains a hallmark of positive involvement. If this were the case, then we would expect to see the need to protect and preserve the group more frequently in stories about hating work, even if this quality defines positive involvement in social life.

The three “negative” elements of social life more frequently found in stories about loving work also suggest a different understanding of social life. Self-assessments based on personal accomplishment, feelings of success based on personal accomplishment, and willingness to stand separate from the group in a “hero” role were all unexpectedly more present in stories of loving work than hating work. These three elements also parse out together in the factor analysis of the elements of social life, indicating that they have much in common. Many of the stories which received high ratings for this element of social life told of individual successes at work. A storyteller remembering such a success fondly does not necessarily imply negative experiences with social life. One likely explanation is that personal accomplishment is a source of positive experience in addition to involvement in social life. In fact, being recognized by the group for an individual contribution may be a powerful reminder that one belongs to that group. Therefore, fondly remembering moments of personal accomplishment in stories of loving work need not necessarily imply anything about the quality of the storyteller’s overall involvement in social life. It could be that these three elements do not necessarily indicate a negative involvement in social life; this would explain why the negative elements parsed into two factors in the factor analysis rather than one. If these three elements are not in fact
negative, then it may even be that positive involvement in social life enables personal accomplishment by providing a secure and supportive context in which to work. This would explain the more frequent appearance of personal success elements in stories about loving work.

The exploratory analyses using the performance and well-being variables explored whether stories which contained the moments of social life to a greater extent would have storytellers with higher levels of psychological well-being and work performance. No such relationship was found; a greater presence of the moments of social life did not indicate storytellers with better psychological or work functioning. This supports the idea that social life is universal, and the appearance of the moments of social life does not depend on characteristics of the people involved or of the context. This result also means that story data may not be an adequate substitute for standard measures of these other variables, at least not if that data is analyzed in terms of the social life theory. It may be that other styles of analysis could uncover this information more effectively. It may also be that stories about salient workplace events evoking strong feelings are not appropriate media for communicating information about psychological health and work performance. Storytellers' behavior in exceptional incidents may not be indicative of their day-to-day experience, and therefore may not reflect their normal levels of functioning.

The exploratory analyses also examined whether storytellers whose stories contained more positive elements of social life and fewer negative elements would have higher scores on measures of psychological well-being and work performance. While many of the performance and well-being variables were not related to the presence of any
of the elements of social life, there were some significant relationships. Specifically, the negative elements of social life significantly related to several performance variables. Both Factor 2 and Factor 3 were significantly negatively correlated with affective and normative commitment, organizational identification, and task interdependence. Interestingly, all four of these variables relate to the respondent’s feeling part of a group. Affective commitment is defined as a respondent feeling part of his or her work organization, while normative commitment is a respondent’s feeling of obligation to remain a member of the organization. Organizational identification is the amount of overlap a respondent perceives between himself and the organization. Finally, task interdependence refers to how a respondent arranges his or her work collaboratively with others; in essence, how a person’s work ties him to a group. Considering these four variables in terms of what they imply for feelings of belonging, it becomes evident that experiencing the negative elements of social life is related to impairment of these feelings of belonging. To the extent that factors such as commitment, identification, and interdependence affect a worker’s performance and well-being, positive involvement in social life might be expected to enhance those variables.

However, none of the well-being variables were related to the elements of social life contained in the story. Once again, the results indicate that the form and experience of social life is not dependent upon the characteristics of the individual involved. Additionally, many work performance variables were not related to the elements of social life contained in the stories. It appears that the only variables which were related to the appearance of the elements of social life in the stories directly deal with the respondent’s involvement with other people. Moreover, these variables were only related to the
presence of negative elements of social life, suggesting that positive experiences of social
life are more universal, as predicted by the social life perspective.

Although the stories told by Study 1 respondents were not good predictors of
work performance and psychological well-being on the whole, the fact that the negative
elements of social life predicted several variables does indicate that with more
appropriate analyses or story prompts, story data might indeed be useful for this purpose.
For researchers interested in feelings of belonging, an analysis of the elements of social
life may be particularly fruitful, while researchers interested in other variables might look
to different coding schemes. Different story prompts might also produce more useful
data for the purpose of learning about performance and well-being. For example, asking
about a typical day at work might provide a story more indicative of average performance
or well-being (although my pre-test interviews indicated that such a prompt often elicited
lists of tasks rather than true stories). While a social life analysis of these stories was not
especially useful for learning about performance and well-being, some aspects of the
analysis encourage further exploration of stories as data.

Taken together, this data enriches our understanding of social life, what it looks
like in a workplace context, and how different aspects of social life relate to one another.
The data generally support Sandelands’ (2003) description of the moments of social life
and the hypothesized elements of social life, although they also suggest that some
supposedly negative elements of social life may in fact be found during positive
experiences. Stories about strong positive events tend to contain more evidence of play
and individuation, and of the positive elements of social life. The data also speak to the
bidirectional nature of the tensions found in the moments of social life, while providing
concrete illustrations of how the moments of social life might appear in a work context. Finally, while the moments of social life appear not to relate to performance and well-being variables, some of the elements of social life do strongly relate to variables assessing the degree of belongingness a person feels with an organization. This suggests that the elements of social life do speak to group membership. In turn, this also suggests that one tactic managers might take to increase commitment to the organization is to help foster interpersonal relationships among workers or between workers and the people they serve.

An overarching interpretation of the data is simply that interpersonal relationships are the crux of a positive, affirming work experience. Asked to tell stories about times they loved or hated their work, almost all respondents chose to speak about times when interpersonal relationships mattered. We see also that relationships characterized by the positive aspects of social life more often appear in stories of loving work, while relationships characterized by negative aspects of social life appear more often in stories of hating work. Finally, the data indicate that learning about a storytellers’ experience of social life at work will suggest his or her feelings of belongingness to the organization, whether they are represented as commitment, identification, or interdependence.

Having developed a theoretical framework for understanding the elements of a true group in the workplace in Study 1, I use Study 2 to better understand a) which features of community must be present before observers perceive the existence of a community; and b) how naive observers understand communities and the experience of community members. I also use Study 2 to validate the results of Study 1. As previously mentioned, all three expert raters used to code the stories in Study 1 are very familiar
with the social life perspective. Although two of the coders were not familiar with the specific hypotheses of the study, it is nonetheless possible that their familiarity with the theory being used to analyze the stories biased their interpretations. If naïve raters, who are unfamiliar with both the social life perspective and the hypotheses of Study 1, code these stories similarly to the expert raters, this increases the confidence with which I can say that Study 1 results were not due to coder bias or expectancy effects.

As previously discussed, one of the difficulties in studying social life is that people have a difficult time talking about it directly. Similarly, people may not be able to adequately verbalize their naïve theories of social life. However, previous work has found that while people often can't explain the heuristics they use to predict and interpret events, they are capable of accurately endorsing scale items describing them (Church et al., 2003). Therefore, in Study 2 I assess respondents' naïve theories of social life by asking them to rate a sub-sample of stories from Study 1 in terms of their beauty, vitality, and embodiment of social life.
Chapter 4
Study 2

In Study 1, I found that firefighters' stories about work are primarily stories about social life. Moreover, I found that the moments of social life as described by Sandelands (2003) can be found in these stories, and that the moments of play and individuation are more frequently found in stories of loving work than in stories of hating work. I also identified ten elements of social life (five positive and five negative) and found that four of the positive elements occurred more often in stories of loving work, while two of the negative elements occurred more often in stories of hating work. Three negative elements, which cluster together as a single factor, were more common in stories of loving work and suggest that individual achievement is an additional source of positive feeling in the workplace. Finally, in Study 1 I found that ratings of the social life in stories about work is a generally poor predictor of workplace performance and psychological well-being, with one exception: Negative elements of social life predict low feelings of belonging to an organization.

Study 2 examines whether lay theories of social life map onto the coding scheme used by the expert raters in Study 1. This study contributes to the theory of social life in several ways. First, if naïve ratings coincide with expert ratings, that supports the idea that the theory of social life makes intuitive sense; that it echoes our lived experience of social life. Second, if naïve readers are able to extract useful information from these stories, then that supports the contention that stories are a valuable source of data about organizations and employees. To the extent that the results of Study 2 confirm the results
of Study 1, they also strengthen the argument that the results of Study 1 are not due to coder bias or expectancy effects.

**Study 2 overview:**

In this study, 26 University of Michigan undergraduates read stories collected from City Fire in Study 1. These stories were presented in the same form that the respondents originally told them, with identifying details such as the location of City Fire and names of individual firefighters changed for privacy. Participants rated the presence of social life in the story, the existence of a true group which includes the story teller, and the extent to which the story teller is individuated from the group. Participants also rated the beauty and quality of each story, following Worline (2003).

**Specific hypotheses:**

As this dissertation and the work of Sandelands (1998a, 2003) posit, social life will become most visible in the moments of love, play, and individuation. In Study 1, I established via expert ratings the extent to which each of these moments is present in a particular story. In Study 2, I hypothesize:

H1a: Stories which received higher ratings for love, play, and individuation in Study 1 will receive higher ratings for the presence of social life in Study 2 when rated by naïve readers.

H1b: Stories which received higher ratings for love, play, and individuation in Study 1 will receive higher ratings for the presence of community in Study 2.

H1c: Storytellers whose stories received higher ratings for love, play, and individuation in Study 1 will receive higher ratings of individuation in Study 2.
I also develop the argument that when social life manifests in the workplace, several elements are present which help us to recognize it. In Study 1, I rated the extent to which these elements, which include feelings of connection to others in the group, concern for group level outcomes even at the expense of personal goals, a tendency to experience group evaluations as personal, a concern with protecting the group from harm, and a reluctance to distinguish the self from the group, are present in each story. In Study 2, I hypothesize:

H2a: Stories which received higher ratings for the presence of positive elements of social life and lower ratings for negative elements will be given higher omnibus ratings of social life by naïve readers.

H2b: Stories which received higher ratings for the presence of positive elements of social life and lower ratings for negative elements will be more likely to be judged to be about community by naïve readers.

H2c: Stories which received higher ratings for the presence of positive elements of social life and lower ratings for negative elements will have storytellers who are judged to be significantly more individuated from the group.

