

Activation of Group Attachment, Perceived Group Diversity & Conflict Attribution

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## **ABSTRACT**

### **Activation of Group Attachment, Perceived Group Diversity & Conflict Attribution**

Mark Bajramovic

The main goal of this thesis is to apply attachment theory as a predictor of individual-level experiences in organizational work groups. Individuals with different group attachment styles (e.g., secure, preoccupied, dismissive avoidant, and fearful avoidant) were studied with respect to activation of the group attachment system, as well as their task and relationship conflict attributions in groups that were (or were perceived to be) homogeneous and heterogeneous. The participants of Study 1 were 129 students at the John Molson School of Business. The participants of Study 2 were 87 employees at an international Hi-Technology firm. Results indicate that the perceived and/or actual presence of diversity is correlated with the activation of the group attachment system in work groups. Activation of the attachment system is known to inhibit the exploration of, and learning about, other group members' thoughts and emotions (Rom & Mikulincer, 2003). Findings also indicate that group attachment anxiety and avoidance are positively correlated to reported attributions of relationship and task conflict, and that people with different attachment styles report attributing different amounts of task and relationship conflict. Finally, when comparing individuals' reported experiences in groups that are perceived to be homogeneous to those that are (or are perceived to be) heterogeneous, differences in task and relationship conflict attributions seem to depend on group attachment styles. An important practical implication of this research is that activation of the attachment system by group diversity may be a significant liability in jobs where exploration and learning are required for group performance and outcomes. Further, it could be that inhibiting the activation of the group attachment system may reduce the negative effects of diversity and conflict attributions in groups. In applying my findings to the workplace, they are consistent with the notion that if managers can maintain employees' group attachment systems in a deactivated state, then they may be able to better harness the value in work group diversity.

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## 1. Introduction

Within the field of organizational behavior, researchers are increasingly investigating how group members affect groups. For the most part, research on groups has focused on individual-level differences, such as motivation and the Big Five personality traits. While acknowledging the influence of these underlying variables, my research focuses on the relationships that individual group members have with their groups. Specifically, I am interested in how individual members view their groups and how those individuals perceive their groups to view them. This redirection of focus presents an opportunity to further our understanding of group dynamics and improve our knowledge of the effects of perceived and actual group diversity and conflict attributions in the workplace.

This research draws on the lens of attachment theory. Attachment theory posits that individuals interact with and seek out psychological and physical proximity to others during times of need (Bowlby, 1973). Further, individuals are thought to develop distinct and quantifiable trait and state attachment styles that are consistent across time, situations, and partners (Smith, Murphy, & Coats, 1999). Attachment theory has received significant attention in the fields of human development and social psychology, but it has only begun to emerge in the organizational behavior literature in the last decade (Richards & Schat, 2010). Current research indicates that attachment is relevant in the workplace (Neustadt, Chamarro-Premuzic, & Furnham, 2011). At the interpersonal level, Hardy and Barkham (1994) found that attachment relates to work induced stress. Richards and Schat (2010) found that interpersonal attachment relates to turnover intention and organizational citizenship behaviors. Further, Neustadt, Chamarro-Premuzic and Furham (2011) found that interpersonal attachment relates to job performance outcomes.

I suggest herein that attachment theory, specifically attachment to groups, provides a unique insight into the dynamics of group behavior. The relationships between group members and those between group leaders and followers can be conceptualized as forms of attachment similar to those experienced in childhood and adult interpersonal relationships (e.g., Rom & Mikulincer, 2003; Smith et al., 1999). Emotional, cognitive, and behavioral attachment patterns are reflective of the internalized mental schemas that define an individual's view of him or herself and others (Bartholomew & Horowitz, 1991). They are the indicators of an individual's perception of their relationships with others (Harms, 2011). Conceptualizing the work environment in this way, as being in part, if not largely, relationship-based highlights the fact

that individual-level differences in relationship orientations may be important for understanding the emotions and cognitions employees experience at work. I propose that individual-level differences in group members' attachment styles to groups determine how they view their groups and how they perceive their groups to view them.

The purpose of this study is to apply attachment theory to the organizational behavior literature and to test if an individual's group attachment style is correlated with reported differences in experienced emotions, cognitions, and attributions of relationship and task conflict in work groups. Study 1 consisted of a convenience sample of first year University students. I tested the hypothesis that diversity is associated with the activation of members' group attachment systems and that members' reported group attachment anxiety and avoidance vary systematically and predictably according to their trait attachment to group styles. I tested whether the underlying dimensions of reported group attachment anxiety and avoidance were correlated with reported attributions of relationship and task conflict. Further, I tested whether group attachment styles have different relationship and task conflict attribution profiles in different types of groups. To overcome some of the limitations of Study 1, I replicated the first study in an organizational field sample over a 6-month period.

This thesis is presented in five parts. In the first part, the treatment of groups in the organizational behavior literature is briefly reviewed. In the second part, I outline the importance of applying group attachment theory to the organizational behavior field. Broadly speaking, the group attachment theory model is proposed to capture how individual-level differences in group-attachment style result in individuals perceiving group contexts differently depending on the extent to which groups are (or are perceived to be) diverse. Further, group attachment theory is used to create a framework to predict how individual group members will react to perceived or actual diverse group situations. In the third part of my thesis, the treatment of conflict in the organizational behavior literature is addressed underscoring some of the limitations of the current theories used in the field. In the fourth part, I discuss the value of importing group attachment theory into the conflict attribution literature. Broadly speaking, the attachment theory model is one mechanism that may explain how individual-level differences in attributions of relationship and task conflict may differ in groups that are similar and diverse. The fifth part focuses on the methodology, results, and a general discussion comparing and contrasting the findings of the two studies addressing both their theoretical and practical

implications as well as outlining the limitations of the samples and study design. Suggestions for future research are thereafter outlined.

Overall, several practical implications emerge from my research. My findings are consistent with the notion that the negative effects of diversity may be an attachment system activation issue rather than an issue that is diversity specific. The idea that perceived and actual diversity causes the activation of the group attachment system, which has been shown in past research to inhibit the interpersonal exploration of, and learning about, other individuals' emotions, ideas, and behaviors (Ainsworth, Blehar, Waters, & Wall, 1978) is a new advance. This finding changes the focal point of the "value in diversity hypothesis" conversation. In applying my results to the workplace, they are consistent with the notion that group attachment bonds, at least in part, govern the dynamics between members of work groups in organizations. As such, if firms can maintain group members' attachment systems in a deactivated state, they may be able to mitigate some of the negative effects of diversity and harness its benefits. One way to achieve this is for organizations to focus their efforts on building groups that are viewed by its members as a safe environment that fosters exploration and learning.

My findings are consistent with the notion that the underlying dimension of group attachment avoidance plays a role in individuals' attributions of task and relationship conflict in groups that are perceived to be similar and diverse (or that are actually diverse). From a group attachment perspective, this implies that it is not an individual's view of self, but rather an individual's view of his/her group, that is central to attributions of relationship and task conflict in groups. Practically speaking, for organizations to mitigate some of the negative effects of conflict, they should focus on enhancing individual members' views of their groups. One way to achieve this is for firms to focus on building groups with the skills and attributes that foster group cohesion.

## **2. Treatment of Groups in the Organizational Behavior Literature**

### **2.1 Theories of Groups**

Over the last quarter century work groups have emerged as a leading topic of interest in the organizational behavior literature (Mathieu, Maynard, Rapp, & Gilson, 2008). This emergent interest has resulted in the publication of hundreds of studies, reviews, and meta-analyses on the subject (e.g., Kozlowski & Bell, 2003; Kozlowski & Ilgen, 2006). A variety of overlapping definitions for work groups and teams have been offered up (Mathieu et al., 2008) each with their own subtle differences. Within the contemporary literature, Kozlowski and Bell

defined work groups as: “Collectives who exist to perform organizationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organizational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity” (Kozlowski & Bell, 2003, p334). This definition encompasses a variety of work groups including product development teams, autonomous work groups, self-managing teams, quality circles, cross-functional teams, project teams, task forces, and committees and is the definition of work groups used in my thesis.

Work groups appear in many forms and vary in terms of their size, member composition, tasks they are required to perform, and the contextual environments in which they operate. Such variations have been found to have a notable effect on work group performance and functioning (Chiocchio & Essiembre, 2009). As such, several classifications have been generated to define the different types of work groups investigated in the literature (e.g., Divine, 2002). Although these classifications focus on the notion that different types of work groups vary in their functioning due to different demands, there are several common themes that are homologous to most groups, including the importance of work group effectiveness.

Several overlapping definitions of group effectiveness can be found within the literature. In a meta-analytic review, Sundstrom, McIntyre, Halfhill, and Richards (2000) listed more than 20 different variables used to define work group effectiveness highlighting that a concise definition has yet to emerge. The definition of work group effectiveness adopted in my thesis is consistent with Sundstrom, DeMeuse, and Futrell (1990) who defined group effectiveness to include one or more of the following three fundamental dimensions: (1) the output the group produces, be it quantitative such as a product, or qualitative such as a service; (2) the effect the process of producing the output has on the group’s members; and/or (3) the effect the process of producing the output has on the capability of group members to work together effectively in the future. Despite the variety of definitions in the literature, what is agreed upon is that work groups are assembled for the purpose of performing one or more tasks leading work group performance to be the most studied organizational effectiveness variable in the management literature to date (Bommer, Johnson, Rich, Podsakoff, & Mackenzie, 1995).

In the recent literature, researchers have placed an increasing focus on factors that mediate relations between group inputs and group performance (Ilgen, Hollenbeck, Johnson, & Jundt, 2005). These mediating factors generally reside in two camps, namely, emergent states

and processes. Emergent states pertain to the emotional, cognitive, and behavioral states of teams that result from work group inputs, processes, outcomes, and contexts (Marks, Mathieu, & Zaccaro, 2001). Team efficacy, behavioral integration, cohesion, and psychological safety are examples of emergent states.

Processes pertain to interpersonal/teamwork processes and task processes. Task processes pertains to the activities members perform to achieve the group's goals, while teamwork processes pertain to the interactions that take place between team members (McIntyre & Salas, 1995). Team processes have also been predominant in work group performance models (Guzzo & Shea, 1992), with the most studied interpersonal process to date being work group conflict. For example, in a meta-analysis on work group conflict, DeDreu and Weingart (2003) found team performance to be negatively correlated with task and relationship conflict. On the other hand, Jehn, Northcraft and Neal (1999) found that task conflict was positively correlated with performance and that task conflict was the way by which informational diversity was shared between team members.

The focus of my research is an individual level difference variable that forms part of team composition. Team composition pertains to the combination of individual attributes of team members (Guzzo & Dickson, 1996); it is an input that has effects on group processes and emergent states, and ultimately, group performance. In their examination of work group composition, scholars have historically researched this variable in field studies without interjecting experimental manipulation. Most often, the prototypic model used is to longitudinally assess both the group composition and performance of existing work groups in the field and correlate changes in group composition with respective changes in performance while simultaneously mitigating contextual factors of influence (Guzzo & Dickson, 1996). Team composition has been present in studies of team effectiveness for more than half a century and is thought to include both surface-level and deep-level diverse attributes (Harrison, Price, & Bell, 1998).

Within the context of group composition inputs, group member diversity pertains to variations in group members' characteristics and how those variations affect group processes and group effectiveness (Chen, Donahue, & Kimoski, 2004). In examining the relationship between diversity and effectiveness, the findings are mixed (e.g., Webber & Donahue, 2001). For example, in a meta-analysis conducted by Campion, Medsker, and Higgs (1993) on 80 work groups in the financial services industry, the researchers found that member diversity in terms of

abilities and experiences negatively affected work group effectiveness. On the other hand, in another meta-analysis examining 72 work groups across two manufacturing firms, Magjuka and Baldwin (1991) found that diversity in job functions performed by group members was positively related to work group effectiveness. In general, research has converged on the notion that the positive effects of diversity result from including different perspectives and an increase in the amount of information that is brought to the group by diverse individuals (e.g., Amason, 1996; Bantel & Jackson, 1989; Eisenhardt, Kahwajy & Bourgeois, 1997). Conversely, other researchers have found that groups with diverse members suffer from poorer communication (e.g., Chatman, Polzer, Barsade, & Neale, 1998; Kirchmeyer & Cohen, 1992;) and less group cohesion (e.g., O'Reilly, Caldwell & Barnett, 1989) than groups with similar members. Group cohesion refers to a high level of interdependence amongst group members (Festinger, 1950). Although several experimental studies, field studies, and comprehensive reviews have been published on a variety of dimensions of work group diversity (e.g., Jackson, Joshi, & Erhardt, 2003), the focus of my research centers on functional and demographic diversity.

Functional diversity pertains to variations in relevant sources of knowledge and expertise among members of a group (Harrison & Klein, 2007). Functional diversity is thought to endow groups with a greater breadth of knowledge, skills, and expertise from which to choose in order to complete a task. Despite the obvious potential benefits, functional diversity has been associated more with process and performance deficits than benefits (Pelled et al., 1999) as well as increases in group conflict. (Jehn & Berzrukova, 2004). Despite these limitations, recent research has made some headway in elucidating the potential benefits of functional diversity. Namely, some researchers have found that different types of functional diversity impact process and performance differently (Bunderson & Sutcliffe, 2002) and, as noted above, functional diversity is positively related to work group effectiveness in manufacturing work teams (Magjuka & Baldwin, 1991).

Demographic diversity pertains to variations in demographic composition of organizational members, including age, gender, race, tenure, religion, and socio-economic background (Pfeffer, 1983). Demographic diversity can be further categorized as separation diversity (variations in opinions, values, attitudes, and beliefs), and disparity diversity (variations in status, authority, income, and social power; Harrison & Klein, 2007). Pfeffer's work (1983) indicated that the distribution of demographic differences in groups had an impact on group processes and performance. For example, some studies found that tenure and age diversity have



a positive effect on work performance (Kilduff, Angelmar, & Mehra, 2000). Conversely, other studies have shown that tenure, age, race, and gender diversity affect work performance negatively (e.g., Li & Hambrick, 2005; Pelled et al., 1999) and have a detrimental effect on work group emergent states and processes (Townsend & Scott, 2001). Given the divergent findings in the field, work group composition merits further investigation and clarification in order to understand how people function in work groups and to clarify the relationship between group composition and performance and outcome variables. One theory that may elucidate the undercurrents of these group dynamics is attachment theory (Bowlby, 1973).

## **2.2 Groups & Multi-level Constructs**

Organizations are comprised of individual employees that are partitioned structurally and functionally into inter-related groups and sub-groups that, when viewed together, comprise a unified multi-level system (Klein & Kozlowski, 2000). The roots of multi-level systems theory stem from the basic assumptions of general systems theory (von Bertalanffy, 1968) imported from the biological sciences. This perspective first appeared in the organizational behavior literature in the Hawthorne Studies (Roethlisberger & Dickson, 1939); it is based on an interactionist perspective that views behaviors as a result of both individual differences and contextual factors (Schneider, 1981). Key to this perspective is the understanding that micro level phenomena are embedded in a macro level context.