Following Worline (2003), I also expect that well-formed and beautiful stories will most effectively communicate the existence of social life. As Sandelands (1998b) notes, art is the most effective medium to convey social life, because of its ability to communicate feeling. The more well-formed or beautiful that a piece of art is, the more effectively it should communicate feeling. Additionally, to the extent that a story echoes the truth of social life, it should be considered beautiful by readers, as suggested by Keats’ famous line, “Beauty is truth, truth beauty.” Other poets and philosophers have
suggested that the social is inherently beautiful. For example, Coleridge (1817) writes that works of art become beautiful when they show the unity of the many; that is, when they contain a tension very similar to Sandelands’ (2003) description of the moment of love, a tension between unity and division. Therefore, I hypothesize that:

H3: More beautiful and well-formed stories will receive higher ratings for the presence of social life and community.

In Study 1, I conducted exploratory analyses to investigate whether there is a relationship between ratings of social life and respondents’ self-rated levels of work performance and psychological well-being. These analyses indicate no relationship between ratings of social life in firefighters’ stories and their outcomes on well-being and performance measures. However, as previously noted, it is possible that while a social life analysis of stories does not predict outcome variables, other types of analyses might. Naïve readers encountering these stories with an open mind might still be able to accurately glean information about the performance and well-being of these storytellers. Moreover, the stories might communicate information about performance or well-being to readers who are actively seeking that information, unlike the coders from Study 1. Therefore, I conduct parallel exploratory analyses here to examine:

1. Whether naïve readers’ ratings of storytellers’ psychological well-being and workplace performance relate to their ratings of the presence of social life, community, and storyteller individuation.

2. Whether naïve readers’ ratings of storytellers’ psychological well-being and work performance differ significantly from the self-report data provided by the storytellers.
In sum, the hypotheses for Study 2 predict that people’s naïve understanding of social life will mirror the theoretical description of social life developed in this dissertation. People will see social life most clearly in the moments of love, play, and individuation; they will also interpret elements of connection to others, concern for protecting the group and achieving group goals, and an overlap between evaluations of the group and the self as indicating a greater presence of social life. Because art of a higher quality will be better able to convey feeling, the presence of social life will be better communicated to naïve readers to the extent that a story is beautiful and well-formed. Finally, these analyses will explore whether naïve respondents sense a connection between the storyteller’s report of social life and his or her psychological well-being and workplace performance.

**Instruments:**

The sub-sample of stories collected from City Fire were selected from Study 1 for use in Study 2. These particular stories were selected for use in Study 2 in order to control for variables that might affect naïve ratings such as the specific type of firefighting work done by the story teller, and the type of event discussed by the story teller.

All stories distributed for participant ratings had identifying details changed. These details include any last names provided by story tellers; the name “City Fire” was substituted for the fire department’s real name. First names were not changed, nor were details of the type of work done by the story teller, in order to maintain the integrity of the story as much as possible.
Participants were provided with ratings sheets for each story asking them to answer several questions on a 1-7 scale (see Appendix D for a complete list of the questions asked). All questions were preceded by a brief explanatory paragraph defining terms used within the question to ensure that all participants operationalized the concepts similarly. The key questions that participants were asked to respond to are:

- To what extent can you sense that the people in this story are all part of a living body that is greater than just the sum of its members? (social life)
- To what extent do you think the story teller is a member of a real, living group whose members have deep connections to one another, and would probably stay together even if they didn’t have a task to do together? (community)
- To what extent do you think the story teller is deeply connected to the group, to the point that he or she carries that group membership into many different situations? (individuation)
- How positive do you think the story teller’s psychological well-being is, based on this story?
- How well do you think this person performs at work, based on this story?
- How beautiful do you think this story is?
- How well-formed do you think this story is?

Sample:

Participants were 26 University of Michigan undergraduates recruited through the Introductory Psychology Subject Pool. Participants received partial course credit for participating. I used this particular sample purely for reasons of convenience. There is no theoretical reason to recruit from any specific population, since I do not expect
people's naïve understanding of social life to vary depending on age, location, or experience (see Sandelands, 2003). No demographic information was collected from participants, as demographic variables were not expected to influence results.

Procedure: This procedure is adapted from Worline (2003). Participants completed the surveys individually. Each participant received a packet containing four through six randomly determined stories from the sub-sample accompanied by ratings sheets.

The researcher verbally instructed participants to read each story, taking as much time as necessary to understand the events in the story. They were then instructed to complete a ratings sheet immediately after reading each story. After completing the ratings sheet for each of the stories in the packet, the participants were debriefed and thanked.

Analyses and results

As in Study 1, I used Cronbach’s alpha to measure the rate of agreement between raters. The Cronbach’s alpha reached conventional levels of acceptability at 0.79 for the nine ratings questions. Because reliability was acceptable, raters’ codes for each story were averaged, and the averaged ratings were used in all statistical analyses. All further analyses are outlined in the order of the hypotheses they address.

Hypotheses 1a and 1b predict that stories which depict the moments of social life will in fact reveal social life and community more effectively to naïve readers than stories which do not depict those moments. Hypothesis 1c also predicts that storytellers whose stories depict the moments of social life to a greater extent will be rated as more individuated by naïve readers. In order to address these hypotheses, I correlated the raw
ratings of the extent to which each moment of social life (love, play, and individuation), as well as an aggregate variable representing social life, is present in the story from Study 1 with the naïve ratings of presence of social life, community, and an individuated storyteller from Study 2. I also correlated Study 2 participants’ naïve ratings of the presence of social life in the stories with their ratings of community and the storytellers’ individuation. All correlations are one-tailed as I predicted relationships in a specific direction.

The results of the first test (Hypothesis 1a) indicate that ratings of love from Study 1 are marginally significantly correlated with ratings of social life from Study 2, $r = 0.235, p < 0.052$. Ratings of the moment of play from Study 1 were significantly correlated with ratings of social life from Study 2, $r = 0.254, p < 0.039$. Ratings of individuation were also significantly correlated with ratings of social life from Study 2, $r = 0.314, p < 0.014$. Finally, I correlated ratings of social life from Study 2 with an aggregate social life variable created by averaging ratings of the moments of social life from Study 1. The results of this correlation were significant, $r = 0.278, p < 0.017$. The results of theses analyses provide support for Hypothesis 1a, that stories with a greater presence of social life as rated by experts will reveal social life more effectively to naïve readers.

Hypothesis 1b also receives partial support. Specifically, love ($r = 0.213, p < 0.07$) and play ($r = 0.236, p < 0.051$) were marginally significantly correlated with ratings of community. However, individuation ($r = 0.338, p < 0.009$) was significantly correlated with ratings of community, while an aggregate rating of social life from Study 1 was significantly correlated with ratings of community in Study 2 ($r = 0.253, p < 0.04$).
Moreover, Study 2 participants’ ratings of social life were also significantly correlated with their ratings of the presence of community: $r = 0.811, p < 0.0001$.

Finally, Hypothesis 1c is fully supported by analyses. Study 1 ratings of love ($r = 0.299, p < 0.017$), play ($r = 0.284, p < 0.024$), individuation ($r = 0.413, p < 0.001$), and the social life aggregate ($r = 0.37, p < 0.004$) were all significantly positively correlated with ratings of storyteller individuation from Study 2, indicating that the presence of the moments of social life in stories indicates a more individuated storyteller to naïve readers. Additionally, naïve readers’ own ratings of the presence of social life in the stories were significantly positively correlated with their ratings of the storytellers’ individuation, $r = 0.677, p < 0.0001$.

In order to test Hypothesis 2a, which predicts that the extent to which each element of social life is present in the story will positively relate to the extent to which each story describes the presence of social life, I correlated the ratings from Study 1 and the omnibus social life rating from Study 2. I used the three factors for the elements of social life produced by the Study 1 analysis: Factor 1 consists of the five positive elements of social life while Factors 2 and 3 consist of negative elements. Factor 1 was significantly positively correlated with omnibus social life ratings from Study 2, $r = 0.433, p < 0.001$. Factor 2 was significantly negatively correlated with omnibus social life ratings from Study 2, $r = -0.316, p < 0.014$, as was Factor 3, $r = -0.418, p < 0.001$. Hypothesis 2a is fully supported by analyses.

In Study 2, readers were asked to judge whether a story truly describes a group or not; that is, whether the story is about community. Hypothesis 2b predicts that to the extent a story contains the elements of social life, it is more likely to evoke perceptions of
community as opposed to collection. Again, ratings of the elements of social life from Study 1 (both individual ratings and the composite variable created to test Hypothesis 2) were correlated with ratings of the extent to which a particular story depicts a community. Factor 1, containing the positive elements of social life, was significantly positively correlated with ratings of the presence of community in Study 2, $r = 0.392, p < 0.002$. Factor 2 was significantly negatively correlated with ratings of community in Study 2, $r = -0.440, p < 0.001$, as was Factor 3, $r = -0.312, p < 0.015$. Hypothesis 2b was also fully supported by analyses.

Finally, **Hypothesis 2c** predicts that stories which received higher ratings for the presence of the elements of social life in Study 1 will have storytellers who are judged to be significantly more individuated from the group in Study 2. To test this hypothesis, I again used bivariate correlations. Ratings of each element of social life from Study 1, as well as the composite variable of the elements of social life, were correlated with the ratings of individuation from Study 2. Factor 1 was significantly positively correlated with ratings of individuation, $r = 0.33, p < 0.01$. Factor 2 was significantly negatively correlated with ratings of individuation in Study 2, $r = -0.342, p < 0.008$, as was Factor 3, $r = -0.33, p < 0.01$. Hypothesis 2c was fully supported by analyses.

**Hypothesis 3** predicts that more beautiful and well-formed stories will better express social life, because better examples of art will more effectively communicate feeling-rich phenomena. I tested this hypothesis with correlational analyses. I found that participants’ ratings of social life were significantly positively correlated with their ratings of the stories’ beauty, $r = 0.689, p < 0.0001$. Similarly, participants’ ratings of social life were significantly positively correlated with how well-formed they felt the
story was, $r = 0.499, p < 0.0001$. A mediational analysis revealed that when the story's beauty was controlled for, the relationship between ratings of social life and ratings of how well-formed the story is fell below conventional levels of significance, $r = 0.0828, p < .576$. A Sobel test confirmed that ratings about the quality of the stories' form mediate the relationship between ratings of beauty and social life, $z = 2.73, p < 0.006$.

It is possible that a confound, such as story quality, is driving the correlations between naïve raters' judgments of social life and beauty. To account for that possibility, I also correlated expert raters' assessments of social life from Study 1 with naïve participants' ratings of stories' beauty and form. These correlations were not significant, allowing the possibility that there is a confound in naïve participants' ratings of the stories. This possibility will be discussed further in the discussion section of this chapter.

I conducted exploratory analyses of the relationship between social life in the stories and naïve readers' impressions of storyteller performance and well-being using ratings from both Study 1 and Study 2. First, I examined whether higher ratings of social life in the stories were related to higher ratings of storyteller performance and well-being using several different tests.

First, I correlated naïve readers' ratings of the social life in each story with their ratings of storytellers' psychological well-being and workplace performance. Both of these correlations were highly significant: Ratings of social life were positively correlated with ratings of psychological well-being, $r = 0.439, p < 0.002$, and work performance, $r = 0.574, p < 0.0001$.

However, these correlations only examine whether one rater's judgments of the presence of social life also relate to that same rater's judgments about the story teller's
well-being and performance. This is a possible confound, as it may be that some third element in these stories leads readers to make both judgments of social life and judgments of well-being and performance. In order to also examine whether one person's assessment of a story teller's psychological well-being and workplace performance relates to a more objective rating of the social life in the story, I also correlated the ratings of well-being and performance from Study 2 with the ratings of the presence of social life from Study 1. These correlations were not significant (social life and psychological well-being, \( r = -0.048, p < 0.744 \); social life and work performance, \( r = -0.094, p < 0.519 \)). This raises the possibility that there is a confound leading participants to make similar ratings for both social life and psychological well-being and work performance. For example, it is possible that participants are using a response set whereby more enlivening stories receive higher ratings for all dimensions. This possibility will be explored in the discussion section of this chapter.

I used further exploratory analyses to examine whether readers are be able to accurately predict the story tellers' actual scores on the measures of psychological well-being and workplace performance administered in Study 1. That is, do naïve readers' assessments of storytellers' performance and well-being resemble storytellers' self-report data? In order to test this question, I created composite scores for psychological well-being and workplace performance using the data from Study 1.

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7 I also conducted exploratory analyses to examine whether any moment or element of social life is more related to readers' ratings of story tellers' psychological well-being and workplace performance. None of the three moments of social life—love, play, and individuation—were significantly related to either readers' ratings of psychological well-being or work performance. Of the three elements factors from Study 1, only Factor 3, consisting of disconnection from the group and need to protect and preserve the self, was significantly related to performance, \( r = -0.521, p < 0.001 \), and well-being ratings, \( r = -0.411, p < 0.002 \).
For the composite variable of psychological well-being, I used the results from the Rosenberg Self-Esteem Scale, the Collective Self-Esteem Scale, the positive emotions subscale of the PANAS-X, and Reeder Stress Inventory. I standardized the scores of each of these measures using the z-transformation. I then created an average of these scores to arrive at an overall psychological well-being variable. Finally, I correlated this composite variable with participants' ratings of storytellers' psychological well-being. The result was non-significant, $r = 0.146, p < 0.318$, indicating that naïve raters do not accurately predict participant well-being.

As a second test of whether naïve readers accurately infer storyteller well-being, I also examined whether participant ratings of psychological well-being significantly differ from the actual results of those measures in Study 1. I ran a t-test using "source" (actual storyteller results from Study 1 or participant ratings from Study 2) as the independent variable, and the z-scored composite variable of psychological well-being and z-scored rating of psychological well-being as the independent variables. The results of this t-test were non-significant, $t(48) = -0.036, p < 0.971$, indicating that participant ratings of psychological well-being ($m = 4.67/7, sd = 0.68$) did not significantly differ from actual tests of psychological well-being ($z$-score $m = 0.005, sd = 0.555$). It appears that while participants assign appropriate mean levels of psychological well-being to storytellers, they are unable to accurately predict individual scores.

In order to explore whether participants are able to accurately predict storytellers' workplace performance based on their stories, I created composite variables for performance measures from Study 1. The performance measures I used are the Self-Efficacy Scale, participants' self-ratings of workplace performance, and the
Organizational Commitment and Identification Scale. As with the psychological well-being variables, I arrived at this composite by averaging z-scores of participants’ results on the other measures. The composite work performance scale was not significantly related to naïve readers’ ratings of storytellers’ work performance, $r = 0.203$, $p < 0.161$. An examination of the component measures used to create the composite work performance variable revealed that naïve readers’ ratings of work performance were significantly correlated with two measures: normative commitment ($r = 0.377$, $p < 0.008$) and affective commitment ($r = 0.296$, $p < 0.039$).

As with the psychological well-being variables, I also performed a t-test using “source” (story teller results from Study 1 or participant ratings from Study 2) as the independent variable, and the z-scored composite variable of actual performance ($m = 0.000$, $sd = 1.0$) and z-scored naïve rating of performance ($m = 0.002$, $sd = 0.49$) as the dependent variables. The results of this t-test were not significant, $t(48) = 0.016$, $p < 0.987$. This result indicates that participants’ naïve ratings of work performance did not differ significantly from storytellers’ actual work performance as indicated by the measures. As with psychological well-being, naïve raters were unable to accurately assign performance scores to individual storytellers, although they were able to predict the correct average level of work performance for the storytellers.

All told, the notion that naïve readers can accurately infer storytellers’ level of work performance and psychological well-being based on the social life communicated through their stories received very limited support. On the one hand, naïve readers’ ratings of psychological well-being and work performance did not significantly deviate from actual measures of psychological well-being and work performance. However,
neither naïve readers’ ratings of psychological well-being and work performance correlated with actual measures. This suggests that while the mean values of actual measures and participant ratings was similar, the pattern in which participants assigned their ratings did not correspond to the actual measures.

Discussion

The results of Study 2 generally support the results of Study 1, while elucidating naïve theories of social life. The results of Study 2 also provide insight into the three moments of social life, particularly individuation. These results further indicate support for the hypothesized elements of social life and demonstrate their relationship to other variables. Finally, these results confirm the findings of Study 1 that a social life analysis of stories does not predict well-being and performance outcomes.

Hypotheses 1a, 1b, and 1c predicted that the moments of social life ratings from Study 1 would be significantly correlated with ratings of social life, community and individuation from Study 2. The results indicated that play and individuation were significantly related to ratings of social life and community, while love was marginally significant related to these ratings. All three moments, on the other hand, significantly predicted Study 2 ratings of storyteller individuation. These results are interesting for several reasons.

First, the fact that only individuation and play predicted Study 2 ratings of social life and community more than the moment of love provides support for Sandelands’ (2003) contention that the moments of social life are sequential. That is, Sandelands believes that play is a specific example of love, and individuation is a specific example of play. If individuation is the most narrowly defined, specific moment of social life, then
we would also expect it to have the greatest predictive validity. The mean rating for the moment of individuation (m = 10.23, sd = 4.48) was significantly higher than the mean rating for the moment of play (m = 8.6, sd = 3.8), t(157) = -5.57, p < 0.001. However, as mentioned in Chapter 3, there were few instances of play in the stories firefighters told, either as a function of the story prompt or of the types of incidents likely to be salient to firefighters. While these results cannot therefore speak to whether individuation is a specific instance of play, they do suggest that individuation is a specific instance of love.

Second, these results suggest that individuation may be more visible to naïve readers than the moments of love or play. Considering that individuation is more specific than either love or play, it may be that people recognize it more easily for its relative rarity. Moreover, as the analyses for both Hypothesis 1a and 1b show, naïve raters find more evidence of social life and community in instances where expert raters have seen individuation. It appears that naïve raters easily and accurately recognize individuation.

Hypothesis 1c, that the moments of social life ratings from Study 1 would predict Study 2 ratings of individuation, was fully supported; moreover, Study 2 ratings of whether social life appeared in the story were significantly positively correlated with ratings of storyteller individuation. It is notable that while ratings of individuation from Study 1 had the greatest predictive power for Study 2 ratings of social life and community, all three moments significantly predicted ratings of individuation in Study 2. This suggests that individuation is particularly accessible to naïve readers. The idea of an individual physically separate from, but psychologically tied to the group resonates in some way with the average person. Naïve raters not only recognize individuation in the

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8 These are the means of the ratings for both the love and the hate story, meaning that they are out of a 14-point scale rather than a 7 point scale.
same places that expert raters do, but they also recognize it in stories where expert raters have found evidence of other moments of social life. The moment of individuation may therefore be a fruitful starting point for further exploration of how naïve individuals understand social connections.

Hypotheses 2a, 2b, and 2c predict that higher Study 1 ratings for the positive elements of social life and lower Study 1 ratings for the negative elements of social life will predict higher Study 2 ratings of social life, community, and an individuated storyteller. All three hypotheses were fully supported by analyses. These results provide empirical support that the ten elements of social life developed from the Chapter 2 literature review provide a recognizable description of the experience of social life. These results also indicate that the presence of these elements in a story elicits an understanding of the quality of social life experienced by the storyteller. A productive direction for future research, based on these findings, may be refining and expanding the features of involvement in social life, as there do appear to be some reliably present qualities.

Hypothesis 3 predicts that more beautiful and well-formed stories are more likely to communicate the presence of social life to readers. In fact, analyses supported this hypothesis. Readers found more indication of social life in stories they also judged to be well-formed, and more importantly, beautiful. This is consistent with Worline (2003), who found that beautiful and well-formed stories more effectively expressed courage. The fact that more beautiful stories more effectively convey social life also speaks to stories' status as art; as they become more aesthetically pleasing, they also communicate social life more powerfully.
However, participants' ratings of the beauty of the stories did not significantly relate to ratings of social life from Study 1; that is, the expert raters did not find more social life in more beautiful stories. This suggests that the beauty or eloquence of the stories may have been a confound for Study 2 raters, particularly with regard to their assessment of work performance and psychological well-being. In fact, ratings of beauty are significantly positively correlated with both ratings of work performance, \( r = 0.602, p < 0.001 \), and psychological well-being, \( r = 0.569, p < 0.001 \). In future research, one tactic to avoid such potential confounds might be selecting stories that have been pre-rated as similarly beautiful. Participants reading more eloquent or moving stories may have used a positive response set and rated the stories highly on all variables.

Another possibility is that the analytical strategies used by expert and naïve raters differed in such a way that beauty guided ratings for the latter and not the former. According to Sandelands (1998b), people find art beautiful when that art communicates a sense of social life to them. Naïve readers may have accounted for the effects of beauty in their ratings, while expert coders examined the stories with a more analytical eye. The attempt of the expert coders to view the stories objectively may have clouded their sensitivity to beauty as a signal of life.