Historically, many organizational behavior theories examined firms from either a macro (top-down) or a micro (bottom-up) perspective (Klein & Kozlowski, 2000). Macro perspective theories generally focus on global measures that treat individuals as being fundamentally equivalent, such as for example suggesting that a positive relationship exists between organizational level investment in marketing training and improved sales performance. On the other hand, micro perspective theories are rooted in psychological origins that focus on differences between individuals, and the effects that individuals have on their groups (e.g., Swann, 1983). Both micro and macro perspectives have been found to either neglect contextual factors that influence behavior in the former or ignore individual-level differences that affect group level phenomenon in the later (House, Rousseau, & Thomas-Hunt, 1995). The multi-level perspective was introduced into the literature in order to develop a more integrated approach to understanding organizational phenomenon. My thesis focuses on relations between variables at an individual/micro level of analysis, but it is important to note that group attachment activation is inherently a multi-level phenomenon. I studied individual processes, but the individuals

thought about the group and organizational situations (higher-level) in which they were embedded. My research examined how micro-level differences in individuals' attachment styles are influenced by varying meso-level contexts, namely, similar and diverse group conditions.

### **3. Applications of Attachment Theory in OB**

#### **3.1 Attachment Theory: Construct Definition**

The theoretical framework that guides this study is *attachment theory* (Bowlby, 1973). Bowlby rejected the foundational psychoanalytic paradigm that attachment develops as a result of sexual drives and postulated that instead attachment develops from social interactions as in animal behavioral models from the biological sciences (Bowlby, 1973).

Situated within the context of evolutionary biology and systems theory, Bowlby (1979) concluded that both human and animal attachment progressed upon the same evolutionary lines such that: (1) Emotional connections between individuals have survival value, (2) Within each attachment dyad, each partner holds an internal mental representation of the other such that in the event of a separation a sense of proximity can be maintained, (3) Attachment behaviors have stable neuronal structures within the central nervous system, (4) One's sense of attachment develops in infancy and those models become the foundation for adult interpersonal relationships (Bowlby, 1988).

Since the primary goal in early childhood is to acquire and maintain security, Bowlby posited that children develop emotional, cognitive, and behavioral schemas that are tailored to maintaining proximity to their parents (Primary Caregivers), referred to as the, "*attachment figure*" (Bowlby, 1982). Within the context of a systems theory framework, attachment as defined by Bowlby (1982) reflects two complementary behavioral systems: (1) the infant's need for care and protection, and (2) the parent's caregiving propensity, such that the behaviors of parents toward their children are inextricably linked to the type of attachments that the child develops. This parent-child behavioral interaction forms a reciprocal dyadic relationship (Bowlby, 1982). These attachment schemas, once internalized in infancy, perpetuate stably into adulthood (Fraley & Shaver, 2000) and become the most salient working mental models in specific relationships and across relationships in general. Since its emergence, attachment theory has been applied in several fields including developmental and social psychology where it is prominent in defining the nature of interpersonal interactions.

#### **3.2 Attachment Activation & Other Behavioral Systems**

Attachment is one of many behavioral systems that governs our actions. Bowlby (1973) defined a behavioral system as a biological drive found within all members of a species that systematically organizes behavior in functional ways in order to increase the likelihood of survival. Behavioral systems are particularly useful in the face of specific environmental threats (Bowlby, 1973). Through natural selection, behavioral systems in humans, such as the attachment, affiliative, care giving, and exploratory systems to name a few, evolved as a hard-wired part of the central nervous system. These behavioral systems have specific activation and termination queues that lead to consistent outcomes between an individual and his/her environment (Bowlby, 1982). These sequences of activation through to termination are independent of learning experiences. The activation of one behavioral system can initiate or inhibit another. Specifically, the activation of the attachment system initiates the affiliated (social) and the fear weariness systems, and inhibits the exploratory system (Answorth, Blehar, & Wall, 1978).

Research has shown that the attachment system has both state and trait components. The trait side of one's attachment style pertains to the emotional, cognitive, and behavioral patterns an individual engages in when his/her attachment system is deactivated. The state side of one's attachment style pertains to the emotional, cognitive, and behavioral patterns an individual engages in when his/her attachment system is activated. For example, in one study on lexical decision based tasks, researchers measured participants' attachment styles and then subliminally exposed them to threatening words. Following the exposure, researchers examined participants' reactions to attachment-related themes (Mikulincer, 2000). The results showed that the subliminally administered threats led to a more rapid identification of attachment-based words than non-attachment-based words). This implies that the perception of environmentally threatening circumstances can lead to a state of attachment system activation during the cognitive filtering of information. Further, the study showed that each attachment style has a distinct cognitive profile both before (trait) and after (state) activation. These findings suggest that attachment has both trait and state components (Green & Campbell, 2000).

Several other studies support the notion that attachment has a state component, in addition to its foundational trait component. Collins and Read (1994) found that individuals could possess multiple mental models reflective of different attachment patterns experienced across different relationships. Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo (1996) found that individuals could possess multiple attachment schemas that can be activated by different

contexts. The activation of the attachment system by psychosomatic threats leading to distinct attachment trait and state profiles is central to the research conducted herein. This will be thoroughly addressed in a later section.

### **3.3 Attachment & Interpersonal Relationships**

Attachment theory provides a potential insight into how individuals interact with others in interpersonal relationships. Beginning in infancy, the quality of the interaction a child has with his/her attachment figure during times of need determines his/her attachment style and his/her perception of others. If interactions with his/her attachment figure are positive and have positive outcomes, then these exchanges reinforce the individual's view of the world as a safe place and the people in it as being well-intentioned towards others. On the other hand, if these attachment-figure interactions are negative and have negative outcomes, then these exchanges reinforce the individual's view of the world as an unsafe place and the people in it as ill-intentioned towards others.

Attachment styles form the most salient working emotional, cognitive, and behavioral schemas that govern an individual's feelings, thoughts, and actions. Once ingrained in childhood, they perpetuate over a lifetime across various relationships. Attachment styles lead individuals to behave in systematic ways that are consistent with how they expect to be treated by others (Hazan & Shaver, 1987) and to elicit reactions from others that are consistent with their expectations (Allen, Cooyne, & Huntoon, 1998). Further, based on their child-caregiver relationship experiences, individuals form distinct and predictable patterns in their tolerance for the anxiety associated with the learning of new experiences (Blatz, 1966).

Ainsworth, Blehar, Waters, and Wall (1978) were the first researchers to classify attachment into 3 predictable styles. In an experimental qualitative study observing the responses of 106 one-year olds, Ainsworth and colleagues systematically analyzed infants' behavioral strategies in response to the presence of a stranger both with and without the presence of their attachment figure. The researchers showed that the presence of a stranger activated the fear-wariness system and the affiliated (sociable) system. The presence of a stranger affected infants' attachment behaviors directed toward their attachment figure as well as inhibiting their exploratory systems. Infants have a natural curiosity that leads them to have an inherent desire to explore the world around them, but it also leads to a heightened state of anxiety due to exposure to unfamiliar circumstances (Blatz, 1966). When an infant becomes frightened while exploring, her/his attachment system will activate and she/he will seek reassurance from their

attachment figure. Seeking reassurance from an attachment figure is known as the *Primary Attachment Strategy* (Bowlby, 1973). If the attachment figure is present and offers reassurance, the attachment system will subside and exploration will continue. However, if the child is unable to attain proximity to his/her attachment figure, then the child's attachment system will remain active and the exploratory system will be suppressed until the real or perceived environmental threat is mitigated. During the time between primary attachment strategy abandonment and the mitigation of the perceived or actual environmental threat, the child will engage in *Secondary Attachment Strategies*. The strange situation study of dyadic parent-child relationships elucidated three main secondary attachment strategies of infants in response to external threats while separated from their primary caregivers, namely: (1) *secure*, (2) *preoccupied*, (3) *avoidant*. Each secondary attachment strategy has its' own emotional, cognitive, and behavioral patterns.

(1) *Secure Attachment*: Secure, which is derived from its latin root "*sine cura*" means without care or without anxiety. Infants with parents who exhibited the qualities of being accepting, sensitive, and synchronized with their infant's needs were viewed as being dependable and available. Since these infants were not preoccupied with their security needs, they were free to direct their attentions towards the exploration of their environment and other non-related attachment activities, even in the absence of their primary caregiver (Ainsworth et al., 1978).

(2) *Preoccupied*: Infants with parents who did not tend to be overtly rejecting, but often were inconsistent and unpredictable in their responses and interactions were characterized as being non-harmonious (Ainsworth et al., 1978). In fear of potential caregiver abandonment, such infants were excessively vigilant about maintaining close parental attachments (Main, 1990). Preoccupied infants acted in such a way as to be hypervigilant of any signs of rejection or cues of threats both in the presence and absence of their primary attachment figures.

(3) *Avoidant*: Infants with parents who tended to be emotionally rigid and/or angry with their infants' proximity seeking attempts, and who often overtly reject their children during times of distress, were not viewed as dependable by children (Ainsworth et al., 1978). These infants were only able to maintain proximity to their parents by behaving as if their parents were not needed. As a result, these infants learned to suppress expressions of overt distress rather than express the need for closeness and attention (Main, 1990).

Attachment research that began as the study of the systematic behavioral patterns of infants and their attachment figures has since grown to encompass adult interpersonal relationships. Drawing on Ainsworth, Blehar, Waters and Walls' (1978) research, Hazan and Shaver (1987) examined adult romantic relationships and identified the same distinct attachment styles previously observed in the infant study. In their seminal research on adult romantic relationships, Hazan & Shaver surveyed 620 adults and found that secure, preoccupied, and avoidant adults experienced interpersonal romantic relationships differently.

Bartholomew (1990) expanded upon the three-style attachment model by theoretically deriving four attachment styles each with its own emotional, cognitive, and behavioral profile. Bartholomew postulated that the attachment system could be activated by anxiety, fatigue, stress, and illness. Further, Bartholomew posited that when an individual's attachment system is activated, s/he will display attachment-related behavioral patterns that are governed by two dimensions:

“(a) whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection; (b) whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way” (Bartholomew, 1990, p. 152).

Bartholomew dichotomized the model of ‘self’ into a positive view of self and a negative view of self, and dichotomized the model of ‘others’ into a positive view of others and a negative view of others. The ‘self’ and ‘others’ model subsequently came to be labeled attachment “anxiety” and “avoidance”, respectively (e.g., Simpson, & Rholes, 1998). In support of Bartholomew's research, Brennan and Shaver (1998) factor analyzed a series of attachment-related measures and empirically confirmed Bartholomew's postulate that attachment-related constructs could be quantified into a two-dimensional space. High attachment anxiety relates to negative views about being accepted by relationship partners whereas low attachment anxiety relates to positive views about being accepted by relationship partners. High attachment avoidance relates to the dismissing of others within relationships whereas low attachment avoidance relates to positive views about relationship dependence. When views of the self and views of others are combined in a two-by-two matrix, four distinct attachment styles are generated, namely: (1) *secure attachment*, (2) *preoccupied attachment*, (3) *dismissive avoidant attachment*, (4) *fearful avoidant attachment*.

(1) Individuals with the *secure attachment style* view their attachment figure and others as people who will be helpful to them during times of need. They view themselves as someone towards whom attachment figures and others will respond in a helpful way. Research has found that securely attached individuals are open with, and trusting of, others (Hazan & Shaver, 1987), and that they are unbiased in their self- and other- appraisals. Securely attached individuals are not focused on their attachment needs and can direct their attention and energy to non-attachment related activities.

(2) Individuals with the *preoccupied attachment style* view their attachment figure and others as people who will be helpful to them during times of need, but they view themselves as not to be someone towards whom attachment figure and others will respond in a helpful manner during times of need. These individuals want close relationships, but fear rejection from others (Bartholomew, 1990). They are excessively vigilant about any signs of rejection or cues of threats (Main, 1990). Preoccupied attached individuals have an overwhelming need for the approval of others due to a lack of self worth (Bowlby, 1973).

Preoccupied attachment is a form of emotional “hyperactivation” strategy equating to a “fight” response. This occurs as a result of a lack of fulfillment of attachment needs (Bowlby, 1982). When preoccupied attached individuals are unable to satisfy their attachment needs, they intensify their efforts and coerce others in order to gain their support and attention (Bowlby, 1973). Preoccupied attached individuals subjectively perceive events as more threatening and exaggerated than they actually are. These individuals tend to subjectively perceive events with greater negative affect and less cognitive openness than secure individuals. Preoccupied attached individuals have two main goals in interacting with others: (1) The pursuit of emotional closeness with others, (2) The resolution of any negative feelings with others.

(3) Individuals with the *dismissive avoidant attachment style* view their attachment figure and others as not to be people who will be helpful to them during times of need. They view themselves as an individual towards whom their attachment figure and others will respond in a helpful way during times of need. These individuals do not overtly express distress or the need for support from others (Main, 1990). For dismissive avoidants, support seeking from others could expose them to further rejection. These individuals often downplay or down regulate their social interaction needs and turn to the pursuit of chronic self reliance (Cassidy & Kobak, 1988). Chronic self-reliance results in dismissive avoidants having a positively biased sense of self-efficacy and a negatively biased sense of others’ abilities. Dismissive avoidant

attachment is a cognitive, emotional, and behavioral imbalance between an individual's sense of independence from and connectedness to others (Bartholmew, 1990).

Dismissive avoidant attachment is a form of emotional “deactivation” strategy that equates to a “flight” response. This occurs as a result of a lack of fulfillment of attachment needs (Bowlby, 1982). Deactivation strategies, which maintain the attachment system in a down-regulated or inactive state, result in the person ignoring or dismissing various threatening aspects of the person–environment relationship and suppressing threatening thoughts that could cause attachment system activation. Deactivating strategies serve to avoid negative thoughts and emotions (Cassidy & Kobak, 1988). Dismissive avoidants deflect information about attachment topics in stressful interpersonal situations (Mikulincer & Shaver, 2003) and tend to perceive events with greater cognitive focus than both preoccupied and secure individuals. Dismissive avoidants have two main goals in interacting with others: (1) The pursuit of self-reliance and control, (2) The avoidance of negative emotions.

(4) Individuals with the *fearful avoidant attachment style* view their attachment figure and others not to be people who will be helpful to them during times of need. They view themselves not to be an individual towards whom their attachment figure and others will respond in a helpful way during times of need. Fearful avoidant attachment is both a deactivation strategy (Bowlby, 1982) and a hyperactivation strategy (Bartholomew, 1990). Fearful avoidants cannot choose between deactivation or hyperactivation strategies and may enact both approach and avoidance behaviors in a chaotic manner (Simpson & Rhodes, 1996). Fearful avoidants experience a sense of anxiety as a result of their social hypersensitivity to the approval of others and as a result experience anxiety (Bartholomew, 1990). They desire social interaction with others, but believe that others will reject them. Fearful avoidants tend to subjectively perceive events with greater negative affect and less cognitive openness than secure, preoccupied, and dismissive individuals.