I also conducted exploratory analyses relating the ratings that naïve respondents give to storytellers on dimensions of work performance and psychological well-being to the ratings of social life from both Study 1 and Study 2. The results showed that naïve raters' assessment of social life were highly significantly correlated with their judgments of storytellers' psychological well-being and work performance. However, expert ratings of social life from Study 1 had no relationship to naïve raters' assessments of well-being.
and performance, suggesting a possible confound drives the former relationships. For example, naïve readers may have been responding to the stories on a holistic level, giving high ratings of well-being and performance to storytellers who displayed positive involvement in social life. Another possible confound is suggested by the significant negative correlation of disconnection from the group and need to protect the self (factor 3) to well-being and performance assessments. Naïve raters may have taken disconnection and self-preservation as more indicative of outcome variables than they actually are.

In fact, Study 2 reinforces the conclusion that a social life analysis of these stories does not provide useful information about the well-being and performance of the storyteller. The results of Study 1 demonstrate no relationship between the presence of social life and actual performance and well-being variables. In Study 2, I found that while naïve readers can accurately predict the mean levels of well-being and performance among storytellers, they are unable to predict the well-being and performance of individual storytellers. If stories are to provide useful information about well-being and performance, either a different story prompt or a different analytical technique is needed. This is consistent with Sandeland’s (2003) contention that social life’s appearance does not depend on the characteristics of those involved.

Taken together, the results of Study 2 demonstrate that people’s naïve understanding of what constitutes social life echoes the theoretical framework developed earlier in this dissertation. While people may not articulate their understanding of social life in the same vocabulary as Sandelands (2003), they nonetheless may resonate with the description of relationships offered by social life theory. These results also provide us
with interesting information about what aspects of social life may be most salient to perceivers, such as individuation, and what qualities most strongly indicate the presence of social life, such as the positive and negative elements identified earlier. Finally, these results encourage us to seek different ways to use stories to learn about other outcome variables, perhaps by asking for different types of stories or by using a different framework to analyze the stories. Unfortunately, while the social life perspective tells us much about the form relationships take, it does not appear to be tell us about work performance and well-being.
Chapter 5
Discussion and conclusion

The two studies in this dissertation represent the first attempt to empirically validate Sandelands’ (2003) theory of social life, or to apply that theory to understanding a workplace context. The studies therefore contribute both to the theory of social life and to a more general understanding of the form and function of interpersonal relationships at work. Like any research project, this dissertation also raises questions and avenues for future research. In this chapter, the contributions of the dissertation studies are discussed, along with potential limitations and suggested directions for further study.

Contributions

Validating and extending the social life perspective: The results of both Study 1 and Study 2 indicate that the social life theory is in fact a valid way to describe the life and form of interpersonal relationships. Specifically, the moments of love, play, and individuation can be recognized in stories about relationships told by firefighters. Moreover, the moments of social life, as well as the elements identified from my literature review, show reliable associations to one another, suggesting that the social life theory accurately describes the form of interpersonal relationships. Study 2 demonstrates that naïve raters, unfamiliar with the social life theory, nonetheless also recognize its components in the stories. Moreover, naïve raters recognize many of the same elements as expert raters, and seem especially sensitive to the moment of individuation. Taken together, the two studies support the idea that the social life perspective echoes the true form of groups.
A primary finding that is particularly striking is that the vast majority of the stories told by firefighters were in fact about social connections. In developing the materials for Study 1, I deliberately avoided story prompts that explicitly requested social stories. In doing so, I was able to test the idea that the most emotionally powerful work events would at heart deal with relationships. The results strongly support this idea; in fact, my qualitative analysis shows how even decidedly non-social story topics, such as technical firefighting tasks, can be used to communicate information about social connections. This finding supports a focus on work relationships as a critical issue for organizational scholars, and confirms the claim of the social life perspective that the social is the primary force in human life.

One specific proposal of social life theory is that the three moments of social life are sequential. That is, love is the first moment of social life, while play is a specific instance of love, and individuation is a specific instance of play (Sandelands, 2003). This portion of the social life theory was partially supported by the data from Study 1 and Study 2. Specifically, the moment of individuation appeared to be the most easily recognizable, and to have the most predictive power with respect to other variables. This is consistent with the idea that individuation is a more specific and less frequently occurring moment than the other two. Expert raters were also able to identify the moment of love in most of the stories from Study 1, while play was less often found. As discussed in Chapter 3, the relative absence of play from the Study 1 stories may be an artifact of the dangerous, often tragic work firefighters do. The Study 1 data does indeed suggest that love is a broader and more primary phenomenon than individuation; the fact
that it does not support the position of play in this hierarchy is likely due to sampling considerations.

This dissertation also extends the theory of social life by compiling a portrait of what social life looks like in the workplace. This extension was accomplished in two ways. First, I reviewed sociological literature on groups and group formation to develop a set of characteristics or elements of social life. These characteristics were evident in the stories told by Study 1 respondents; moreover, a factor analysis revealed that the elements co-occurred in patterns consistent with hypotheses. I also conducted qualitative analyses of firefighters' stories to find that they cover at least ten broad topics, ranging from explicit discussions of community to stories about firefighting tasks and duties. The qualitative analysis demonstrates the ways in which social life manifests across situations and through a variety of different topics.

The development of a list of elements or features of social life is a significant contribution to the social life perspective. These features represent a first step away from more abstract descriptions such as those offered by Sandelands (2003) toward more a concrete description of how social life appears. The ten hypothesized elements were identifiable in stories told by participants. Moreover, a factor analysis revealed that the elements clustered in theoretically consistent ways, such that the five hypothesized positive elements clustered together and the five negative elements formed two other clusters.

On the whole, the elements of social life that were hypothesized to be associated with positive experiences were identified more frequently and to a greater extent in stories about loving work than in stories about hating work. Likewise, many of the
negative elements of social life were more present in stories about hating work. The one positive element which occurred with greater frequency in stories of hating work provides a more nuanced understanding of social life and how it is experienced by the individuals involved. Specifically, a need to preserve or protect the group appeared more frequently in stories of hating work than in stories of loving work, even though I hypothesized that such a protective instinct would be a feature of someone positively involved in social life. This finding, however, suggests that a need to protect the group might emerge only under conditions of threat, which will be perceived as negative by anyone experiencing them. A storyteller might be positively involved in social life, recognize some threat to his community, and then respond with protective instincts, all the while “hating” the situation. By demonstrating how features of involvement can occur in stories about negative feeling, the finding that the need to preserve the group is more present in stories of hating work also supports Sandelands’ (2003) contention that social life has much the same appearance across different situations.

There were also some features of social life that I hypothesized to be negative, but which appeared more frequently in stories of loving work. Specifically, self assessments based on personal accomplishment, feelings of success based on personal accomplishment, and willingness to separate the self from the group were all found more frequently in stories of loving work than in stories of hating work. I interpret these findings in part as a reminder that while the social is the primary force in human life, it is not the only force. We still derive satisfaction and joy from personal accomplishment. In fact, this accomplishment may feel all the sweeter to the extent that it also benefits the communities to which we belong. Many of the stories about individual success
connected back to the group in this way, as storytellers recounted how their personal actions helped others. Although I hypothesized that these three elements would represent a distance between the person and the community—a tension skewed more toward division than unity—it seems that they may instead represent individuation, a time when the person acts as an individual but also on behalf of the group. In that way, these supposedly “negative” elements may actually indicate a more neutral moment of social life.

This dissertation also contributes to theory about social life by providing insight into what social life actually looks like in organizations. Building on the work of Sandelands and colleagues, I provide some qualitative examples of how social life manifests in the workplace. This will both allow researchers to identify social life more easily, and encourage them to take social life more seriously as a point of research. By illustrating an abstract concept with concrete examples from stories—which make social life real for its audience—I hope to make the idea of social life as a valid and indeed vital perspective for social science real for my audience. As a result of my qualitative analysis, we have an illustration of how social life is communicated through ten different broad topics, some of which initially appear unrelated to social phenomena. In addition to showing how the social is interwoven with virtually every other aspect of working life, these stories powerfully communicate the emotional intensity and depth of interpersonal connection.

Finally, this dissertation contributes to the social life perspective by demonstrating the ways in which the perspective resonates with a naïve understanding of interpersonal relationships. The social life perspective claims that social life is universal
and ubiquitous, and that we know it by feeling rather than assessment or cognition. This claim implies that people should easily reach consensus about what is and is not social life. In fact, I did find a high degree of agreement amongst naïve raters as to which stories demonstrated social life most clearly. Moreover, naïve raters generally followed similar ratings patterns to experts, which suggests that the social life perspective can be followed without training or exposure to the theory. The naïve ratings strongly support the idea that the social life perspective, as foreign as it may seem to new readers, does in fact describe our experiences of social life.

Asking naïve raters to read and judge the stories of social life collected in Study 1 also allows for some falsifiability of my theoretical work. If naïve raters had not seen social life where expert raters identified it, that would have suggested possible expectancy effects drove the expert ratings. Instead, naïve readers showed a large degree of concurrence with the expert ratings. This bolsters the claim that the expert ratings were done in an objective and unbiased manner, and that they are valid interpretations of the stories.

In summary, the two studies in this dissertation both validate and extend the social life perspective in several ways. First, these studies confirm that the three moments of social life, love, play, and individuation, are recognizable in stories about work. Second, the results partially support that the moments of social life are sequential. Third, these studies empirically demonstrate the existence of particular features of social life and demonstrate their connection to the moments of social life. Finally, these studies confirm that the social life perspective echoes a naïve understanding of relationships.
Stories as method: Another area of contribution for this dissertation is in the use of stories as data for organizational research. These two studies demonstrate how stories told by workers can provide useful data for understanding organizational processes. Other researchers have previously identified stories as a fruitful method for examining social life at work (Sandelands & Boudens, 2000). Some researchers have also used stories to examine specific types of actions in the workplace, such as acts of courage (Worline, 2003) or duty (Boudens, 2005b). Stories have been used to better understand relationships, specifically, instances of interpersonal disconnection (Kanov, 2005).

Finally, researchers have used stories to illustrate people’s general experiences of work (Bowe, Bowe, & Streeter, 2000; Terkel, 1974). This dissertation adds to this body of research by using respondents’ stories to illustrate the form and appearance of social life at work.

This dissertation also contributes to the knowledge about stories’ effectiveness as data by pointing out some ways in which stories cannot adequately replace survey measures. Study 1 demonstrates that a social life analysis of stories about exceptional or memorable incidents does not provide sufficient information about well-being and performance to replace other measures of those constructs. The results of Study 1 do not necessarily indicate that stories cannot be useful sources of information about well-being or performance variables. However, they do suggest that a different type of story—perhaps a story about an average day rather than an exceptional event—and a different type of content analysis are necessary to uncover this information. Indeed, even though the presence and appearance of social life do not predict storytellers’ well-being and work performance, there is theoretical reason to believe that analyzing interpersonal
relationships from a different perspective might yield information about the other variables.

The data also illustrate the power of stories to communicate feeling succinctly and in a way that resonates with personal experience. From a qualitative perspective, these stories do more to create an understanding of what it is like to be a firefighter than any scale measurements could. In this way, asking respondents for stories can provide a context and background for other sorts of measures that help researchers interpret those measures in a way that honors the reality of the research setting. Used in tandem with traditional measures, stories allow researchers to provide a more accurate and complete portrait of organizations in their work. This dissertation is an example of such a portrait.

**Understanding groups and relationships differently:** In Chapter 1, I described how traditional psychological studies of groups have at least three major shortcomings: they look at groups as mere aggregates, they privilege cognitive over emotional processes in their measurements, and they do not describe groups and relationships in a way that resonates with lived experience. The methods used in this dissertation, particularly in Study 1, address these three concerns. Taken as a complement to other research on groups, these studies help us to understand relationships differently.

First, these studies demonstrate a manageable way to look not just at individuals or at groups, but at the relationships themselves. Stories are told from an individual perspective, yet are actually a snapshot of the group and the relationships amongst the group's members. While this may not perfectly capture the social life that flows between the people in the community, it does come closer to it than an individually-administered scale, for example. As a result of Study 1's focus on the relationship rather than the
individual, new aspects of group life can be seen. For example, as uncovered through qualitative analyses, many of the dynamic tensions that characterize relationships can be examined through the stories, such as the tension between division and unity that occurs following the death of a group member. This tension would not be visible from an individual-level investigation.

The studies in this dissertation also better account for the feelings associated with group membership than do many psychological studies. The process of having raters code stories almost requires that the feelings in the stories be considered. In fact, much of the coding process included attending to details of word choice and expression in order to read the storytellers' feelings about events. The consideration of feelings and emotion is most clearly seen in the qualitative analyses of Study 1, but in fact this consideration informs the quantitative analyses of both studies. First, to the extent that feelings contributed to the coding decisions made by expert coders in Study 1, those numerical ratings are proxies for feeling. Second, naïve raters in Study 2 did not have the background or training to respond to the stories on any level besides feeling. The naïve ratings in Study 2 are feeling-based reactions to feeling-rich data.

The inclusion of feeling in these studies gives a glimpse of how feelings may inform group life in ways not usually identified by other research approaches. One question I posed in Chapter 1 was how research might account for people who stayed in unpleasant jobs or performed “dirty work” (Ashforth & Kreiner, 1999) despite the disadvantages of doing so. While most of the firefighters who participated in Study 1 would not consider their jobs undesirable, many of them nonetheless identified points of difficulty in their work, such as physical danger or departmental politics. Their stories
powerfully illustrate how feelings, particularly feelings of camaraderie and friendship toward coworkers and feelings of responsibility and protectiveness towards local citizens, motivate them to perform at their highest levels even in times of struggle. The story data I collected could easily be re-analyzed to more systematically explore the relationship of feeling to perseverance, or any number of relevant phenomena.

Finally, of the three roadblocks I identified in traditional psychological approaches, the studies in this dissertation best address the third: that investigations of relationships seldom take a form that echoes lived experience. By using as data firsthand accounts of actual lived experience, I do not face many of the translation difficulties that come from relying largely on scales. Of course, there are limitations to this data caused by factors such as varying degrees of articulateness among respondents, or respondents’ editorial decisions. Nonetheless, it would be difficult to argue that firsthand stories about group life significantly deviate from the actual experience of group life.

By addressing some of the limitations of other approaches to studying groups, the studies in this dissertation suggest that a more complete picture of relationships and group life could be achieved through a combination of methods. For example, story data might be used to complement the information gathered from scales. Interview protocols might include asking participants for stories, rather than other types of information, since stories allow participants to select the details and wording they most prefer to emphasize. Moreover, respondents in my Study 1 pre-test interviews seemed more comfortable and confident telling stories than answering more limited questions. This suggests that many interview respondents might offer more useful information if asked for a story than if asked to respond to specific questions. The contrast between the realistic picture of
group life provided by stories and the more focused but limited picture provided by other methods is ample evidence for the benefits of considering studies using each of these methods in tandem.

**Limitations and future directions:**

As with all studies, the two presented in this dissertation have limitations. For example, asking participants to volunteer stories about social life retains some of the problems of self-report measures. We rely on participants' accurate recall of the events in their story, and their honesty in reporting them. While this does limit the factual validity of the data, I believe it does not represent a serious problem to this research. Because social life is known through feeling, the factual accuracy of the stories is less important than their affective accuracy. In fact, at times the revision of factual truth in a story actually clarifies the emotional truth in the story (Sandelands & Boudens, 2000).

Stories still represent an improvement over other self-report methods as far as capturing emotion is concerned.

**Methodological concerns:** A second limitation is that the method may create biased data. By asking participants to volunteer stories about times they loved or hated work, we are inviting several types of bias. For example, we may be over-sampling recent events, as these are more easily recalled. However, I do not believe that seriously hinders the data. Moments where we feel social life most strongly should be especially memorable to us because of the strong feelings they evoke. Moreover, recent moments of social life should have a greater relationship to current assessments of work life; the respondent is more likely to work at the same job as the time of the story if it is a recent story, and the coworkers with whom they share social life are also more likely to still
work there. Therefore, the same events which might be most easily recalled by respondents are also the events which are of the most interest to me for the purposes of this study.

Another limitation is that asking participants to talk about times they loved or hated work will not capture the day-to-day experience of work. "Love" and "hate" are strong and extreme emotions. For most people, their daily work experiences do not evoke such strong feelings. Yet, this is an instance where the outliers, the unusual, once-in-a-while experiences, have much to tell us about the daily experiences as well. A group may be bound by an undercurrent of love that constantly exists, and is even felt, but does not register in consciousness except on rare occasions when circumstances bring it to the surface (similar to the "creative disruptions" that enable courage; Worline, 2003). The results do indicate that this exceptional quality of stories of love and hate hinder our ability to monitor stable, day-to-day well-being and work performance variables through the stories, suggesting that a more mundane story might be more appropriate for that purpose. However, these exceptional stories do convey a rich and powerful sense of social life.

A methodological concern for future research is simply that using stories as data requires more complex data analysis than simple survey methods. Additionally, analyzing stories is more time-consuming and expensive for the researcher than using surveys and scales. However, I believe that the richness and context that this sort of data provides overrides these difficulties, at least for some research purposes. As this dissertation shows, there are benefits to using story data which outweigh many of the difficulties this data presents. I encourage other researchers to carefully consider the
trade-offs of using story data instead of more traditional measures; I suspect many of
them will find story data a worthwhile endeavor.

The coding scheme I developed obviously affected the type of information I was
able to extract from the stories. Alternative coding schemes could be helpful in further
exploration of social life as expressed through stories. One suggested coding scheme is
two-dimensional, with the first dimension being the presence or absence of social life and
the second dimension being the quality of that social life. This coding scheme seems
particularly appropriate given the finding in Study 1 that stories of loving and hating
work do not differ in how strongly they express the moments of social life. This finding
suggests that the presence of social life is not necessarily related to the quality of social
life. Looking at both variables simultaneously may therefore be a fruitful way to learn
more about social life.

Another factor which may have affected the ratings process is the cultural bias of
Westerners and particularly Americans toward the individual, rather than the group (see
Markus & Kitayama for a review). Both the expert and naïve raters in these studies were
of Western origin and may have been culturally predisposed to notice individual-level
phenomena. Such a cultural predisposition may account for the strong convergence of
ratings of individuation in Study 2. Future studies might examine whether raters of
different cultural backgrounds are sensitive to different aspects of social life, and whether
this sensitivity affects study results.

Finally, although I suggest that using stories as data circumvent many of the
difficulties created by using scales, I do not believe stories to be a panacea. As this
section indicates, stories bring with them their own limitations and difficulties.
Researchers should be aware of the potential for bias in collecting and interpreting stories, and work to minimize this bias. There are also undoubtedly some research topics which will not be significantly clarified by the use of stories as data. At this time, it also appears that stories are not well-suited to replace many traditional scale measures, although further research may address this shortcoming. However, I do believe that researchers who are interested in social life must integrate the use of stories with other, more popular methods if they hope to achieve an accurate understanding of community.

**Sampling considerations:** One factor that may have influenced the results of these studies is the overwhelmingly male storyteller sample. Men and women differ in their communication styles in ways that might affect the quality of the stories provided. For example, Tannen (1990) notes that men often use a “report” style of narrative focused on communicating factual information, while women prefer a “rapport” style of narrative focused on building a relationship with the listener. A preference for a report style over a rapport style would certainly limit the amount of emotional information available in the narrative, and may make the stories collected in Study 1 a less powerful source of information about feeling than stories told by women.

Another communication difference related to sex may have also influenced the results. Pennebaker, Groom, Loew, and Dabbs (2004) found that people with higher levels of testosterone were less likely to refer to others when keeping diaries. Given that the men in my sample also work in a highly physical, dangerous job, it seems possible that they would have particularly high levels of testosterone, and thus reference other people less often in their stories than would women or people in a different line of work.
As a result we might expect female storytellers or storytellers in less “masculine” professions to tell stories that are even more social than the ones in Study 1.

However, gender differences in communication do not necessarily limit the usefulness of these studies. The communication differences between men and women all suggest that men should tell the less rich, less social, less emotional stories. Therefore, a story methodology used with other samples should provide even more useful and powerful data than the stories described in this dissertation. Rather than seeing the male sample as a limitation, I see it as a confirmation of the power of stories to communicate complex and detailed information about respondents.

A secondary concern about communication differences between men and women is that they may change the social experiences members of one sex have in an environment where their coworkers are mostly of the opposite sex. In addition to affecting the stories firefighters tell, one female firefighter points out that gender-based communication differences can also lead female firefighters to feel excluded from workplace camaraderie (Paul, 1998). In this way the primarily male demographics of the firefighting population may influence female firefighter’s actual experience of social life. In fact some theorists would predict that women would struggle to feel comfortable in a masculine workplace (see Sandelands, 2001) because of innate differences between the sexes. Future research might investigate social life in work settings with more of a gender balance, or primarily female workplaces, to see if sex ratios do in fact influence the appearance and experience of social life.