Dismissive and fearful avoidant attached individuals differ in that the former attains a sense of self worth through autonomy and by denying their intimacy needs, while the later has both intimacy issues and a low sense of self worth. The distinction between the two styles of avoidant attachment resides in the valence of their views of self. Dismissive avoidants possess a positively valenced view of self that minimizes their perceived social needs and inflates their sense of self-efficacy. On the other hand, fearful avoidants possess a negatively valenced view of self that minimizes their belief that they are worthy of support from others. Whereas the



dismissive avoidant style is characterized by a denial of attachment needs, the fearful avoidant style is characterized by a desire to interact socially with others that is inhibited by fears of rejection (Bartholomew, 1990).

### **3.4 Attachment in the Workplace**

Organizations require their employees to interact directly with customers, clients, and/or coworkers (Bowen, Siehl, & Schneider, 1989). As a result, organizational researchers have increasingly placed an emphasis on how interpersonal relationships determine individual, work group, and organizational processes and outcomes (Bowen et al., 1989; Malach-Pines, 2005). Research investigating this topic has mainly centered on individual-level differences, such as the Five-Factor Model and motivation (e.g., Bono, Boles, Jude, & Lauver, 2002). From this research, we have learned that personality influences the attributions that individuals make about their work-based experiences. These findings are important, but there is still more than can be learned about how individual-level differences affect employees in groups. Attachment theory represents one of these potential personality constructs.

Although attachment theory has received significant attention in other fields, only a handful of researchers have explored this topic in organizational behavior. The emotional, cognitive, and behavioral patterns associated with attachment are reflective of the internalized mental schemas that define individuals' views of the self and others (Bartholomew & Horowitz, 1991) and are the relational indicators of individuals' perceptions of their relationships (Harms, 2011).

Research findings on attachment in the workplace indicate that attachment styles play a key role in influencing employees' work-related emotions, thoughts, and behaviors (Richards & Schat, 2011). Due to the dependence of the exploratory system on the attachment system, it has been posited that attachment style can influence employees' functioning at work (Hazan & Shaver, 1990). Since attachment styles may affect individuals' pursuit of exploration during stressful work circumstances, as well as their ability to resolve work-based challenges, attachment may be a critical individual-level difference that determines work processes and outcomes (Blustein, Prezioso, & Schultheiss, 1995).

Hazan and Shaver (1990) were the first to import attachment theory into the organizational behaviour literature. They examined the relationships between employee attachment style and job satisfaction, self-rated work performance, co-workers perception of work performance, experiences of anxiety about work-related rejections from co-workers, and

the degree to which interpersonal relationship concerns negatively impacted job performance. The findings indicated that a relationship exists between attachment style and work processes and outcomes.

Securely attached individuals were found to experience a higher overall degree of work satisfaction, greater satisfaction with coworkers, and were the least likely to put off tasks. They also valued interpersonal and social relationships more than work as compared to preoccupied and avoidant attached individuals (Hazan & Shaver, 1990). Preoccupied attached individuals were found to experience feelings of insecurity on the job and thoughts of being under recognized and under-appreciated. They allowed their personal lives to interfere with their work. Preoccupied attached individuals preferred to be sociable and work with others even though they worried that others would undervalue them. As well, they experienced significant anxiety about being rejected by co-workers (Hazan & Shaver, 1990). Dismissive attached individuals were found to experience a sense of dissatisfaction with coworkers, felt nervous when not working, often preferred to work alone, and preferred to work rather than to go on vacation. Dismissive attached individuals emphasized the importance of work over relationships (Hazan & Shaver, 1990).

In a self-report study on attachment at work of 211 managers in the hospitality industry, Neustadt, Chamorro-Premuzic and Furnham (2011) found that secure attachment was positively correlated with trait emotional intelligence, work related self-esteem, and performance outcomes. In support of these findings, Hardy and Barkham (1994) using data collected from 219 participants being treated for work related stress found that the attachment anxiety dimension positively correlated with interpersonal difficulties at work. These difficulties include anxiety about being rejected by coworkers, over involvement with significant others, and dysfunctional work behavior. Attachment avoidance was also correlated with interpersonal difficulties at work such as conflicts with co-workers, avoidance of closeness with others, avoidance of commitment, and a preference to work alone.

Other researchers have found similar results when examining the effects of attachment style on work functioning. Richards and Schat (2011) found that attachment anxiety was positively correlated with emotional and instrumental support seeking from others, as well as turnover intention. Further, attachment anxiety was negatively correlated with organizational citizenship behaviors. The attachment avoidance dimension was found to be negatively correlated with emotional and instrumental support seeking.

In another study that sampled 150 employees from a variety of organizations representing a range of industries, positions and occupations, Littman-Ovadia, Oren, and Lavy (2013) found a significant relationship between the attachment anxiety and avoidance, and work outcomes. The researchers showed that attachment anxiety and avoidance were both positively correlated with burnout and emotional distress, whereas only the avoidance dimension was negatively correlated with job commitment and work engagement.

Put together, these findings suggest that attachment is a unique interpersonal difference that has the potential to contribute to our knowledge of people's experiences in the workplace. Specifically, a person's interpersonal attachment style may affect their job satisfaction, performance, commitment, organizational citizenship behaviors, work related burnout, and interpersonal relationships. These findings imply that attachment may provide insight beyond the already well established effects of other personality traits (e.g., affectivity) and may explain the relationships employees experience within their work groups. To date, however, attachment research in organizations has focused on interpersonal attachment relationships. Another important aspect of attachment is employees' attachment to their groups. Group attachment in organizations is the focus of my research.

### **3.5 Group Attachment: Theory & Findings**

Research on attachment has further grown to encompass individuals' relationships with their groups. Much like interpersonal attachments, group dynamics and the relationship between a group and its members can be viewed as a form of attachment with attachment bonds similar to those experienced in interpersonal relationships (Rom & Mikulincer, 2003). In a seminal study on attachment to groups, Smith, Murphy, and Coats (1999) introduced a construct whereby group attachment was defined by two underlying dimensions: *Group attachment anxiety* and *group attachment avoidance*. The researchers found that the two group attachment dimensions could be derived with statistically significant reliability and validity, and were generally stable across time and contexts. Smith and colleagues (1999) found that interpersonal attachment anxiety and group attachment anxiety were associated, and that interpersonal attachment avoidance and group attachment avoidance were associated. Despite their significance, these correlations were found to be moderate in size suggesting that group attachment's dimensions may be special cases of global dimensions that are derived from factors other than child-parent caregiver interactions, namely, past and current group experiences (Smith et al., 1999).

The researchers found that individuals who scored high on group attachment anxiety experienced a sense of unworthiness as a group member and acted in a way that was appeasing to their group. Those who scored low on group attachment anxiety experienced a sense of being accepted by their group and acted in a way that was less focused on their need for acceptance by their group. Individuals who scored high on group attachment avoidance viewed group membership as undesirable and acted independently in group situations. Those who scored low on group attachment avoidance viewed group membership and dependence as attractive traits and acted in such a way as to encourage these types of bonds.

Taken together in a two-by-two matrix, four distinct group attachment styles were generated, namely: (1) secure group attachment, (2) preoccupied group attachment, (3) dismissive avoidant group attachment, (4) fearful avoidant group attachment. Individuals with the secure group attachment style score low on group attachment anxiety and group attachment avoidance. Individuals with the preoccupied group attachment style score high on group attachment anxiety and low on group attachment avoidance. Individuals with the dismissive avoidant group attachment style score low on group attachment anxiety and high on group attachment avoidance. Individuals with the fearful avoidant group attachment score high on attachment anxiety and high on attachment avoidance.

Much like with interpersonal relationships, individuals can develop attachment bonds with their groups and come to view them as a secure base. Research on group cohesion indicates that groups can act as a source of comfort and support for individuals in times of need (Mullen & Cooper, 1994). Research on identification indicates that people have a preference for their own groups in times of stress and uncertainty (for review, see Dovidio & Gaertner, 1993). Research on groups indicates that group membership and exchange can foster an environment conducive to emotional and cognitive exploration and learning (Forsyth, 1990). If groups fulfill these criteria, then much like with interpersonal relationships, attachment bonds can form between individuals and their groups (Rom & Mikulincer, 2003).

Groups provide a rich environment in which individuals can engage in attachment behaviors and receive feedback from others. Inasmuch as engaging in attachment behaviors at an interpersonal level may lead to a consistent change in outcomes between an individual and his/her environment (Bowlby, 1982), this effect may be compounded in a group context. By interacting with the group as a whole, an individual can enact and evoke a reaction from all

members simultaneously receiving a richer and more intense feedback than would be possible from one or a series of dyadic interpersonal interactions.

Group attachment pertains to how individuals' systematic and stable views regulate their perceived and actual experiences within a group setting (Smith et al., 1999). Attachment schemas regulate individuals through the pursuit of three specific strategies. First, attachment schemas regulate the information individuals pay attention to (Fraley, Garner, & Shaver, 2000), as well as the context of that information (Green & Campbell, 2000). Second, attachment schemas regulate the impressions individuals make about others (Mikulincer & Horest, 1999). Third, attachment schemas guide individuals to engage in emotional, cognitive, and behavioral patterns that target others who can confirm their expectations (Brennan & Shaver, 1995). In sum, attachment schemas regulate individuals to act in a way that is consistent with how they expect to be treated by others (Hazen & Shaver, 1987) and elicit reactions from others that are consistent with their expectations (Allen, Coyne, & Huntoon, 1998).

Returning to the issue of multi-level constructs discussed earlier, group attachment is rooted in perceptions and behaviors that originate at the individual/micro level. Research suggests, however, that attachment at the individual level may differ from attachment at the group level (Smith et al., 1999), which suggests that attachment is non-isomorphic at different levels of analysis. Further, since group attachment styles result in members contributing to their groups differently (Rom & Mikulincer, 2003), members' properties do not converge within groups. As a result, the latent construct of group attachment is a configural unit property (e.g., each group has an array of individuals with his/her own group attachment style). In this thesis, I am concerned with the group attachments of individuals and the level of measurement is the individual.

### **3.6 Attachment in Diverse Groups**

One application of group attachment to organizational behavior pertains to the context of diverse work group situations. The relationships between group members and those between group leaders and followers can be conceptualized as forms of attachment similar to those experienced in childhood and adult interpersonal relationships (e.g., Rom & Mikulincer, 2003; Smith et al., 1999). In my research, I propose that the presence of group diversity is positively correlated with the activation of the group attachment system. If so, and if activation of the attachment system inhibits the exploratory system as indicated by past research (Ainsworth et al., 1978), then this may explain some of the observed negative effects of group diversity, namely,

attributions of task and relationship conflict. To explicate this matter, attachment system activation is discussed first. Second, surface and deep level group diversity are defined. Third, the theoretical mechanism behind group diversity as a chronic activator of the group attachment system is outlined. Finally, comparisons and contrasts are drawn between attachment activation in similar and diverse group conditions.

Bowlby (1973) posited that the biological function of the attachment system is to protect an individual in situations of uncertainty and to ensure that the individual stays a safe distance away from danger and within arms length of protection from their primary attachment figures. In support of this, research has shown that individuals are genetically predisposed to fear certain types of stimuli, specifically, sharp changes in light, sound, and certain types of movement (Bowlby, 1973). Researchers found that such cues affect individuals by triggering anxiety and activating either proximity seeking to their attachment figure or escape behaviors (Bowlby, 1973).

In more recent studies, researchers found that the attachment system can also be activated by psychological threats. These psychological threats are dependent only upon subjective appraisals, and may be either real or perceived. Several widely accepted models of emotion and adaption (e.g., Lazarus, 1991) as well as models of stress regulation through active coping strategies (e.g., Lazarus & Folkman, 1984) support this model of subjective appraisal. In line with these findings, psychological triggers such as anxiety, stress, and psychosomatic threats are thought to activate the attachment system (Bartholomew, 1990). Research has shown that such psychosomatic threats can result in the preconscious activation of the attachment system (Mikulincer, 2001). I suggest here that group diversity may be both a perceived and actual stressor that activates the group attachment system.

Bowlby (1969) posited that activation of the attachment system also initiates the activation of the fear weariness system, specifically, the inherent fear of strangers. Basing his research on findings in animal behavioral models (Collard, 1967), Bowlby observed that infants were inherently afraid of unfamiliar objects, environments, and individuals, all of which acted as cues to situations of uncertainty and danger. I extrapolate these findings to adults in diverse groups.

Group diversity can be categorized on two distinct levels: *Surface level diversity*, and *Deep level diversity*. Surface level diversity, namely, demographic diversity, refers to differences in biological characteristics of the members of a group that are reflected in their

physical characteristics, such as age, gender, and ethnicity. These characteristics are genetically determined, inherently observable, and generally unalterable (Milliken & Martins, 1996). On the other hand, deep level diversity, namely, attitudinal diversity, refers to differences in values, attitudes, beliefs, knowledge, and skill sets of the members of a group. Group members' deep level diverse characteristics are generally difficult to visually observe and are thought to become increasingly salient over time through continued interaction with other group members. Unlike surface level diversity characteristics that are unalterable, group members' deep level characteristics may be subject to change over time.

One potential model that can explain how surface level diversity triggers the group attachment system is Pfeffer's (1983) Organizational Demography Model. This model focuses on the demographic composition of organizational members, including age, gender, race, tenure, religion, and socio-economic background. Pfeffer's work (1983) indicated that the distribution of demographic differences in groups had an effect on group processes and performance. Based on his empirical findings, Pfeffer (1983) suggested that variations in demographic composition of group members result in variations in group integration, cohesion, and communication patterns. Pfeffer (1983) found that the underlying factor causing these effects was the degree to which individuals perceived themselves as similar to or different from other members of their group. Findings from decades of research on similarity attraction support Pfeffer's conclusions, such that it is now taken for granted that similarity in terms of attributes ranging from appearance to attitudes increases interpersonal attraction (e.g., Burt & Reagans, 1997). Research further indicates that individuals, given the opportunity to interact with any number of other individuals in a free choice situation, have a strong tendency to choose those who they perceive as similar to themselves (e.g., Burt & Reagans, 1997).

In the studies conducted on surface level diversity to date, some research has shown that individuals have a negative bias towards those who are different (Tsui & O'Reilly, 1989) whereas other studies have found that surface level diversity does not lead to negative bias towards others (e.g., Konrad, Winter & Gutek, 1992). Examining the specific surface-level characteristics tested in these studies and their relationship to the underlying factors of deep-level diversity may clarify these mixed findings. In their seminal study on surface and deep level diversity, Harrison, Price, and Bell (1998) found that the longer group members worked together, the lesser the effects of surface-level diversity and the more pronounced the effects of deep-level diversity. This study has in many ways bridged the gap of explaining the mixed findings in the

field indicating that both surface and deep level diversity clearly have an effect on groups, but at different points in time.

In this paper, I argue that diversity activates the group attachment system. I base this argument on the Bartholomew's (1990) postulate that psychosomatic triggers can activate the attachment system. Specifically, uncertain circumstances that are subjectively perceived as threatening result in stress and that can shift the attachment system into an active state (e.g., Mikulincer, 2001). Perceived threats refer to both surface- and deep-level diversities. I now turn to how group diversity can cause the chronic activation of the group attachment system. First, I will explain how the group attachment system functions within the context of homogeneous groups. Thereafter, I will explain how the group attachment system functions within the context of diverse groups.