The professional affiliation of the storytellers also undoubtedly influences these results. For example, one of the variables used in coding was whether a storyteller
portrays him or herself as exceptional in any way, different from the group. Using a sample of firefighters may have influenced this variable in particular. While researchers studying other professions have found that people tend to downplay their own courageous acts (Worline, 2003), this has also been found for firefighters specifically (see Smith, 1988). In fact, one interview study of firefighters who received awards for valor found that these recipients often wished the award could have been given to their team instead, rejecting the notion that their individual actions led to the positive outcomes (Peterson, personal communication). Indeed, in my sample of firefighters, I found a similar reluctance to claim personal responsibility for success. Expert codings of the extent to which a storyteller made himself a hero (m = 3.04, sd = 1.2) fell significantly below the scale midpoint (3.5), ť (157) = -4.9, p < 0.001. In addition to the many other reasons to diversify research on social life by examining other professions, it might be useful to research workers whose culture places less of a premium on modesty; these workers might be more willing to separate themselves from the group through claims of heroism. Nonetheless, as Worline (2003) found similar modesty among tech workers, I do not feel this represents a significant shortcoming of the present research.

A final sampling consideration that may have influenced results is that many of the firefighters who responded to the survey do not have a high level of formal education. Many of the firefighters from City Fire mentioned their reluctance to write a story, based on their perceived inability to express themselves articulately through the written word. Yet, these same firefighters easily told colorful and vivid stories aloud without hesitation. Having a written survey may have intimidated some potential respondents, limiting the sample to only the most confident, or restricted respondents’ ability to tell a story in the
most natural and vibrant way. Therefore, I would consider using another method to collect stories in the future, such as videotaping participants talking with the researcher or even with each other. Having nonverbal cues such as tone of voice, hesitations in speech, hand gestures, and facial expressions available through video for coding purposes would also greatly enhance the emotional information researchers might glean from the stories.

New research directions: The research reported in this dissertation also suggests a number of new directions for further study. In particular, now that a first empirical test of the social life perspective has been carried out, we can now begin to explore how social life begins and grows in a variety of contexts. We can also now begin to consider how the context itself affects social life, allowing it to flourish or stunting its emergence. What are the conditions that must be in place before social life flows through a particular grouping of individuals? What conditions impede the flow of social life through a group? Research into contextual variables which influence the manifestation of social life would be especially useful for application to workplaces. Encouraging social life to flourish in the workplace is beneficial not only for the employees, but for the organization as a whole.

Some specific contexts to study might include retirees or people who have been laid off. An examination of the aspects of work they miss most might reveal whether and how social life endures beyond exit from the workplace. A highly independent and somewhat isolated work context, such as some segments of academic work, or a highly independent yet social work context such as clinical psychology, would provide an interesting counterpoint to the highly interdependent and social work context of
firefighting. Such a comparison study would elucidate how varying degrees of interdependence and isolation relate to the experience of social life at work.

The power of stories about social life to predict psychological outcomes can also be further explored, particularly given that a social life analysis of stories about loving and hating work did not predict well-being or work performance in this study. As previously mentioned, an important next step is to collect different types of stories from respondents that may be more evocative of everyday functioning. For example, a story about a typical day at work, as opposed to a particularly salient incident, may tell us more about performance and well-being in general. Another type of story that may tell us about work performance might be stories about times the respondent has performed poorly or well; these types of stories could be useful in uncovering the contexts and variables leading to extreme levels of performance, both for particular individuals and on a more general level. While these studies were not able to demonstrate whether stories can be used to predict psychological variables typically assessed via questionnaire, the richness and variety of the actual stories collected encourage further exploration of this possibility.

Stories may also provide insight into other types of psychological variables. One idea for exploring whether this is the case is to test the usefulness of stories as a moderator in replications of well-known psychological studies. For example, studies of stereotype threat have found that women who are highly identified with their gender are more likely to succumb to performance decrements (Schmader, 2002). It may be that having participants in this sort of study tell the researcher a story about their experiences related to their gender group may provide even greater insight into stereotype threat. This is a provocative avenue for continuing research.
Conclusion

The two studies in this dissertation provide the first empirical exploration of Sandelands’ (2003) social life perspective. In doing so, they confirm many of the claims of the perspective regarding the form and appearance of social life. At the same time, these studies extend the perspective by offering insights into other characteristics that signal the presence of social life. These studies also, I hope, make the case that the social life perspective enriches our understanding of group processes by focusing on the relationship itself, particularly the feelings that the relationship provokes in those involved, and by echoing lived experience. At the same time, it is clear that the social life perspective does not supersede other approaches to learning about groups, but rather complements them. These studies suggest a number of future investigative endeavors that will both further clarify and refine the social life perspective, and demonstrate the ways in which it complements other approaches to understanding groups.
Appendix A: Materials, Study 1

Introductory letter for study participants:
About this survey:

My name is Amy Trahan and I am a graduate student in Organizational Psychology at the University of Michigan in Ann Arbor, MI. I am researching what type of stories people tell about the times that they really loved and really hated their work. I am interested in what types of events and situations people focus on when they have strong feelings about work. I am also interested in how these stories may relate to responses to surveys about work styles and psychological processes.

I have asked to survey the employees of the Somerville Fire Department because I believe this is an exceptional organization. First, the SFD, unlike many organizations in other sectors, has a long track record of effective performance. Second, the SFD is unique in the team-based nature of the work. Although many types of organizations use teams, few have teams which are as long-standing as the firefighting groups are. Third, firefighters make a very clear and indisputable contribution to the community through their work. All of these factors make the SFD stand out as an organization worthy of study, so that its many positive qualities might be better understood and adapted to other situations.

If you agree to participate in this research, you will be asked to complete the attached survey packet. You will be asked to tell two stories in your own words—one about a time when you loved your work, and one about a time when you hated it. It's especially helpful to me if you can think about one specific incident that made you feel very strongly about your job, and describe that incident and how it effected you. You will also be asked to complete a number of standard psychological measures related to personal well-being and work preferences. The survey should take approximately an hour to complete in total.

You will be able to complete the survey at your own pace and do not need to fill it out in one sitting. It is fine to work on it for a few minutes at a time over several days. You are also free to skip any questions which you do not want to answer, or to stop filling out the survey if you decide you do not want to continue. I am providing my contact information to you on this packet, and will also make my information available at the fire station, so that you can contact me at any time with any questions or concerns about the surveys.

This study has been approved by the Institutional Review Board (IRB) at the University of Michigan. The IRB reviews research to make sure that participants’ rights and confidentiality are carefully considered in the research design. You will also be provided with contact information for the IRB, so that you may contact them with any concerns or questions you might have about this research.

Your confidentiality will be protected in several ways if you choose to complete these surveys. First, your name and other identifying information will immediately be
separated from all other study materials. You will be asked to sign a consent form indicating your agreement to participate in the survey. This form will be the only material containing your name, and will be kept separate from all other materials. Additionally, any publications or presentations of the survey results will use a pseudonym for the SFD ("City Fire"), to protect the identity of participants. Your stories may be excerpted in publications or presentations, but any names or place names included in the stories will be changed to protect your privacy. Data from the other surveys will only be reported in aggregate; no individual results will be revealed. Your stories and data will also not be shown to your coworkers at any time for any reason. You will be provided with envelopes in which to seal your surveys before returning them to me, in order to further protect your privacy.

After the surveys have been completed and analyzed, I will provide aggregate feedback to you individually, as well as to the SFD. This feedback will provide an overview of the survey results, and will explain how I am discussing these results in my dissertation. I will be happy to provide more detailed results to anyone who is interested at this time, including a copy of the actual dissertation.

I am very grateful for your participation in my dissertation research. It is very exciting for me to be able to learn about the wonderful work you do through the Somerville Fire Department.

Sincerely,

Amy Trahan

**Contact information:**

<table>
<thead>
<tr>
<th>Amy Trahan, M.A.</th>
<th>Prof. Lloyd Sandelands (Dissertation Chair)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Michigan</td>
<td>University of Michigan</td>
</tr>
<tr>
<td>Department of Psychology</td>
<td>Department of Psychology</td>
</tr>
<tr>
<td>3020 East Hall</td>
<td>Michigan Business School</td>
</tr>
<tr>
<td>525 E. University</td>
<td>Management &amp; Organizations</td>
</tr>
<tr>
<td>Ann Arbor, MI 48109-1109</td>
<td>Telephone: 734-604-7460</td>
</tr>
<tr>
<td>Telephone: 734-604-7460</td>
<td>E-mail: <a href="mailto:atrahan@umich.edu">atrahan@umich.edu</a></td>
</tr>
<tr>
<td>E-mail: <a href="mailto:atrahan@umich.edu">atrahan@umich.edu</a></td>
<td>E-mail: <a href="mailto:lsandel@umich.edu">lsandel@umich.edu</a></td>
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</tbody>
</table>

The University of Michigan Institutional Review Board  
Kate Keever  
540 East Liberty Street, Suite 202  
Ann Arbor, MI 48104-2210  
Phone: (734) 936-0933  
Fax: (734) 998-9171  
E-mail: irbhsbs@umich.edu
Story measure: Love version
Please tell a story about a time when something happened that made you feel like you loved your work. Tell this story in your own words, describing what happened and your reactions to it.

I remember one time when . . .

(please continue on the other side of the sheet if necessary)

Story measure: Hate version
Please tell a story about a time when something happened that made you feel like you hated your work. Tell this story in your own words, describing what happened and your reactions to it.

I remember one time when . . .

(please continue on the other side of the sheet if necessary)
Positive and Negative Affective Schedule, Expanded Version (PANAS-X; Watson, Clark, & Tellegen, 1988)

This scale consists of a number of words and phrases that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you have felt this way during the past few weeks. Use the following scale to record your answers:

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<tr>
<td>very slightly or not at</td>
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<tr>
<td>all</td>
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<tr>
<td>a little</td>
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<tr>
<td>moderately</td>
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<tr>
<td>quite a bit</td>
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<tr>
<td>extremely</td>
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____ cheerful
____ sad
____ active
____ angry at self
____ disgusted
____ calm
____ guilty
____ enthusiastic
____ attentive
____ afraid
____ joyful
____ downhearted
____ bashful
____ tired
____ nervous
____ sheepish
____ sluggish
____ amazed
____ lonely
____ distressed
____ daring
____ shaky
____ sleepy
____ blameworthy
____ surprised
____ happy
____ excited
____ determined
____ strong
____ timid
____ hostile
____ frightened
____ scornful
____ alone
____ proud

125
Organizational Identification (Adapted from Bartel, 2001, and Mael and Ashforth, 1992 [questions 4-9])

The next series of questions have to do with your personal feelings and opinions about your work and yourself. Please answer the questions as honestly as possible, but feel free to skip any items you do not wish to answer.