Like the attachment system in general, the group attachment system is triggered by the perception of threats, such as uncertainty or the anxiety associated with exploring the unknown (e.g., diverse attributes and attitudes; Bartholomew, 1990). I argue that threats will likely be perceived to be at a minimum when an individual perceives that other group members in their group are similar to himself/herself with respect to salient characteristics (the group is viewed as homogeneous). In this situation, the triggers of group attachment will generally be absent and group members' attachment systems will remain deactivated. This will result in group members engaging in trait group attachment related emotions, cognitions, and behaviors.

Over time, as group members repeatedly interact through various work-related circumstances, their deep level similarities and/or differences will begin to develop (Tsui & O'Reilly, 1989). In cases where attitudes and attributes of group members are similar, if the group members interact and repeatedly share similar positive experiences with positive outcomes, then attachment bonds may develop between the group and its members. The stronger these bonds, the more members will perceive their groups as a source of comfort and support (Mullen & Cooper, 1994), have a preference for their groups over others groups during times of need, and perceive their groups as an environment that fosters exploration and learning. If over time, group members continue to express similarities to their group, attachment bonds may deepen fostering members to view their group as a secure base (primary attachment figure; Tsui & O'Reilly, 1989).

Undoubtedly, situations will emerge when the work group is subject to stress and uncertainty, such as situational factors like shifts in industry demands, high sales seasons, or



even simply the uncertainty associated with learning new skills on the job. Such situations are more than likely to shift members' group attachment systems to an active state. To the extent that these events of uncertainty are perceived as threatening, they will likely result in assurance seeking (enactment of the primary attachment strategy of seeking out an attachment figure to provide comfort and support; Smith et al., 1999). If the attachment figure is reassuring, then the anxiety associated with overcoming unknown and threatening events can be alleviated, the attachment system will subside, and exploration and learning can continue (Blatz, 1966). Within a homogeneous group context, where group attachment bonds have formed between the group and its members, the group can serve as an attachment figure and the group's reassurances can deactivate its members' attachment systems allowing for non-group attachment related activities, such as exploring the challenges at hand. If the outcomes of surmounting these challenges are positive, the group attachment bonds between group members will strengthen.

The outlook for diverse groups is altogether different. First, if a group member perceives his/her group to be diverse, then he/she may experience uncertainty, even during non-stressful periods, which can shift the member's group attachment system to an active state. If this occurs due to surface level diversity, which is generally stable and always present, then the member's group attachment system may remain active as long as he/she perceives the surface level diversity as a threat. Further, it is unlikely that the group member will eventually explore these surface level differences to overcome their fears since the activation of their attachment system inhibits the activation of their exploratory systems (Ainsworth et al., 1978). If, however, the diversity is deep level and is not initially perceived, then the group member's attachment system may remain in an inhibited state until deep level diversities emerge.

Over time, with repeated group member interactions, and through various work related circumstances, deep-level diversities may begin to emerge within a heterogeneous group. Such deep level diversities will cause the member's group attachment system to activate and they will be unable to develop the attachment bonds necessary to view their group as a secure base (primary attachment figure). This is due to the fact that the group member may perceive his/her diverse group as a source of uncertainty and stress rather than as a source of comfort and support (Ainsworth et al., 1978). The group member will be unable to fulfill their primary attachment strategy of attaining proximity to an attachment figure within their group. Consequently, individuals in groups that are perceived to have deep level diversities may have group attachment systems that remain in a chronically active state, which will likely suppress

exploration and learning. Further, situations will undoubtedly emerge when the work group is subject to stress and uncertainty, which can further activate the attachment system. During these times, the primary attachment strategy is to seek out an attachment figure to provide comfort and support (Smith et al., 1999). In this case, because the group member does not view his/her group as a secure base (primary attachment figure), he/she will likely engage in secondary attachment strategies, namely, the emotions, cognitions, and behaviors associated with one of the four aforementioned group attachment styles (secure, preoccupied, dismissive avoidant, or fearful avoidant group attachment). Due to the diverse group being the source of attachment system activation as well as the focus of secondary attachment strategies, the group member's attachment systems may remain in a chronically activated state. Essentially, the chronic activation of the group member's attachment system should be reflected in higher levels of both group anxiety and avoidance. However, the degrees to which group anxiety and avoidance levels increase will depend on the member's group attachment style.

Diverse groups present a rich environment in which to observe the effects of group attachment behaviors. One reason for this is that it is central to the nature of group functioning for members to interact as a cohesive unit towards a superordinate goal (Sheriff, 1958) in order to enact change on (or under changing) environmental circumstances. A second reason is because diverse groups, by their nature, possess members with inherently heterogeneous characteristics that may be viewed by some as physically or psychologically threatening and may trigger the precognitive activation of members' group attachment systems. Because causing or overcoming environmental change as a group requires cohesion and because diversity within group members may inhibit proximity attainment, diverse groups present a rich environment in which to examine the effects of diversity on members' attachment systems.

### **3.7 Attachment Styles in Diverse Groups**

I propose that group members' trait group attachment styles determine the impact of group diversity on their state group attachment styles. Individuals who tend to be low on group attachment anxiety are likely to have their views challenged in a diverse group situation. Recall that individuals who score low on trait group attachment anxiety view themselves as being a worthy group member, view group interactions as emotionally fulfilling (Rom & Mukuliner, 2003), and do not worry about being rejected by their groups (Smith et al., 1999). These individuals have positive expectations about their ability to deal with group-related situations (Rom et al., 2003) and believe that other group members will accept them. Further, they behave

in such a manner as to receive high levels of social support during interactions (Smith et al., 1999).

Despite their expectations of a positive group experience, group diversity will likely activate members' group attachment, affiliated (social) and fear weariness systems, and inhibit their exploratory systems (Ainsworth et al., 1978). These individuals who anticipate being met with understanding and openness in diverse groups will be met with a lack of understanding and acceptance. Those who score low on trait group attachment anxiety will be limited in their ability to explore new and novel situations resulting in an outgroup bias (Pelled, Eisenhardt, & Xin, 1999). Outgroup bias occurs when ingroup members are identified with outgroup characteristics that can result in the perceived dissension of those members and disruption of group dynamics (Pelled et al., 1999; Tsui, Egan, & O'Reilly, 1992). As the intensity, frequency, and duration of outgroup bias persists, the negative effects of diversity will become increasingly impactful (Schneider, 1987). Research suggests that the resulting strain on the group and its members will cause increased feelings of anxiety and rejection and be reflected by an increase in members' group attachment anxiety scores (Rom & Mikulincer, 2003).

In contrast, group members who have high trait group attachment anxiety are likely to have their views affirmed in a diverse group situation. Recall that individuals who score high on trait group attachment anxiety view themselves as being an unworthy group member, view group interactions as emotionally challenging (Rom & Mukuliner, 2003), and constantly worry about being rejected by their groups (Smith et al., 1999). These individuals have negative expectations about their ability to deal with group-related situations (Rom & Mikulincer, 2003) and they believe that other group members will reject them. As a result of group diversity activating their attachment and affiliated behavioral systems, members with high group attachment anxiety will engage in negative interactions with their group, view their group as rejecting them, and perceive these experiences with negative emotions (Rom & Mikulincer, 2003). The chronic activation of members' group attachment systems will prove to have a negative impact on their abilities to resolve task-oriented problems (Rom & Mikulincer, 2003). Further, because group members' abilities to explore new and novel situations are inhibited, group diversity will be met with outgroup bias (Pelled et al., 1999) rather than exploration and acceptance. As the intensity, frequency, and duration of out-group bias persists, the negative effects of diversity will become increasing impactful (Schneider, 1987). Research suggests that the resulting strain on the group

will confirm its members' predisposed feelings of rejection and be reflected in members retaining their high attachment anxiety scores (Rom et al., 2003).

Looking at the second dimension of avoidance, group members who score low on trait group attachment avoidance view closeness to groups as necessary (Rom & Mikulincer, 2003), view group dependence and intimacy as positive values (Smith et al., 1999), and identify highly with groups (Rom & Mikulincer, 2003). Further, the lower the level of group attachment avoidance, the lower the distance coping (the process by which one distances oneself from those who are perceived to be a threat), and the higher the appraisal of task-oriented group interactions as positive experiences (Rom & Mikulincer, 2003).

Group members who score low on trait group attachment avoidance are likely to have their views challenged in a diverse group situation. As a result of the activation of their attachment and related behavioral systems, their ability to explore new and novel situations is inhibited. Group diversity will be met with outgroup bias (Pelled et al., 1999) resulting in the disruption of group dynamics (Tsui et al., 1992). The group's members will have difficulty developing attachment bonds because their exploratory systems are inhibited causing group diversity to not be examined in an open and constructive manner (Rom & Mikulincer, 2003). As immersion into the diverse group persists, group members will increasingly view task-oriented group interactions as negative experiences (Rom & Mikulincer, 2003). Research suggests that as this strain on the group persists, its members will increasingly engage in distance coping behaviors to prevent the active confrontation of threats and the intrusion of threatening thoughts. Distance coping and other deactivation strategies such as cognitive closure will be reflected by an increase in attachment avoidance scores for individuals whose trait group attachment styles are low in avoidance (Rom & Mikulincer, 2003).

In contrast, group members who score high on trait group attachment avoidance view closeness to groups as unnecessary (Rom & Mikulincer, 2003), view group dependence and intimacy as negative values (Smith et al., 1999), and score low on measures of identification with social groups (Rom & Mikulincer, 2003). Further, the higher the level of group attachment avoidance, the higher the distance coping and the appraisal of task-oriented group interactions as negative experiences (Rom & Mikulincer, 2003).

Members who score high on trait group attachment avoidance are likely to have their views affirmed in a diverse group. As a result of the activation of their attachment systems and affiliated behavioral systems, group members' abilities to explore new and novel situations will

be inhibited. Instances of group diversity will be met with outgroup bias (Pelled, 1999) negatively impacting group dynamics (e.g., Tsui et al., 1992). The group and its members' will have difficulty attaining the closeness and intimacy required to establish group attachment bonds (Rom & Mikulincer, 2003). As immersion into the diverse group persists, task-oriented group interactions will become increasingly viewed as negative experiences (Rom & Mikulincer, 2003). Research suggests that the resulting strain on group members will confirm their beliefs in the lack of value in group attachment bonds and result in their continued engagement in deactivation strategies. This will be reflected by members' group attachment avoidance scores remaining high (Rom & Mikulincer, 2003).

From the above and consistent with the anxiety and avoidance dimensions underlying the 4 group attachment styles, the following hypotheses will be tested:

*Hypothesis 1: Group diversity activates the group attachment system affecting attachment anxiety and avoidance.*

*H1a: For Secure individuals (low anxiety - low avoidance), group diversity will cause an increase in both the group attachment anxiety and avoidance.*

*H1b: For Preoccupied individuals (high anxiety - low avoidance), group diversity will cause an increase in the group attachment avoidance.*

*H1c: For Dismissive Avoidant individuals (low anxiety - high low avoidance), group diversity will cause an increase in the group attachment anxiety.*

*H1d: For Fearful Avoidant individuals (high anxiety - high avoidance), group diversity will have no effect on group attachment anxiety and avoidance.*

#### **4. Treatment of Conflict in the OB Group Dynamics Literature**

##### **4.1 Conflict: A Construct Definition**

*Conflict* is defined as the emotions, cognitions, and behaviors of an individual or group that inhibit or interfere with the emotions, cognitions, and behaviors of others (Boulding, 1965). Conflicts often occur as a result of limited resources and are based on incompatibilities in perceived needs and goals. Conflicts occur in organizations as a result of their divisional yet interdependent structures (Deutsch, 1973).

In recent years, organizational behavior research has focused on the relationship between intra group conflict and group composition, and its effects on the performance in organizational teams (Jehn, Bezrukova, & Thatcher, 2008). Two specific theories, namely, Dispersion and Alignment, reside at the forefront of this research. Dispersion theories center on

the distribution of individual characteristics (demographic) in a group (McGrath, 1998; Milliken & Martins, 1996) and the influence that such distributions have has on group processes and outcomes. The theoretical basis for dispersion is rooted in self-categorization theory (Tajfel & Turner, 1986). Self-categorization theory explains how the group as a whole influences its individual members, specifically, the mechanisms by which stereotyping and intra-group prejudice arise (e.g., Jehn, Northcraft, & Neale, 1999).

Alignment theories, on the other hand, focus on the grouping of varying demographics into homogeneous subgroups across similar members within a diverse group. Alignment theories, such as Faultline theory, focus on the psychological lines that divide larger heterogeneous groups into smaller homogeneous subgroups (Lau & Marnighan, 1998) as well as the effects that these divisions have on group processes, such as intragroup conflict.

Intragroup conflict is defined as the thoughts, emotions, and behaviors resulting from the perceived differences amongst members of a group (De Dreu & Gelfand, 2008). The foundational works on intragroup conflict suggest that conflict can have a detrimental effect on group processes and outcomes (e.g., Argyris, 1962; Blake & Mouton, 1984; Pondy, 1967). More recent research indicates that conflict can be beneficial to group processes and outcomes, and improve group creativity and decision making (e.g., Amason, 1996; Jehn, 1995; Jehn, 1997; Tjosvold, 1991; Van de Vliert & De Dreu, 1994).

As studies of conflict continue to proliferate in the organizational psychology literature, so do the range of circumstances under which conflict is found to be beneficial or detrimental (e.g., De Dreu, 200; Goncalo, Polman, & Maslach, 2010). Recently, in a meta-analysis of 116 empirical studies on intra-group conflict examining the overall trend of the relationship between intragroup conflict and group processes and outcomes, De Wit, Greer, and Jehn (2012) distinguished between the effects of intragroup conflict on proximal and distal group outcomes. Proximal group outcomes refer to the emotional, cognitions, and motivational states of the group, such as trust and cohesion (Marks, Mathieu, & Zaccaro, 2001). Distal group outcomes refer the performance-based outcomes of the group such as productivity and effectiveness (Anacona & Caldwell, 1992). The meta-analysis found that task conflict was beneficial whereas relationship conflict and process conflict (disputes amongst members regarding the coordination of group tasks, such as the allocation of responsibilities and resources; Jehn & Bendersky, 2003) were detrimental to both proximal and distal group outcomes. The type and amount of conflict that emerges in groups is in part dependent upon the attributions that are made about those

conflicts (Jehn, 1995). In following section, the construct of *conflict attribution* is defined, its theoretical underpinnings reviewed, and its underlying dimensions discussed.

## 4.2 Conflict Attribution

*Conflict attribution* is the process by which individuals attribute a conflict to be a substantive disagreement (Jehn, 1995), a socio-emotional disagreement (Jehn, 1995), or both (Jehn, 1997). Stemming from the field of social psychology, conflict attribution theory emerged from Pinkley's (1990) theory of conflict frames. Conflict frames are the perceptual filters that influence peoples' selection, processing, and evaluation abilities (Mather & Ynguesson, 1981) and are the vantage point from which disputes are interpreted (Pinkley, 1990). In order for conflicts to be effectively managed, they must first be acknowledged and then framed by those involved (Roth & Sheppard, 1989; Pinkley & Northcraft, 1994). Pinkley (1990) found that individuals tend to frame conflicts along three distinct dimensions: *emotional versus intellectual*, *compromise versus win*, and *task versus relationship*.

The *emotional versus intellectual conflict frame* dimension addresses the degree to which parties focus on the affective versus cognitive components of a conflict during a dispute (Pinkley & Northcraft, 1994). *Emotional conflict* driven individuals tend to focus more on the feelings and affective components of a conflict. *Intellectual conflict* driven individuals tend to focus more on the actions and behavioral outcomes of a conflict.

The *cooperation versus win conflict frame* dimension addresses the degree to which disputants see a conflict as the responsibility of one or both parties (Pinkley & Northcraft, 1994). *Cooperation conflict* focused individuals share the responsibility for the cause of a conflict and see both parties as responsible. These individuals act to maximize the benefits of the outcomes for both parties. *Win conflict* focused individuals hold the other party responsible for the cause of a conflict and act to maximize the benefits of their own outcomes at the expense of the other party (Pinkley, 1990).

The *task versus relationship conflict frame* dimension addresses the degree to which parties focus on the tangible versus interpersonal components of a conflict during a dispute (Pinkley & Northcraft, 1994). *Task conflict* driven individuals focus on differences in ideas or outcomes between parties as the cause of conflict. *Relationship conflict* driven individuals focus more on their conflict partner as the cause of conflict. Pinkley's (1990) original work treated task and relationship conflict as a single bipolar dimension. Subsequent empirical research has indicated that task and relationship conflict may be separate, but correlated dimensions (Amason,

1996; Jehn, 1995). Pinkley's (1990) three conflict dimensions, namely, emotional versus intellectual, compromise versus win, and task versus relationship, explain why disputants often differ significantly in how they view or "frame" the same conflict situation. From the model presented, it is clear that different individuals frame conflicts differently, which can result in parties having difficulty in finding a common ground (Pinkley & Northcraft, 1994).

### **4.3 Conflict Attribution in the Workplace**

In the past decade, organizational researchers have become interested in the attributions individuals make about conflicts at work. The theory of conflict frames (Pinkley, 1990) was originally imported into the organizational behavior field by Roth & Shepperd (1989) and began to proliferate when Jehn (1995) quantified task and relationship conflict attributions into an 8-question survey scale. Jehn's scale generated a measurement technique that was easily applicable to data gathering.

Within the organizational behavior literature, Jehn (1995) generated field specific definitions for task and relationship conflict. Jehn defined *task conflicts* as disagreements between individuals, groups, and entities about the nature of the work being conceptualized and performed. Task conflicts occur over substantive issues such as differences of opinion or ideas about the correct way to approach or solve a problem (Jehn, 1995). *Relationship conflicts* refer to socio-emotional disagreements (Jehn, 1995). Relationship conflicts are characterized by interpersonal disagreements and are usually associated with feelings of annoyance, animosity, anger, and resentment (Jehn, 1995). The two distinguishing factors between task and relationship conflicts are: (1) whether the conflict is focused on the task at hand or the interpersonal relationship between disputants, (2) whether the conflict is centered on disputants ideas and opinions or on feelings and emotions (Jehn, 1995). Specifically, the dimension of task versus relationship conflict is relevant to the conflict literature because whether a conflict is attributed to be either task or relationship based often determines the outcome of that conflict (Jehn, 1997).

### **4.4 Conflict Attribution & Current Theoretical Underpinnings**

Conflict attribution has a significant impact on the effectiveness and performance of work groups (Jehn, 1995). Managers spend 20% of their time addressing conflicts in the workplace (Thomas, 1998). The outcomes of conflicts can be either beneficial or detrimental depending on how the conflict is attributed (Jehn, 1995). Researchers have tested several individual level variables in hopes of finding one predictive of an individual's conflict attribution



type. For example, Bono, Boles, Judge, and Lauver (2002) used the Five-Factor Model to determine the degree to which personality influences peoples' task and relationship conflict attributions. In a longitudinal mixed-method study, undergraduate students were asked to respond to questions about a written conflict scenario and to keep a daily conflict journal diary. The findings showed that the five factors of personality, namely, *Agreeableness*, *Conscientiousness*, *Extraversion*, *Neuroticism*, and *Openness to Experience* were related to subjects' task and relationship conflict attributions. The study showed that openness, agreeableness, extraversion, and conscientiousness were positively correlated to reports of relationship conflict attribution. Although these findings are significant, the exploration of other individual level difference variables, such as group attachment, (Smith et al., 1999) may further contribute to our knowledge of conflict attribution. One relevant study that has taken this approach is Pistole's (1989) research on conflict resolution. Pistole found attachment style in interpersonal adult relationships was related to Rahim's (1983) conflict resolution style. To date, however, no studies have examined the relationship between group attachment style and conflict attribution type.

## **5. Group Attachment & Conflict Attribution**

In order to elucidate the relationship between group attachment and conflict attribution, the theoretical underpinnings of both theories are discussed and similarities between their underlying dimensions are explained. Similarities and differences between the *emotional states* of each group attachment style and relationship conflict attribution are discussed, and hypotheses are presented. Similarities and differences between the *cognitive states* of each group attachment style and task conflict attribution are discussed, and hypotheses are presented. It is also worth noting that conflict attributions are an individual level phenomenon and are measured as such.

Theoretical evidence suggests that attachment styles and conflict attribution types may be correlated at the emotional and cognitive levels. Each group attachment style is characterized by distinct emotional and cognitive patterns across time, situations, and partners (Smith et al., 1999). For example, secure attachment is defined by a balance between emotional and cognitive engagement whereas preoccupied attachment is defined by an excessive emotional response coupled with a suppressed cognitive response.

Theoretical evidence suggests that conflict attribution may overlap with attachment theory at the emotional and cognitive levels. Much like attachment, the relationship and task dimensions of conflict attribution are defined as having specific cognitive and emotional profiles

(Jehn, 1997). Similar to the differences in levels of emotional and cognitive regulation between attachment styles, individual-level differences in relationship and task conflict attributions were found to be consistent *within* each individual and vary *between* individuals (Bono et al., 2002). Because the attachment system develops prior to conflict attributions, I will relate these two theories at the cognitive and emotional levels from the perspective of group attachment.

### **5.1 Group Attachment & Relationship Conflict Attribution**

Theorists and researchers alike have found that secure attachment has a distinct emotional profile (e.g., Smith et al., 1999). Evidence in the field of social psychology supports these findings. For example, Brennan & Shaver (1995) found that securely attached individuals were less emotionally frustrated with partners and more emotionally open to others than individuals with other attachment styles. Mikulincer and Orbach (1995) found that secure individuals consistently reacted with less emotional defensiveness than individuals with other attachment styles. This is thought to occur because secure individuals believe that they have the ability to bring situations of distress to a positive outcome. Further, secure individuals believe that they are deserving of help and that others are willing to help them. Field and experimental studies on relationship conflict attribution have shown that some individuals have a relationship conflict attribution dimension that has an emotional profile similar to that of secure attachment. In the field of social psychology, Bono, Boles, Judge, and Lauver (2002) found that for some individuals, relationship conflict attribution was stable across time, scenarios, and partners. Across individuals, the degree of relationship conflict attribution varied such that some consistently attributed less relationship conflict than others (Bono et al., 2002). Further, Mikulincer and Orbach (1995) found that some people perceived situations as less emotionally focused than others. In the management literature, similar findings have emerged. For example, Jehn (1995) found that some employees' consistently perceived conflicts as less emotionally-based than others.

Research has shown that preoccupied attachment also has a distinct emotional regulation profile (e.g., Mikulincer & Orbach, 1995). For example, Brennan & Shaver (1995) found that preoccupied attached individuals were more emotionally frustrated with partners than individuals with other attachment styles. This is thought to occur because preoccupied individuals use an emotion-focused coping strategy centered on self-relevant indicators of distress that intensify the subjective experience of negative emotions and related schemas (Lazarus & Folkman, 1984). Further, Mikulincer and Orbach (1995) found that preoccupied

individuals were unable to repress their negative emotions when interacting with others.

Similarly, field studies on relationship conflict attribution have shown that some individuals have an emotional profile similar to that of preoccupied attachment. In the management literature, Jehn (1995) found that individuals have different subjective interpretations of conflict events such that some consistently perceived more relationship conflict than others.

Dismissive avoidant attachment also has a distinct emotional profile (e.g., Mikulincer & Orbach, 1995). For example, Rom and Mikulincer (2003) found that dismissive avoidant attachment positively correlated with socio-emotional performance deficits. Further, Brennan & Shaver (1995) found that dismissive avoidant attachment was positively correlated with emotional self-reliance and negatively correlated with seeking reassurance from others. This is thought to occur because dismissive avoidant individuals believe that they have the ability to bring situations of distress to a positive outcome. However, dismissive avoidant individuals believe that others are inept and unable to help them achieve their goals. As such, dismissive avoidant individuals feel that they can only rely on themselves. The emotional suppression of the dismissive avoidant attachment style may be interpreted as a defensive mechanism with the goal of avoiding negative affect experiences (Cassidy & Kobak, 1988). Rom and Mikulincer (2003) found dismissive avoidant attachment to be positively correlated with diminished positive emotions towards work groups. In the management literature, similar findings have emerged for the construct of relationship conflict. For example, Jehn (1995) found that employees had different subjective interpretations of conflict events such that some consistently attributed less relationship conflict than others.

Lastly, fearful avoidant attachment also has its distinct emotional profile (Shaver & Clark, 1994). Fearful avoidant attachment is characterized by a desire for social interaction with others coupled with behavioral inhibition due to fears of rejection (Bartholomew, 1990). This occurs because fearful individuals believe that they lack the ability to bring situations of distress to a positive outcome. Fearful avoidant individuals also believe that others are inept and unable to help them achieve their goals. As such, avoidant individuals feel that they can neither rely on themselves nor others. This causes fearful avoidant individuals to behave in a highly socially-dysfunctional way. Evidence in the field supports these research findings. For example, Shaver & Clark (1994) found that within their clinical subject pool, fearful avoidant attached individuals exhibited extremely high scores on attachment anxiety. This indicated that these individuals used an emotion-focused coping strategy (Lazarus & Folkman, 1984). Within the management

field, Vasquez, Durik and Hyde (2002) found that fearful avoidant individuals had a marked difficulty in socio-emotional work-related domains. These included role overload and excessive concerns about work. Based on the above rationale, the following hypotheses are proposed.

*Hypothesis 2a: Group attachment anxiety is positively correlated to relationship conflict attribution.*

*Hypothesis 3: Group attachment styles have different levels of relationship conflict attribution, such that:*

*Hypothesis 3a: Individuals with secure group attachments will have significantly lower relationship conflict attribution scores than individuals with preoccupied and fearful avoidant, but not significantly different than individuals with dismissive group attachments;*

*Hypothesis 3b: Individuals with dismissive avoidant group attachments will have significantly lower relationship conflict attribution scores than individuals with preoccupied and fearful avoidant group attachments.*

## **5.2 Group Attachment & Task Conflict Attribution**

Research has found that secure attachment has a distinct cognitive profile (e.g., Mikulincer, 1997). For example, Mikulincer and Sheffi (2000) found that secure attachment was correlated with a greater degree of cognitive openness than other attachment styles. Further, secure individuals were found to have “positive mental working models” of situational outcomes with cognitively differentiated attachment schemas about thoughts of rejection (Mikulincer & Sheffi, 2000). This is thought to occur because secure individuals believe that they have the ability to bring situations of distress to a positive outcome. Further, secure individuals believe that they are deserving of help and that others are willing to help them.

Similarly, field studies on conflict attribution have shown that the task conflict dimension has a cognitive profile similar to that of secure attachment. Bono, Boles, Judge, and Lauver (2002) found that within each person task conflict attribution was stable across time, scenarios, and partners. Across individuals, the level of task conflict attribution was found to vary, such that some individuals consistently experienced less task conflict than others (Bono et al., 2002). Further, Mikulincer (1997) found that some individuals were less cognitively focused while others remained consistently open to new information during situations of conflict. In the management literature, similar findings have emerged. For example, Jehn (1995) found that some individuals consistently experienced less task conflict whereas others scored significantly

higher on experiences of task conflict. Since both task conflict attribution and attachment style relate to an individual's degree of focus on cognitions, this may suggest a correlation between the two constructs.

Theorists and researchers alike have found that preoccupied attachment has a distinct cognitive profile (Mikulincer, 1997). Several research studies in the field of social psychology have found preoccupied attachment to be negatively correlated with schemas that orient individuals towards cognitive cues of threats. This indicates that such hyperactivating strategies cause cognitive attachment schemas to be diminished due to a chronically activated emotional state (e.g., Main 1990; Main, Kaplan, & Cassidy, 1985). Similarly, field studies on task conflict attribution have shown the task conflict dimension to have a cognitive profile similar to preoccupied attachment. For example, one study on information processing found that some individuals exhibited diminished degrees of cognitive openness and were less likely than others to rely on new information to make decisions (Mikulincer, 1997). In the management literature, similar findings have emerged. For example, Jehn (1997) found that some individuals consistently experience less task conflict than others.

Research has found dismissive avoidant attachment to have a distinct cognitive profile (Mikulincer & Orbach, 1995). For example, Mikulincer and Shaver (2003) found that during stressful situations subjects classified as dismissive attached had accessible working mental schemas of deactivating states of mind associated with deflecting information about attachment topics during stressful situations. This occurs because avoidant individuals believe that they have the ability to bring situations of distress to a positive outcome. However, avoidant individuals believe that others are unable to help them achieve this goal. As such, avoidant individuals feel that they can only rely on themselves to bring the situation to a desirable outcome. Dismissive avoidant attachment was found to be positively correlated with distance coping (Lussier, Sabourin, & Turgeon, 1997). This strategy biases cognitive information and attributes failures to external causes as opposed to internal causes in order to deflect negative thoughts about oneself (Kennedy, 1999; Main, 1990).

Rom and Mikulincer (2003) found dismissive avoidant attachment to be positively correlated with cognitive closure to new information. Dismissive avoidant attachment is a deactivating strategy that assures that the attachment system remains in an emotionally suppressed state minimizing the subjective perception of threats. In doing so, dismissive avoidant attached individuals minimize their subjective experiences of negative thoughts and

related schemas (Cassidy & Kobak, 1988). In the management literature, similar findings have emerged for task conflict. For example, in a longitudinal field study on conflict attribution, Jehn (1997) found that employees had different subjective interpretations of conflict events such that some consistently perceived more task conflicts than others.