1. Please describe your relationship with your work by using the following diagrams. Imagine that the circles on the left represent your **own personal identity** (what describes you as a unique individual), while the circles at the right represent the **identity of the Somerville Fire Department**. Which diagram best describes the level of overlap between your identity and the identity of your work organization?

<table>
<thead>
<tr>
<th>My Identity</th>
<th>SFD's identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Far apart</td>
</tr>
<tr>
<td>2</td>
<td>Close together, but separate</td>
</tr>
<tr>
<td>3</td>
<td>Very small overlap</td>
</tr>
<tr>
<td>4</td>
<td>Small overlap</td>
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<tr>
<td>5</td>
<td>Moderate overlap</td>
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<tr>
<td>6</td>
<td>Large overlap</td>
</tr>
<tr>
<td>7</td>
<td>Very large overlap</td>
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<tr>
<td>8</td>
<td>Complete overlap</td>
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2. To what extent does your own sense of who you are (i.e., your personal identity) overlap with your sense of what the SFD represents (i.e., the group’s identity)? Please check one box.

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<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>To a great extent</td>
</tr>
</tbody>
</table>

3. When someone criticizes the SFD, it feels like a personal insult.

   1  2  3  4  5  6  7
4. I am very interested in what others think about the SFD.

1 2 3 4 5 6 7

Strongly agree Neither agree nor disagree
Strongly disagree

5. When I talk about the SFD, I usually say “we” other than “they.”

1 2 3 4 5 6 7

Strongly agree
Neither agree nor disagree

6. The SFD’s successes are my successes.

1 2 3 4 5 6 7

Strongly agree
Neither agree nor disagree

7. When someone praises the SFD, it feels like a personal compliment.

1 2 3 4 5 6 7

Strongly agree
Neither agree nor disagree

8. If a story in the media criticized the SFD, I would feel embarrassed.

1 2 3 4 5 6 7

Strongly agree
Neither agree nor disagree

Collective Self-Esteem (Adapted from Luhtanen and Crocker, 1992)

INSTRUCTIONS: We are all members of different social groups or social categories. Some of such social groups or categories pertain to gender, race, religion, nationality,
ethnicity, and socioeconomic class. We would like you to consider your membership in the Somerville Fire Department, and respond to the following statements on the basis of how you feel about your work organization and your membership in it. There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by using the following scale from 1 to 7:

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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Disagree somewhat</td>
<td>Neutral</td>
<td>Agree somewhat</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

____ 1. I am a worthy member of the SFD.
____ 2. I often regret that I belong to the SFD.
____ 3. Overall, the SFD is considered good by others.
____ 4. Overall, my membership in the SFD has very little to do with how I feel about myself.
____ 5. I feel I don't have much to offer to the SFD.
____ 6. In general, I'm glad to be a member of the SFD.
____ 7. Most people consider the SFD, on the average, to be more ineffective than other work organizations.
____ 8. The SFD is an important reflection of who I am.
____ 9. I am a cooperative participant in the SFD.
____ 10. Overall, I often feel that the SFD is not worthwhile.
____ 11. In general, others respect the SFD.
____ 12. The SFD is unimportant to my sense of what kind of a person I am.
____ 13. I often feel I'm a useless member of the SFD.
____ 14. I feel good about the SFD.
____ 15. In general, others think that the SFD is unworthy.
____ 16. In general, belonging to the SFD is an important part of my self image.
Reeder Stress Inventory (Reeder, Chapman, & Coulson, 1968)

Please indicate by a check in the appropriate box in each of the following sections which description suits you best.

1. In general, I am usually tense or nervous.
   This describes me:
   □ Exactly
   □ To some extent
   □ Not very
   □ Not at all accurately

2. There is a great deal of nervous strain connected with my daily activities
   This describes my situation:
   □ Exactly
   □ To some extent
   □ Not very
   □ Not at all accurately

3. At the end of the day I am completely exhausted
   This describes me:
   □ Exactly
   □ To some extent
   □ Not very
   □ Not at all accurately

4. My daily activities are extremely trying and stressful
   This describes my activities:
   □ Exactly
   □ To some extent
   □ Not very
   □ Not at all accurately

Rosenberg Self Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you STRONGLY AGREE, circle SA. If you AGREE with the statement, circle A. If you DISAGREE, circle D. If you STRONGLY DISAGREE, circle SD.

1. On the whole, I am satisfied with myself.                   SD   D   A   SA
2. At times I think I am no good at all.                     SD   D   A   SA
3. I feel that I have a number of good qualities.             SD   D   A   SA

129
4. I am able to do things as well as most other people. SD D A SA
5. I feel I do not have much to be proud of. SD D A SA
6. I certainly feel useless at times. SD D A SA
7. I feel I'm a person of worth, at least on an equal plane with others. SD D A SA
8. I wish I could have more respect for myself. SD D A SA
9. All in all, I am inclined to feel I am a failure. SD D A SA
10. I take a positive attitude toward myself. SD D A SA

Preference for autonomy at work (Wageman, 1995)

Listed below are some statements that might be made about the way you complete your work at the Somerville Fire Department. Please indicate whether each statement is an accurate or inaccurate description of your personal position.

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<tbody>
<tr>
<td></td>
<td>Very inaccurate</td>
<td>Mostly inaccurate</td>
<td>Slightly inaccurate</td>
<td>Uncertain</td>
<td>Slightly accurate</td>
<td>Mostly accurate</td>
<td>Very accurate</td>
</tr>
</tbody>
</table>

___ 1. I like my work best when I do it all by myself.
___ 2. I prefer tasks that allow me to work with others.
___ 3. I would rather work alone than with other people.
___ 4. The less I have to rely on others at work, the happier I am.
___ 5. I would rather work through a word problem myself than ask for advice.
___ 6. Working in small groups is better than working alone.

Task Interdependence (Pearce and Gregerson, 1991)

This part of the questionnaire asks about the nature of your job. Listed below are some of statements that might be made about your behavior in your work group.

Please indicate whether each statement is an accurate or inaccurate description of how you typically behave in your work group (department).
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<tbody>
<tr>
<td></td>
<td>Very inaccurate</td>
<td>Mostly inaccurate</td>
<td>Slightly inaccurate</td>
<td>Uncertain</td>
<td>Slightly accurate</td>
<td>Mostly accurate</td>
<td>Very accurate</td>
</tr>
</tbody>
</table>

1. I work closely with others.

2. I coordinate my efforts with others frequently.

3. My own performance is dependent on receiving accurate information from the other co-workers.

4. The way I perform my role has a significant impact on other co-workers.

5. My role requires me to consult with others fairly frequently.

6. I work fairly independently of others. (reverse scored)

7. I can plan my own work with little need to coordinate with others. (reverse scored)

8. I rarely have to obtain information from others to carry out my work. (reverse scored)

**Affective, Normative, and Continuance Commitment subscales of the Commitment Scale (Meyer, Allen, & Smith, 1993)**

For the next set of questions, please use the following response scale to describe your feelings about work:

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<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Disagree somewhat</td>
<td>Neutral</td>
<td>Agree somewhat</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

9. I would be very happy to spend the rest of my career with the SFD.

10. I do not feel a strong sense of belonging to the SFD.

11. The SFD deserves my loyalty.

12. I would not leave the SFD right now because I have a sense of obligation to the people in it.

13. I do not feel like “part of the family” at the SFD.

14. The SFD has a great deal of personal meaning for me.
Right now, staying with the SFD is a matter of necessity as much as desire.

It would be very hard for me to leave the SFD right now, even if I wanted to.

Too much of my life would be disrupted if I decided I wanted to leave the SFD now.

I feel that I have too few options to consider leaving the SFD.

I owe a great deal to the SFD.

If I had not already put so much of myself into the SFD, I might consider working elsewhere.

One of the few negative consequences of leaving the SFD would be the scarcity of available alternatives.

I really feel as if the SFD’s problems are my own.

I do not feel any obligation to remain with the SFD.

Even if it were to my advantage, I do not feel it would be right to leave the SFD now.

I do not feel “emotionally attached” to the SFD.

I would feel guilty if I left the SFD now.

**Personal efficacy beliefs scale (Riggs, Warka, Babasa, Betancourt, and Hooker, 1994)**

Think about your ability to do the tasks required by your job. When answering the following questions, answer in reference to your personal work skills and ability to perform your job.

<table>
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<tr>
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<th>1</th>
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<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Disagree somewhat</td>
<td>Neutral</td>
<td>Agree somewhat</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

I have confidence in my ability to do my job.

There are some tasks required by my job that I cannot do well.

When my performance is poor, it is due to my lack of ability.
I doubt my ability to do my job.

I have all the skills needed to perform my job very well.

Most people in my line of work can do this job better than I can.

I am an expert at my job.

My future in this job is limited because of my lack of skills.

I am very proud of my job skills and abilities.

I feel threatened when others watch me work.

Demographic questions

These last questions are asked for statistical purposes and will not be used to identify you from your responses. Please answer the following questions to the best of your ability, skipping any questions you do not wish to answer.

1. What is your sex? (check one) Male Female

2. What is your race? (check all that apply)
   - African-American
   - Asian
   - Caucasian
   - Latino/Hispanic
   - Middle Eastern
   - Native American
   - African
   - Other (specify): ____________________________

1. Age (years; check one):
   - under 20
   - 30-39
   - 50-59
   - 20-29
   - 40-49
   - 60 or over

2. Which fire station do you normally work at?
   - Reilly-Brickley (Headquarters)
   - Union Square
   - Highland Ave
   - Teele Sq.
   - Lowell St.