Research has shown that fearful avoidant attachment has a distinct cognitive profile. In the field of social psychology, Shaver & Clark (1994) found that a significant portion of participants within their clinical subject pool exhibited a high score on attachment avoidance, indicating the use of distance coping strategies. This was thought to occur because fearful avoidant individuals believe that they lack the ability to bring situations of distress to a positive outcome. Fearful avoidant individuals also believe that others are unwilling to help them achieve their goals. As such, they feel that they can neither rely on themselves or others to resolve matters. This results in highly dysfunctional social-interactions with others. Within the management literature, in a study on the relationship between attachment and work, Vasquez, Durik, and Hyde (2002) found that fearful avoidant individuals experienced difficulties in socio-emotional work related domains. Field studies on task conflict attribution have shown the dimension to have a cognitive profile similar to that of fearful avoidant attachment such that some individuals consistently experienced higher levels of task conflict than others (Jehn, 1997). Further, Jehn (1995) found that individuals attributed conflict differently, such that some consistently perceive more task conflict than others. Hence, the following hypotheses will be tested:

*Hypothesis 2b: Group attachment avoidance is positively correlated to task conflict attribution.*

*Hypothesis 3c: Secure group attached individuals will have significantly lower task conflict attribution scores than avoidant and fearful group attached individuals, but not significantly lower than preoccupied group attached individuals;*

*Hypothesis 3d: Preoccupied group attached individuals will have significantly lower task conflict attribution scores than dismissive and fearful avoidant group attached individuals, but not significantly lower than secure group attached individuals.*

### **5.3 Group Attachment Styles & Conflict Attribution in Diverse Groups**

Another application of group attachment to organizational behavior pertains to conflict attributions in diverse groups. Hypothesis 1 proposed that each group attachment style has a distinct trait and state profile and that individuals' group attachment systems are activated by group diversity. Hypothesis 2 proposed that group attachment anxiety is related to relationship

conflict attribution, and that group attachment avoidance is related to task conflict attribution. Drawing on Hypothesis 1 in combination with Hypothesis 2, Hypothesis 3 proposed that in as much as each group attachment style has a trait group attachment anxiety and avoidance profile, each group attachment style also has a trait task and relationship conflict attribution profile. When considered together, Hypotheses 1 through 3 suggest that another pattern may emerge when examining the relationship between group attachment style and conflict attribution when individuals are primed to think about either homogeneous or diverse groups. Generally, I propose that task and relationship conflict attributions will be higher when individuals are primed to think about a diverse group than when they are primed to think about a similar group for some group attachment styles.

Previously, I proposed that secure group attached individuals will exhibit low group attachment anxiety and avoidance in similar groups and high group attachment anxiety and avoidance in diverse groups. As well, I proposed that secure group attached individuals may have relationship conflict attributions that are positively correlated with group attachment anxiety and task conflict attributions that are positively correlated with group attachment avoidance. I now further suggest that these two propositions hold true together. Hence, the following hypotheses will be tested:

*Hypothesis 4: Group diversity activates the group attachment behavioral system causing task and relationship conflict type scores for some group attachment styles in the diverse group condition to be higher than scores in the similar group condition, such that:*

*Hypothesis 4a: For Secure individuals, group diversity will cause an increase in task and relationship conflict attribution type scores;*

Previously, I proposed that preoccupied group attached individuals will exhibit high group attachment anxiety in both similar and diverse group contexts. I proposed that preoccupied individuals will exhibit low group attachment avoidance in similar groups and exhibit high group attachment avoidance in diverse groups. Further, I proposed that preoccupied individuals will have relationship conflict attributions that are positively correlated with attachment's anxiety dimension and will have task conflict attributions that are positively correlated with group attachment avoidance. I now suggest that these two aforementioned propositions hold true together and in combination. Hence, the following hypotheses will be tested:

*Hypothesis 4b: For Preoccupied individuals, group diversity will cause an increase in task conflict type scores;*

Previously, I proposed that dismissive avoidant group attached individuals will exhibit low group attachment anxiety in similar groups and exhibit high group attachment anxiety in diverse groups. I proposed that dismissive avoidant individuals will exhibit high group attachment avoidance in similar groups and exhibit high group attachment avoidance in diverse groups. Further, I proposed that dismissive avoidant individuals would have relationship conflict attributions that are positively correlated with group attachment anxiety and task conflict attributions that are positively correlated to attachment group avoidance. I now further suggest that these two aforementioned propositions hold true together and in combination. Hence, the following hypotheses will be tested:

*Hypothesis 4c: For Dismissive Avoidant individuals, group diversity will increase relationship conflict type scores;*

Previously, I proposed that fearful avoidant group attached individuals will exhibit high group attachment anxiety in both similar and diverse groups. I proposed that fearful individuals will exhibit high group attachment avoidance in both similar and diverse groups. As well, I proposed that fearful group attached individuals will have relationship conflict attributions that are positively correlated with group attachment anxiety and task conflict attributions that are positively correlated with group attachment avoidance. I now further suggest that these two aforementioned propositions hold true together and in combination. Hence, the following hypotheses will be tested:

*Hypothesis 4d: For Fearful Avoidant, group diversity will have no effect on task and relationship conflict type scores.*

## **6. Methodology – Study 1**

### **6.1 Sample & Procedures**

The purpose of Study 1 was to examine the activation of group attachment systems in individuals with various group attachment styles (Smith et al., 1999) and to explore conflict attributions in two different group contexts (similar versus diverse). Study 1 was a convenience sample of undergraduate students at the John Molson School of Business in Montreal, Quebec, Canada. Data collection took place during the fall school semester of 2010 and the winter semester of 2011. Data was collected using online self-report surveys with two points of data collection staggered between two to six weeks apart. The sample consisted of 129 participants.



All cases missing 2% or more data points ( $n = 14$ ) were discarded. Expectation Maximization (EM) was used to complete any missing data in the remaining cases. The sample consisted of 63 female participants and 52 male participants. Ages ranged from 17 to 26 years. Work experience ranged from 1 to 8 years.

At the beginning of an introductory course lecture in organizational behavior at the John Molson School of Business at Concordia University, students were informed through a five-minute presentation accompanied by a handout (see Appendix 1) that they were eligible to participate in a voluntary research study. Students were informed of the general nature of the study, how their participation would impact the research being conducted, and what they could learn by participating. In exchange for their participation students received 1% extra course credit for completing part 1 of the online survey and an additional 1% extra course credit for completing part 2 of the online survey.

Students were informed that all private information would be held confidential. Those choosing not to participate in the study were notified that there was no penalty for doing so because it was not part of their regular course requirements. At the end of the lecture, those interested in participating remained after class to complete a consent form. The consent form outlined what was expected of participants, what risks they would face, and that they were free to discontinue the study at any time (see Appendix 2). Surveys were completed online; students were directed to the online survey by logging on to the JMSB website.

At Time 1, participants were primed to think about a “similar group” context. Prior to completing the questions, participants were instructed to answer the questions in reference to a group of which they were, or are currently, a member that they consider group members to be similar to themselves. These groups could include work groups, university work groups, and sports teams to name a few. These groups are consistent with the definition of work groups provided earlier. This first survey included 36 questions. Three questions pertained to the age, gender, and work experience of the participant (see Appendix 4), 25 questions pertained to group attachment style, and 8 questions pertained to conflict attribution. At Time 2, participants were instructed to answer the questions in reference to a group of which they are currently, or were in the past, a member, which they consider group members to be different from themselves, in order to prime their responses to a diverse group context. This second survey included the same 36 questions as Wave 1. At the beginning of each wave of online data collection, participants were informed in writing on the computer screen that they were free to discontinue the study at

any time. Upon completion of the study, participants were given a debriefing handout explaining the full nature of the research study in which they had participated (see Appendix 3).

## 6.2 Measures

**Group Attachment.** Group attachment style was measured using Brennan, Clark, and Shaver's (1998) ERS, as adapted by Smith and Coats (1999). The 25-item scale measures the two dimensions of group attachment anxiety (13 items) and avoidance (12 items). Sample items are, "I sometimes worried that I would be hurt if I allowed myself to become too close to my group" (anxiety), "Often my group wanted me to be more open about my thoughts and feelings than I felt comfortable being" (anxiety), "I knew that my group would be here when I needed it" (avoidance; reverse-keyed), and "I was comfortable not being close to my group" (avoidance). Responses were provided on 7-point Likert scales ranging from strongly disagree to strongly agree. In Wave 1, the similar group context, the Cronbach Alphas for group attachment anxiety and avoidance were .83 and .87, respectively. In Wave 2, the diverse group context, the Cronbach Alphas for group attachment anxiety and avoidance were .82 and .82, respectively.

**Conflict Attribution Type.** Jehn's (1995) conflict attribution type scale was adapted to the group context and used to measure group conflict attribution type. The 8-item scale measures the two dimensions of relationship (4 items) and task conflict attribution (4 items). Sample items are, "How much friction was there in your group" (relationship), "How much were personality conflicts evident in your group?" (relationship), "How often did your group disagree about opinions regarding the work being done?" (task), and "To what extent were there differences of opinion in your group?" (task). Responses were provided on 7-point frequency scales ranging from *almost never* to *almost all the time*. In Wave 1, the similar group context, the Cronbach Alphas for group relationship and task conflict attribution type were .87 and .91, respectively. In Wave 2, the diverse group context, the Cronbach Alphas for group relationship and task conflict attribution type were .86 and .88, respectively.

**Perceived group similarity and diversity.** Perceived group similarity and diversity were primed to create two conditions. As described in the procedure, participants were first asked to think about a group (of which they were or are a member) in which they perceived other members to be similar and then to respond to the attachment and conflict measures. Second, they were asked to think about a group (of which they were or are a member) in which they perceived all members to be diverse and then respond to the attachment and conflict measures again.

## 7. Results – Study 1

Hypothesis 1 stated that diversity activates the group attachment behavioral system affecting group attachment anxiety (hereafter anxiety) and group attachment avoidance (hereafter avoidance) such that scores in the diverse condition will be higher than scores in the similar condition. I tested this hypothesis by examining correlations between anxiety and avoidance in the similar group (hereafter similar) and diverse group (hereafter diverse) conditions. Thereafter, a repeat measures MANOVA analysis followed by paired-samples *t*-Tests were conducted to determine if significant differences were observed for different group attachment styles within the similar and diverse conditions.

Descriptive statistics and correlations for all variables in the similar and diverse conditions are shown in Table 1. The correlation analyses for the two group attachment dimensions revealed that anxiety and avoidance were significantly positively correlated in the whole sample in both the similar and diverse conditions. Without accounting for different attachment styles, as anxiety increased, avoidance increased as well. A correlation analysis of anxiety in the similar and diverse conditions revealed that anxiety in the similar condition was significantly positively related to both anxiety and avoidance in the diverse condition. A correlation analysis of avoidance in the similar and diverse conditions revealed that avoidance in the similar condition was significantly positively related to both anxiety and avoidance in the diverse condition.

The next step in testing H1 was to divide participants into attachment categories. Group attachment was classified into 4 styles according to ratings on the two dimensions of anxiety and avoidance. Anxiety was dichotomized using the median value for the sample in the similar condition as the cut-off point (*Mdn* = 2.5). To confirm that the median cut-off successfully divided people into low and high anxiety, the mean score on anxiety was compared for those who fell below the median and those who fell above. The difference in the means was significant ( $M = 1.95$ ,  $SD = 0.40$  for those below the median [ $n = 63$ ] and  $M = 3.05$ ,  $SD = 0.29$  for those above the median [ $n = 52$ ],  $t [113] = -16.60$ ,  $p < .01$ ). Avoidance was also dichotomized using the median value for the sample in the similar group condition as the cut-off point (*Mdn* = 2.5). To confirm that the median cut-off successfully divided people into low and high avoidance, the mean score on avoidance was compared for those who fell below the median and those who fell above. The difference in the means was found to be significant ( $M = 2.00$ ,  $SD$

= 0.41 for those below the median [ $n = 67$ ] and  $M = 3.02$ ,  $SD = 0.39$  for those above the median [ $n = 48$ ],  $t [105] = -13.60$ ,  $p < .01$ ).

The division based on these median splits resulted in 41% of the sample being classified as securely attached (low anxiety - low avoidance), 17% being classified as preoccupied attached (high anxiety - low avoidance), 14% being classified as dismissive avoidant attached (low anxiety - high avoidance), and 28% being classified as fearful avoidant attached (high anxiety - high avoidance). This distribution is generally consistent with other studies (Hazan & Shaver, 1987; Kobak & Sceery, 1988), although the percentage of individuals classified as securely attached appeared somewhat lower than the expected 58% found in past research and the percentage of individuals classified as avoidant attached appeared somewhat higher than the expected 23% found in past research.

Scores on anxiety and avoidance were measured for all four group attachment styles in the similar and diverse group conditions. Repeated-measures MANOVA analyses confirmed that there were significant multivariate effects for attachment styles ( $F [6,222] = 40.40$ ,  $p < .01$ ), similar and diverse conditions ( $F [2, 110] = 6.15$ ,  $p < .05$ ), and the interaction between attachment style and similar versus diverse group condition ( $F [6, 222] = 6.69$ ,  $p < .05$ ).

Univariate between-group analyses showed that some group attachment styles reported significantly more anxiety ( $F [3,111] = 58.63$ ,  $p < .01$ ) and significantly more avoidance ( $F [3,111] = 45.11$ ,  $p < .01$ ) than others. Univariate tests also showed that participants reported significantly more anxiety ( $F [1,111] = 6.69$ ,  $p < .01$ ) and avoidance ( $F [1,111] = 8.34$ ,  $p < .01$ ) when primed to think about a diverse group than when primed to think about a similar group. There was also a significant interaction between group attachment style and similar and diverse conditions for anxiety ( $F [3,111] = 4.05$ ,  $p < .01$ ) and avoidance ( $F [3,111] = 10.02$ ,  $p < .01$ ).

Further analyses of anxiety and avoidance in the similar versus diverse conditions were conducted using paired-samples  $t$ -Tests (shown in Table 2). Consistent with Hypothesis H1a, the analyses showed that for participants who were in the secure group (low anxiety - low avoidance), anxiety was significantly higher when they were primed to think about a diverse group than when they were primed to think about a similar group. Further, avoidance was higher in the diverse as compared to the similar condition. Consistent with Hypothesis H1b, the analyses showed that for participants who were in the preoccupied group (high anxiety - low avoidance), there was no significant difference in anxiety scores when comparing the diverse and similar conditions, whereas, the difference in avoidance was significant when comparing the

diverse and similar conditions. Consistent with Hypothesis H1c, the analyses showed that for participants who were in the dismissive avoidant group (low anxiety - high avoidance), anxiety was significantly higher in the diverse as compared to the similar condition, whereas there was no significant difference in avoidance scores when comparing the diverse and similar conditions. Consistent with Hypothesis H1d, the analyses showed that for participants who were in the fearful avoidant group (high anxiety - high avoidance), there was no significant difference in anxiety scores nor was there any difference in avoidance scores when comparing the diverse and similar conditions. These findings fully support Hypothesis 1.

Hypothesis 2 stated that anxiety and avoidance are related to attributions of relationship and task-based conflict. This hypothesis was tested with bivariate correlations (shown in Table 1). The correlation analyses revealed that, consistent with Hypothesis H2a, anxiety and relationship conflict attribution were positively correlated when participants were primed to think about both a similar, and a diverse, condition. Consistent with Hypothesis H2b, avoidance and task conflict were positively correlated when participants were primed to think about both a similar, and a diverse, condition. These findings fully support Hypothesis 2.

Hypothesis 3 stated that individuals with different group attachment styles will attribute different amounts of task and relationship conflict, such that individuals who are low on anxiety will attribute significantly less relationship conflict than those who are high on anxiety, and individuals who are low on avoidance will attribute significantly less task conflict than those who are high on avoidance. This hypothesis was tested with a MANOVA analysis followed by LSD post-hoc tests.

Scores on anxiety and avoidance, and relationship and task conflict were compared for all four group-attachment styles in the similar group condition (shown in Table 3). Consistent with Hypothesis 3, MANOVA analyses confirmed that there was a significant multivariate effect for attachment style ( $F [6,222] = 4.08, p < .01$ ). Further, univariate analyses showed significant main effects for attachment type with respect to both relationship conflict attributions ( $F [3,111] = 7.54, p < .001$ ) and task conflict attributions ( $F [3,111] = 4.77, p < .01$ ).

In partial support of Hypothesis H3a, LSD post-hoc tests (shown in Table 4 and Table 5) indicated that attributions of relationship conflict for participants in the secure group (low anxiety - low avoidance) were significantly lower than were those in the dismissive avoidant group (low anxiety - high avoidance) and those in the fearful avoidant group (high anxiety - high avoidance), but not significantly different from those in the preoccupied group (high anxiety -

low avoidance). In partial support of Hypothesis H3b, LSD post-hoc tests indicated that attributions of relationship conflict for the participants in the dismissive avoidant group (low anxiety - high avoidance) were significantly higher than were those in the secure group and those in the preoccupied avoidant group (high anxiety - low avoidance), but not but not significantly different from those in the fearful avoidant group (high anxiety - high avoidance).

In support of Hypothesis H3c, the LSD post-hoc tests confirmed that attributions of task conflict for participants in the secure group (low anxiety - low avoidance) were significantly lower than were those in the dismissive avoidant group (low anxiety - high avoidance) and those in the fearful avoidant group (high anxiety - high avoidance), but not significantly different from those of the preoccupied group (high anxiety - low avoidance). In support of Hypothesis H3d, the LSD post-hoc tests confirmed that, attributions of task conflict for participants in the preoccupied group (high anxiety - low avoidance) were significantly lower than those in the dismissive avoidant group (low anxiety - high avoidance), and those in the fearful avoidant group (high anxiety - high avoidance). These findings partially support Hypothesis 3.

Hypothesis 4 stated that diversity activates the group attachment system such that attributions of relationship and task based conflicts by some attachment styles in the similar condition will be lower than those in the diverse condition. This hypothesis was tested by conducting repeated measures MANOVA analysis followed by paired-samples *t*-Tests to determine if significant differences could be observed for different group attachment styles within the similar versus diverse conditions.

Scores on relationship and task conflict were measured for all four group-attachment styles in the similar and diverse conditions (shown in Table 6). Repeated-measure MANOVA analyses confirmed that there were significant multivariate effects for attachment style ( $F [6,222] = 2.79, p < .05$ ), similar and diverse conditions ( $F [2, 110] = 5.56, p < .01$ ), and a marginal interaction between attachment style and similar and diverse conditions ( $F [6, 222] = 1.66, p < .07$ ).

Univariate between-group analysis showed that some group attachment styles attributed significantly more relationship ( $F [3,111] = 5.52, p < .01$ ) and task conflict ( $F [3,111] = 2.53, p < .06$ ) than others. Univariate tests also showed that participants primed to think about a diverse condition attributed significantly more task ( $F [1,111] = 611.21, p < .01$ ) but not relationship conflict ( $F [1,111] = 2.65, ns$ ) than those primed to think about a similar condition. There was also a significant interaction between group attachment style and similar and diverse conditions

for task conflict ( $F [3,111] = 2.87, p < .05$ ) and marginally significant interaction for relationship conflict attribution ( $F [3,111] = 1.8, p < .10$ ). Further analyses of relationship and task conflict attribution in the similar versus diverse conditions were conducted using paired-samples  $t$ -Tests (shown in Table 6).

Consistent with Hypothesis H4a, attributions of both relationship and task conflict were significantly higher in the diverse as compared to the similar condition for participants who were in the secure group (low anxiety - low avoidance). In partial support of Hypothesis H4b, attributions of relationship conflict were marginally higher and those of task conflict were significantly higher in the diverse as compared to the similar condition for participants who were in the preoccupied group (high anxiety - low avoidance).

In partial support of Hypothesis H4c, attributions of both relationship and task conflict were not significantly different in the diverse as compared to the similar condition for participants who were in the dismissive avoidant group (low anxiety - high avoidance). Consistent with Hypothesis H4d, , attributions of relationship and task conflict were not significantly different in the diverse as compared to the similar condition for participants who were in the fearful avoidant group (high anxiety - high avoidance). These findings fully support Hypothesis 4.

## **8. Conclusions Based on Study 1**

The results of Study 1 are consistent with the notion that priming participants to think about the diverse group condition is correlated with changes in reported anxiety and avoidance in work groups. The findings of Study 1 are also consistent with the notion that reported group attachment anxiety and avoidance are correlated with relationship and task conflict attributions such that people with different attachment styles attribute different amounts of task and relationship conflict. Overall, the pattern of results that emerges suggests that the underlying dimensions of group attachment anxiety and avoidance vary systematically across attachment styles and between the similar and diverse primed conditions.

Study 1 had several methodological limitations to which improvements could be readily made. First, Study 1 allowed participants to consider any group in which they were involved, without controlling for that group being a past or present group. Second, Study 1 considered many types of groups outside an organizational context including work groups, sports teams, and university work groups. Third, group similarity and diversity were determined solely by the perception of the participants without any third party verification of actual similarity or diversity.

Lastly, participants in this sample were students as opposed to employees within an organizational setting. Study 2 was conducted with a view of testing the hypotheses herein in a solely organizational context, while addressing some of these limitations.

## **9. Methodology – Study 2**

### **9.1 Sample & Procedures**

A large multi-national Hi-Technology start up firm based in Toronto was selected for Study 2. The director of the firm was contacted and informed that my study served to address the effects of individuals' personalities on the performance of diverse teams in the workplace. Benefits cited to the firm included helping to educate them on how to minimize conflict between directors, managers, and subordinates, and to improve the performance of work groups. The request was followed up with a formal research proposal (see Appendix 9). The research proposal in Appendix 9 was the initial proposal submitted to the firm and was subsequently modified to include only the metrics that fell within the firm's data collection constraints. This study was a part of a larger study that included measurements beyond the scope of my thesis research.

Employees of the Hi-Technology start up firm worked in product-based ad-hoc teams. Each employee was assigned to more than one product development team at a time. Each team was diverse in nature in terms of nationality as well as the cross-functional skills required to design, develop, produce, market, and manufacture hi-tech products. The ad-hoc teams on average spent 2 years working on the development of a product from concept to launch and then were disbanded. Each team consisted of at least two software engineers, two hardware engineers, a user interface specialist, a marketing department team member, an industrial designer, and a project manager. The sample consisted of 87 participants. As per Study 1, a criterion to delete all cases missing more than 2% of data points was observed. In this sample, no participants met this criterion. One case was later discarded due to the employee informing me that she never felt that she had worked in a group with individuals who were similar to her. Expectation Maximization (EM) was used to complete any missing data in the sample. The sample consisted of 14 female participants and 72 male participants. Age ranged from 27 to 56 years. Work experience ranged from 7 to 32 years.

I was present on site during work hours for the five-month duration of the data collection. All surveys were in hard copy format. I handed out and collected the surveys from participants on site and in person. Surveys were administered in the morning and collected prior



to the end of the day. At times, surveys required up to four days to collect from participants due to workloads on active projects. At the beginning of each wave of data collection, participants were informed verbally that they were free to discontinue the study at any time. Upon completion of the study, participants were given a debriefing handout explaining the full nature of the research (see Appendix 12). During this time, I re-evaluated each work group in situ and judged them all to be both cross-functionally and nationally diverse.

During a weekly Monday morning meeting held by the firm, employees were notified through a ten-minute presentation accompanied by a handout (see Appendix 10) that they were eligible to participate in a voluntary research study. Employees were informed of the general nature of the study, how their participation would impact the research being conducted, how the research conducted would benefit their firm, and what they could learn by participating. Employees were further informed that the study consisted of 4 waves of data collection. Each participant would be required to complete all 4 waves of the survey in order to complete the study. In exchange for their involvement, participants' names were placed in a raffle with the chance to win one of 9 prizes: (1) One cash prize of \$200, (2) One cash prize of \$100, (3) One cash prize of \$50, (4) One of cash six prizes of \$25.

Employees were informed that all private information would be held confidential and only the principle researcher would have access to individual scores. Further, managers would not know which employees chose to participate in the study, nor have access to data from individual employees. Employees were informed that the data collected would only be accessible to the managers on an aggregate level to assist in future decision making. Employees were allowed to complete the surveys during work hours. Further, employees were informed that there was no penalty for choosing not to participate in the study because it was not part of their regular work requirements. Those interested in participating in the study were asked to approach me in the office during work hours to receive and complete a consent form. The consent form outlined what was expected of participants, what risks they would face, and that they were free to discontinue the study at any time (see Appendix 11).

At Time 1, one week after the initial presentation, wave one of the survey was distributed to participants. Wave one included 28 questions relevant to my thesis. Three questions pertained to the age, gender, and work experience of the participant (see Appendix 13), and 25 questions pertained to group attachment style. Prior to completing the survey, participants were instructed to answer the questions with reference to a position they held for a

company other than their current employer where they considered the members of their work group to be very similar to them in order to prime their responses to a similar work group context.

At Time 2, one month later, wave two of the survey was distributed to participants. Wave two consisted of eight questions pertaining to conflict attribution, among other questions not related to this thesis. Prior to completing this survey, participants were instructed to answer the questions with reference to the same company they thought of in the first survey (a company other than their current employer where they considered the members of their work group to be very similar to them), in order to prime their responses to a similar work group context.

At Time 3, two months after the second survey, wave three of the survey was distributed to participants. Wave three included the 25 questions pertaining to group attachment style. Prior to completing the survey, participants were instructed to answer the questions with reference to the position they hold at the company that currently employs them in order to prime their responses to their current work group context.

At Time 4, one month later, wave four of the survey was distributed to participants. Wave four of the survey included the eight questions pertaining to conflict attribution, among others not used in this thesis. Prior to completing the survey, participants were again instructed to answer the questions with reference to the position they hold at the company that currently employs them in order to prime their responses to their current work group context.

## **9.2 Measures**

**Group Attachment.** Group attachment style was measured using the same Brennan, Clark, and Shaver's (1998) ERS as adapted by Smith, Murphy, and Coats (1999) measures as in Study 1. The 25-item scale measures the two dimensions of group attachment anxiety (13 items) and avoidance (12 items). Responses were provided on 7-point Likert scales ranging from strongly disagree to strongly agree. In Wave 1, the similar group context, the Cronbach Alphas for group attachment anxiety and avoidance were .86 and .82, respectively. In Wave 3, the diverse group context, the Cronbach Alphas for group attachment anxiety and avoidance were .83 and .78, respectively.

**Conflict Attribution Type.** Jehn's (1995) conflict attribution type scale was adapted to the group context and used to measure group conflict attribution type as in Study 1. The 8-item scale measures the two dimensions of relationship (4 items) and task (4 items) conflict attribution. Responses were provided on 7-point frequency scales ranging from *almost never* to

*almost all the time.* In Wave 2, the similar group context, the Cronbach Alphas for relationship and task conflict attribution type were .88 and .80, respectively. In Wave 4, the diverse group context, the Cronbach Alphas for relationship and task conflict attribution type were .84 and .95, respectively.

**Group similarity and diversity.** Participants were primed to think about an organizational work group to which they belonged in the past, in which they perceived all members to be similar, and then to respond to the attachment and conflict measures. This represented the similar group condition. Second, participants were asked to think about their current work group and to respond to the attachment and conflict measures again. Participants were not primed to think about the level of diversity in the current work group when responding to the questions, but the researcher observed the actual diversity of the work groups in situ. Based on these observations, the current work groups were deemed to be diverse with respect to cross-functional skills and nationality. Thus, measures taken in reference to the “current” group served as a measure of participants’ experiences in the diverse group condition.

## **10. Results – Study 2**

Hypothesis 1 stated that diversity activates the group attachment behavioral system affecting anxiety and avoidance scores such that scores in the diverse condition will be higher than scores in the similar condition. The correlations between anxiety in the similar and current conditions and avoidance in the similar and current conditions were examined to test this hypothesis. Thereafter, a repeat measures MANOVA analysis followed by paired-samples *t*-Tests were conducted to determine if significant differences were observed for different group attachment styles within the similar and current conditions. Descriptive statistics and correlations for all variables are shown in Table 7. The correlation analyses for the two group attachment dimensions revealed that anxiety and avoidance were significantly positively correlated in the whole sample in both the similar and current conditions. Without controlling for attachment style, anxiety and avoidance were positively correlated. A correlation analysis of anxiety in the similar and current conditions revealed that anxiety in the similar condition was significantly positively correlated to both anxiety and avoidance in the diverse condition. A correlation analysis of avoidance in the similar and current conditions revealed that avoidance in the similar condition was significantly positively correlated to avoidance and positively correlated to anxiety, but not significantly in the current condition.

The next step in testing H1 was to divide participants into attachment styles. Group attachment was classified into 4 styles according to ratings on the dimensions of anxiety and avoidance. Anxiety was dichotomized using the median value for the sample in the similar condition as the cut-off point ( $Mdn = 2.1$ ). To confirm that the median cut-off successfully divided people into low and high anxiety, the mean score on anxiety was compared for those who fell below the median and those who fell above. The difference in the means was significant ( $M = 1.62$ ,  $SD = 0.31$  for those below the median [ $n = 49$ ] and  $M = 2.87$ ,  $SD = 0.42$  for those above the median [ $n = 37$ ],  $t [84] = 15.87$ ,  $p < .001$ ). Avoidance was also dichotomized using the median value for the sample in the similar group condition as the cut-off point ( $Mdn = 2.6$ ). To confirm that the median cut-off successfully divided people into low and high avoidance, the mean score on avoidance was compared for those who fell below the median and those who fell above. The difference in the means was found to be significant ( $M = 2.14$ ,  $SD = 0.37$  for those below the median [ $n = 51$ ] and  $M = 3.29$ ,  $SD = 0.45$  for those above the median [ $n = 35$ ],  $t [84] = 12.37$ ,  $p < .001$ ).

The division based on these median splits resulted in 44% of the sample being classified as securely attached (low anxiety - low avoidance), 15% being classified as preoccupied attached (high anxiety - low avoidance), 13% being classified as dismissive avoidant attached (low anxiety - high avoidance), and 28% being classified as fearful avoidant attached (high anxiety - high avoidance). This distribution is generally consistent with other studies (Hazan & Shaver, 1987; Kobak & Sceery, 1988), although the percentage of individuals classified as secure appeared somewhat lower than the expected 58% found in past research and the percentage of individuals classified as avoidant appeared somewhat higher than the expected 23% found in past research.