3. Which company do you work with? (please write in the correct number)
   - Ladder__________
   - Engine__________
4. How many years have you been a member of the company you work with now? ______

5. How many years have you worked for the Somerville Fire Department? ______

6. On the following scale, how would you evaluate your own performance as a Somerville fire fighter?

   1   2   3   4   5   6
   7
Poor          Average
Exceptional

7. When you think of the Somerville Fire Department, do you mostly think about (choose one):
   ____ your group
   ____ your station
   ____ the department as a whole
Appendix B: Coding scheme for firefighting stories

**Directions:** After reading each story, please indicate to what extent each of the following descriptions applies to the stories. Please remember that each rating is independent; the same story, for example, could receive high task and group-related ratings. Use the following scale to guide your ratings:

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>Somewhat</td>
<td>Very much</td>
<td></td>
<td></td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>Feature of story</th>
<th>Description</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task-related</td>
<td>Concentrates on pragmatic aspects of work such as task requirements or finances. Other people might be mentioned if they play a role in accomplishing tasks. Examples might include descriptions of how a fire was put out or how a medical emergency was addressed in terms of techniques or equipment.</td>
<td>1-2-3-4-5-6-7</td>
</tr>
<tr>
<td>Group-related</td>
<td>Focuses on relationships, either with coworkers or with other parties to the work such as customers or clients.</td>
<td>1-2-3-4-5-6-7</td>
</tr>
<tr>
<td>Love</td>
<td>Please note that “love” is used differently here from in everyday speech. Characterized by tensions between division (being separate from other people) and unity (being part of a single unit with other people). May be seen in shared rhythms, routines, or activities, especially when they are not necessary to complete a work task.</td>
<td>1-2-3-4-5-6-7</td>
</tr>
<tr>
<td>Play</td>
<td>Characterized by tensions between fantasy and reality. There may be elements of pretending or games.</td>
<td>1-2-3-4-5-6-7</td>
</tr>
<tr>
<td>Individuation</td>
<td>Characterized by tensions between the individual and the group. Individuals may act on behalf of the group or as agents or representatives of the group. Individuation might seem like the story teller has the group in his imagination.</td>
<td>1-2-3-4-5-6-7</td>
</tr>
<tr>
<td>Community</td>
<td><strong>Connection:</strong> Connection to others; bonds between individuals or between the individual and the group. May speak of brotherhood, friendship, camaraderie, etc. <strong>Preservation:</strong> Desire to preserve and protect the group; may take the form of enforcing norms, hiding norm/rule violations from supervisors, or praising the group to external audiences. May also take the form of</td>
<td>1-2-3-4-5-6-7</td>
</tr>
</tbody>
</table>
negative feelings toward anything that might threaten the group, like policies or budget decisions, or injury/death. However, these negative feelings should connect back to a desire to keep the group intact and healthy.

<table>
<thead>
<tr>
<th align="left"><strong>Good member:</strong></th>
<th align="left">Connection between group outcomes and individual self-esteem; group goals become individual goals; the individual feels good because he is a good member of the group. The story teller might talk about wanting to be worthy of the group or wanting to live up to the group’s reputation.</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">Collectivity</td>
<td align="left"><strong>Disconnect:</strong> Disconnection from or lack of connection to others; feeling left out or not a part of the group. May mention how some event has changed or damaged the group.</td>
</tr>
<tr>
<td align="left"></td>
<td align="left"><strong>Self-preservation:</strong> Individual concerns outweigh the motivation to preserve and protect the group; “I have to look out for myself.” Although this person might also feel negatively toward anything that threatens the group, his focus is on personally surviving the threat rather than sheltering the group.</td>
</tr>
<tr>
<td align="left"></td>
<td align="left"><strong>Good self:</strong> Little or no connection between group outcomes and individual self-esteem and self-appraisal; self-assessments most heavily based on personal accomplishment, even when it does not benefit the group; may be proud of things that help self without helping the group, or because they help the self even if they also do help the group.</td>
</tr>
</tbody>
</table>
### Appendix C: Study 1 instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Description</th>
<th>Reliability and validity in previous work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive and negative affective schedule, expanded version (PANAS-X); Watson, Clark, &amp; Tellegen, 1988</td>
<td>Measures positive and negative affect. The expanded version of the PANAS (PANAS-X; Watson &amp; Clark, 1994) allows a more nuanced report of emotional states, with Positive Affect (PA), Negative Affect (NA), and other subscales. Participants rate the frequency with which they have experienced sixty emotions in the past few weeks on a 5-point scale (1=not at all, 5=extremely).</td>
<td>Acceptable internal and test-retest reliability, as well as high construct validity for both entire measure and subscales (Watson &amp; Clark, 1994).</td>
</tr>
<tr>
<td>Collective self-esteem (CSE): Luhtanen &amp; Crocker, 1992</td>
<td>Measures evaluations of the organization. Sixteen items corresponding to 4 subscales: Private Collective Self-Esteem, referring to the person’s own evaluation of their organization; Public Collective Self-Esteem, or the person’s ideas about how others evaluate the organization; Importance to Identity, or how related membership in the target group is to the person’s overall self-concept; and Membership Self-Esteem, referring to the person’s assessment of his or her worthiness as a group member.</td>
<td>High internal consistency (all subscale alphas &gt; .83), and acceptable test-retest reliability (r = .68; Luhtanen &amp; Crocker, 1992). Acceptable internal consistency for adapted (group-specific) versions (alphas &gt; .68; e.g., Ethier &amp; Deaux, 1994).</td>
</tr>
<tr>
<td>Rosenberg self-esteem scale (RSE); Rosenberg, 1965</td>
<td>Measures personal self-esteem. Ten items assess global trait self-esteem by asking participants to evaluate their personal qualities. Uses a 7-point scale (1=strongly disagree, 7=strongly agree).</td>
<td>High internal consistency and test-retest reliability in several studies (Wylie, 1974).</td>
</tr>
<tr>
<td>Reeder stress inventory (RSI); Reeder, Chapman, &amp; Coulson, 1968</td>
<td>Four-item questionnaire assessing stress, defined as a state which follows a severe situational constraint but precedes attempts to resolve the constraint (Reeder, Chapman, &amp; Coulson, 1968). Designed with daily stressors, such as work stress, in mind (Metcalfe et al., 2003).</td>
<td>Validated on a modern sample of British workers; significantly positively correlates with stress-reduction behaviors such as smoking cigarettes and drinking alcohol, and absenteeism from work (Metcalfe et al., 2003). Acceptable internal consistency (α=0.77; Heslop et al., 2001). Acceptable internal reliability for the first six items (α &gt; 0.83; Bartel, 1999) and the final two (α = 0.94; Bartel, 2001).</td>
</tr>
<tr>
<td>Organizational identification; Bartel, 1999; Bagozzi &amp; Bergami, 2000; Mael &amp; Ashforth, 1992</td>
<td>Combines 6 items from Mael and Ashforth (1992) and 2 items from Bagozzi and Bergami (2000) (see Bartel, 1999, 2001) to measure perceived overlap between self and organization. The first 6 items use a 5-point scale (1=strongly disagree, 5=strongly agree). The last 2 items use different response formats (overlapping Venn diagrams and an 8 point scale).</td>
<td>In a longitudinal test of the three organizational commitment subscales, Cronbach’s alphas ranged from 0.71 to 0.85 (Meyer, Irving, &amp; Allen, 1998).</td>
</tr>
<tr>
<td>Organizational commitment; Meyer, Allen &amp; Smith, 1993</td>
<td>Eighteen-item scale adapted from Meyer, Allen, and Smith (1993). Has 3 components with 6 items each. Affective commitment is the extent to which a respondent feels part of the organization. Continuance commitment is similar to intention to leave, especially due to economic and pragmatic factors. Normative</td>
<td></td>
</tr>
</tbody>
</table>

138
commitment is the extent to which an employee feels obligated to remain with a particular employer. Affective and normative commitment both negatively correlate with voluntary absences and intention to leave the organization. Affective commitment positively correlates with supervisor assessments of performance (Meyer et al., 1993). Uses 7-point response scales (1 = strongly disagree and 7 = strongly agree).

| Preference for autonomy at work; Wageman, 1995 | The Preference for Autonomy at Work scale (Wageman, 1995) is a 6 item scale which assesses the degree to which a person prefers to work independently or interdependently with others. In previous studies using this scale, it has been found to significantly relate to how interdependent the respondent's job actually is (Wageman, 1995). That is, people who work independently to begin with will express higher preference for autonomy than people who work interdependently. Acceptable internal reliability ($\alpha$.0.78; Wageman, 1995). |
| Task interdependence; Pearce & Gregersen, 1991 | Eight items, with a 5 item interdependence factor and a 3 item independence factor, using a 7-point response scale (1=very inaccurate and 7=very accurate; Pearce & Gregersen, 1991) Acceptable internal reliability for factors (reciprocal interdependence $\alpha$.78 and independence $\alpha$.61; Pearce & Gregersen, 1991). Acceptable internal reliability ($\alpha$.85; Riggs et al., 1994). |
| Personal efficacy beliefs scale; Riggs, Warka, Babasa, Betancourt, & Hooker, 1994 | Ten-item self-report measure scored on a 7 point scale (Riggs, Warka, Babasa, Betancourt, & Hooker, 1994). Personal efficacy beliefs correlate significantly with job satisfaction, organizational commitment, and co-worker ratings of individual performance (Riggs et al., 1994). |
Appendix D: Study 2 Materials

Definitions of terms provided for Study 2 participants:

- **Social life** – The sense that the people in the story are all part of a living body that is greater than just the sum of its members
- **Community** – A real, living group whose members have deep connections to one another; this group would probably stay together even if they didn’t have a task to do together
- **Collection** – A group of people whose members are not deeply connected to one another, but have a specific and concrete purpose such as a task to accomplish
- **Individual** – A person who is deeply connected to the group; this person is so much a part of the group that they carry their group membership with them from situation to situation
- **Group member** – A person who is not deeply connected with the group; this person participates in group activities but does not remain a group member in situations where the group is not present
- **Psychological well-being** – A general term referring to a person’s day-to-day mental health. May include things like having good self-esteem, positive thoughts about the groups one belongs to, and experiencing positive emotions.

Ratings questions for Study 2 stories (All questions will be answered on a 1-7 scale, found below):

- To what extent can you sense that the people in this story are all part of a living body that is greater than just the sum of its members?
- To what extent do you think the story teller is a member of a real, living group whose members have deep connections to one another, and would probably stay together even if they didn’t have a task to do together?
- To what extent do you think the story teller is a member of a group of people whose members are not deeply connected to one another, but have a specific and concrete purpose such as a task to accomplish?
- To what extent do you think the story teller is deeply connected to the group, to the point that he or she carries that group membership into many different situations?
• To what extent do you think the story teller is not deeply connected to the group, so that he or she only thinks of being a group member while doing group activities?

• How positive do you think the story teller's psychological well-being is, based on this story?

• How well do you think this person performs at work, based on this story?

• How beautiful do you think this story is?

• How well-formed do you think this story is?

Ratings scale:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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<th>4</th>
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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td>Somewhat</td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>
References:


Brewer, M.B. (1979). In-group bias in the minimal intergroup situation: A cognitive-