Scores on anxiety and avoidance were compared for all four group attachment styles in the perceived similar and current group conditions. Repeated-measures MANOVA analyses confirmed that there were significant multivariate effects for attachment styles ( $F [6,164] = 33.48$ ,  $p < .001$ ), similar and current conditions ( $F [2, 81] = 37.51$ ,  $p < .001$ ), and the interaction between attachment styles and similar versus diverse conditions ( $F [6, 164] = 11.95$ ,  $p < .001$ ).

Univariate between-group analyses showed that some group attachment styles reported significantly more anxiety ( $F [3,82] = 54.07$ ,  $p < .001$ ) and significantly more avoidance ( $F [3,82] = 29.61$ ,  $p < .001$ ) than others. Univariate tests also showed that participants reported significantly more anxiety ( $F [1,82] = 18.85$ ,  $p < .001$ ) and avoidance ( $F [1,82] = 59.17$ ,  $p <$

.001) when primed to think about being in the current group condition than when primed to think about being in a similar group condition. There was also a significant interaction between group attachment styles and similar/diverse conditions for anxiety ( $F [3,82] = 10.10, p < .001$ ) and avoidance ( $F [3,82] = 14.86, p < .001$ ).

Further analyses of anxiety and avoidance in the similar and diverse group conditions were conducted using paired-samples *t*-Tests (Shown in Table 8). Consistent with Hypothesis H1a, the analyses showed that for participants who were in the secure group (low anxiety - low avoidance), anxiety was significantly higher when they were primed to think about being in the current group than when they were primed to think about being in a similar group. Further, avoidance was higher in the current group condition as compared to the similar group condition. Consistent with Hypothesis H1b, the analyses showed that for participants who were in the preoccupied group (high anxiety - low avoidance), there was no significant difference in anxiety for the current and similar group conditions, whereas, the difference in avoidance was significant when comparing the current and similar group conditions. Consistent with Hypothesis H1c, the analyses showed that for participants who were in the dismissive avoidant group (low anxiety - high avoidance), anxiety was significantly higher when they were primed to think about their current groups as compared to when they were primed to think about a similar group, whereas there was no significant difference in avoidance. Consistent with Hypothesis H1d, the analyses showed that for participants who were in the fearful avoidant group (high anxiety - high avoidance), there was no significant difference in anxiety when comparing the current and similar group conditions, nor was there any difference in avoidance scores. These findings fully support Hypothesis 1.

Hypothesis 2 stated that anxiety and avoidance are related to perceptions of relationship and task-based conflict attributions. This hypothesis was tested with bivariate correlations (Shown in Table 7). The correlation analyses revealed that, in partial support of Hypothesis H2a, anxiety and relationship conflict were significantly positively correlated when participants were primed to think about a similar group, but not when primed to think about their current groups. In support of Hypothesis H2b, avoidance and task conflict were significantly positively correlated when participants were primed to think about a similar group and marginally positively correlated when they were primed to think about their current groups. These findings partially support Hypothesis 2.

Hypothesis 3 stated that individuals with different group attachment styles will attribute different amounts of task and relationship conflict. Individuals who are low on anxiety will attribute significantly less relationship conflict than those who are high on anxiety, and individuals who are low on avoidance will attribute significantly less task conflict than those who are high on avoidance. This hypothesis was tested with a MANOVA analysis followed by LSD post-hoc tests.

Scores on anxiety and avoidance, and relationship and task conflict were compared for all four group-attachment styles in the similar group condition shown (see Table 9). Consistent with Hypothesis 3, MANOVA analyses confirmed that there was a significant multivariate effect for attachment styles ( $F [6,164] = 3.47, p < .01$ ). Further, univariate analyses showed significant main effects for attachment style with respect to both relationship conflict:  $F (3,82) = 3.67, p < .02$ ; and task conflict:  $F (3,82) = 3.98, p < .01$ .

In partial support of Hypothesis H3a, LSD post-hoc tests (shown in Table 10 and Table 11) indicated that attributions of relationship conflict for participants in the secure group (low anxiety - low avoidance) were significantly lower than those in the dismissive avoidant group (low anxiety - high avoidance) and those in the fearful avoidant group (high anxiety - high avoidance), but not significantly different from those in the preoccupied avoidant group (high anxiety - low avoidance). In partial support of Hypothesis H3b, LSD post-hoc tests indicated that attributions of relationship conflict for the participants in the dismissive avoidant group (low anxiety - high avoidance) were significantly higher than those in the secure group and those in the preoccupied avoidant group (high anxiety - low avoidance), but not significantly different from those in the fearful avoidant group (high anxiety - high avoidance). Consistent with Hypothesis H3c, the LSD post-hoc tests confirmed that attributions of task conflict for participants in the secure group (low anxiety - low avoidance) were significantly lower than those in the dismissive avoidant group (low anxiety - high avoidance) and those in the fearful avoidant group (high anxiety - high avoidance), but not significantly different from those of the preoccupied avoidant group (high anxiety - low avoidance). Consistent with Hypothesis H3d, the LSD post-hoc tests confirmed that, attributions of task conflict for participants in the preoccupied group (high anxiety - low avoidance) were significantly lower than those in the dismissive avoidant group (low anxiety - high avoidance) and those in the fearful avoidant group (high anxiety - high avoidance). These findings partially support Hypothesis 3.

Hypothesis 4 stated that diversity activates the group attachment system such that attributions of relationship and task conflicts by some attachment styles in the diverse condition will be higher than those in the similar condition. This hypothesis was tested by conducting a repeat measures MANOVA analysis followed by paired-samples *t*-Tests to determine if significant differences could be observed for different group attachment styles within the similar versus diverse conditions.

Scores on relationship and task conflict were measured for all four group-attachment styles in the similar and current group conditions (see Table 12). Repeated-measure MANOVA analyses confirmed that there were no significant multivariate effects for attachment style ( $F [6,164] = 1.95, p < ns$ ), but there were significant effects between the similar and current group conditions ( $F [2, 81] = 8.85, p < .05$ ), and an interaction between attachment style and similar versus current group conditions ( $F [6, 164] = 4.37, p < .001$ ).

Univariate between-group analysis showed that relationship conflict did not vary by group attachment style ( $F [3,82] = 2.27, ns$ ) and there were only marginal differences in task conflict across attachment styles ( $F [3,82] = 2.27, p < .08$ ). Univariate tests also showed that participants primed to think about their current groups had significantly more relationship conflict ( $F [1,82] = 14.77, p < .001$ ) than participants primed to think about a similar group, but no significant difference in task conflict ( $F [1,82] = 2.30, ns$ ). There was a significant interaction between group attachment style and similar versus current group conditions for both task ( $F [3,82] = 3.88, p < .01$ ) and relationship conflict ( $F [3,82] = 5.46, p < .01$ ). Further analyses of relationship and task conflict in the similar versus diverse conditions were conducted using paired-samples *t*-Tests (Shown in Table 12).

Consistent with Hypothesis H4a, attributions of both relationship and task conflict were significantly higher for the current group as compared to the similar group conditions for participants with secure group attachment (low anxiety – low avoidance). In partial support of Hypothesis H4b, attributions of relationship conflict were found to be significantly higher in the current group as compared to the similar group condition, and attributions of task conflict were found to be marginally higher in the current group as compared to the similar group condition for participants with preoccupied group attachment (high anxiety - low avoidance).

In partial support of Hypothesis H4c, attributions of relationship conflict were not significantly higher in the current group as compared to similar group condition, and attributions of task conflict were not significantly higher in the current group as compared to the similar

group condition for participants with dismissive avoidant group attachment (low anxiety - high avoidance).

Consistent with Hypothesis H4d, attributions of relationship conflict were not significantly higher in the current group as compared to the similar group condition, and attributions of task conflict were not significantly higher in the current group condition as compared to the similar group condition for participants with fearful avoidant group attachment (high anxiety - high avoidance). These findings fully support Hypothesis 4.

## **11. Discussion**

### **11.1 General Conclusion, Sample Comparisons, & Contribution**

The results presented in this thesis suggest that when individuals are asked to think about groups in which they have worked in the past or are currently working, they report changes in cognitions (avoidance ) and emotions (anxiety) that are consistent with group attachment system activation. Specifically, my results are consistent with the notion that group attachment systems can be activated by psychological triggers, including diversity, as evidenced by changes in individuals' reported cognitions (avoidance) and emotions (anxiety) when they think about different groups to which they belong. Overall, the pattern of results that emerges suggests that the underlying dimensions of reported group attachment anxiety and avoidance vary systematically across attachment styles and when individuals are primed to think about being in a group that is similar versus when they are primed to think about being in a group that is perceived to be diverse (or that has cross-functional and national diversity according to a third party observation). Further, I found that the underlying dimensions of reported group attachment anxiety and avoidance appear to be correlated with reported attributions of relationship and task conflict, such that each group attachment style has a different reported relationship and task conflict attribution profile that is specific to its trait and state. These patterns were observed in two separate studies and are discussed below.

Study 1 examined the relationship between individual level differences in reported group attachment anxiety and avoidance, and reported attributions of task and relationship conflict using an online survey where participants were primed to think about a similar group condition and primed to think about a diverse group condition. Data were gathered from a convenience sample of undergraduate students at the John Molson School of Business at Concordia University. This study did not observe people in groups, but instead had individuals report their individual experiences in groups that they perceived as similar and diverse. Data



collection did not include cross validation of participants' perceptions, with an objective measure of group similarity or diversity. Further, Study 1 was limited in that it did not capture the traits to which participants were referring when they were primed to think about "similar" and "diverse" groups; thus, the traits for which participants thought that group members were the same or different are unknown, and may have been different for different participants. Study 2 addressed the limitations of Study 1 by replicating the first study using a field study design in an organizational setting. Also, a critical difference between Studies 1 and 2 was that participants in Study 2 were not primed to think about a diverse group; rather, they were asked to respond to questions about "their current group," and the diversity in their current group was assessed by the researcher. Thus, the traits on which the current groups were diverse are known (cross-functionality and different nationalities), but this is based on the researcher's, rather than the participants', perceptions and still is not based on an actual measure of diversity (e.g., such as proposed by Blau, 1977).

#### **11.1.1 Diversity as an Activator of the Group Attachment System**

The first goal of this thesis was to test whether diversity activates the group attachment system. I made four propositions. First, I proposed that group diversity would cause an increase in both anxiety and avoidance for individuals who are securely attached to their groups (low anxiety – low avoidance). Second, I proposed that group diversity would cause an increase in avoidance scores for individuals who are preoccupied attached to their groups (high anxiety – low avoidance). Third, I proposed that group diversity cause an increase in anxiety scores for individuals who are dismissive avoidant attached to their groups (low anxiety – high avoidance). Fourth, I proposed group diversity would not trigger the activation of the attachment system resulting in changes in anxiety and avoidance scores for individuals who are fearful avoidant attached to their groups (high anxiety – high avoidance). The findings of both Study 1 and Study 2 show that priming individuals to think about diverse group situations is associated with changes in reported anxiety and avoidance, which is consistent with the hypothesis that being in a diverse group activates the group attachment system activation causing changes in the experienced levels of anxiety and avoidance in group members.

Another notable finding is that individuals with different attachment styles report reacting to diversity differently. The general pattern that emerged was that individuals who tend to report having low anxiety when primed to think about a similar group reported significantly more anxiety when primed to think about a diverse group. Individuals who tend to report having

low avoidance when primed to think about being in a similar group reported significantly more avoidance when primed to think about being in a diverse group. Further, individuals who reported having high anxiety when primed to think about being in a similar group reported equally high anxiety when primed to think about being in a diverse group. As well, individuals who tend to report having high avoidance when primed to think about being in a similar group reported equally high avoidance when primed to think about being in a diverse group.

In general, the results of my research are consistent with other findings in the literature. Bartholomew (1990) postulated that the attachment system could be activated by anxiety, fatigue, stress, and illness. My research findings are consistent with the notion that diversity may be a stressor that activates the group attachment system. Further, my results are consistent with the idea that group attachment may have both trait and state anxiety and avoidance dimensions. This is consistent with studies on interpersonal attachment (e.g., Collins & Read, 1994) indicating that individuals can possess multiple mental models reflective of different attachment patterns experienced across different relationships. As well, researchers have found similar results for individuals' group attachment cognitive profiles both before and after activation (Mikulincer, 2000).

Generally speaking, group attachment has the potential to explain employees' relationships within their work groups and organizations, beyond the already well-established effects of broad personality traits (e.g., affectivity). My results are consistent with the notion that differences in members' group attachment styles are correlated with systematic differences in how they view their groups and how they perceive their groups to view them. Specifically, if group diversity does activate individuals' group attachment systems, it may inhibit the activation of the affiliative and exploratory systems, which are the behavioral systems necessary to reap the benefits of group diversity (Ainsworth et al., 1978).

I found that priming individuals to think about diverse groups is associated with increases in group attachment anxiety and avoidance. Specifically, the pattern that emerged suggests that all four group-attachment styles tend toward a significantly higher state of anxiety and avoidance when thinking about being in a diverse group as compared to when thinking about being in a similar group. Another significant theoretical contribution that emerges is that trait group attachment style may be an individual level difference predictor for levels of experienced anxiety and avoidance in diverse group situations. As such, much like with interpersonal level

attachment (Bluestein, Prezioso, & Schultheiss, 1995), group attachment may be a critical individual-level difference variable that determines work group processes and outcomes.

As predicted by the literature (Smith et al., 1999), securely attached individuals appear to be the least affected when primed to think about being in a diverse group. Secure individuals reported the lowest anxiety and avoidance of all attachment styles when primed to think about being in a similar group *and* when primed to think about being in the diverse group. Further, even though the diverse group condition was correlated with a reported increase in anxiety and avoidance for secure individuals, they still reported lower anxiety and avoidance in the diverse group condition than any other attachment style. This suggests that these individuals possess more positive views of themselves and others than do individuals with other group attachment styles (Bartholemew, 1990). These results are consistent with other findings in the literature that suggest that secure individuals may be better able to maintain lower levels of anxiety and avoidance even when their attachment systems are activated (Rom & Mikulincer, 2003) enabling them to be more resilient to the negative effects of diversity than other attachment styles. For organizational behavior theory, this suggests that under the duress of group diversity, secure individuals may be better conditioned to be open to explore and learn from diverse others than any other attachment style and may be best suited of all attachment styles to find the value in diversity.

For individuals who tend to have preoccupied attachments to their groups, priming them to think about being in a diverse group was correlated with a reported increase in avoidance, but not a reported increase in anxiety, as compared to when they thought about being in a similar group. Notably, individuals with preoccupied group attachments are already high in anxiety in the similar group condition. These findings are consistent with the literature (Rom & Mikulincer, 2003). In line with attachment theory (Ainsworth et al., 1978) and my predictions, preoccupied individuals reported a greater increase in avoidance scores between the similar and diverse group conditions than any other attachment style. This is thought to occur because preoccupied individuals believe other group members view the desire for group membership as an attractive trait (Smith et al., 1999). Since this expectation is not met in the condition where individuals are primed to think about a diverse group, preoccupied individuals' views are challenged, resulting in an increase in reported avoidance. This finding contributes to the literature because it suggests that attachment theory may predict preoccupied individuals reactions to diverse group situations. In combination with preoccupied individuals already high

anxiety scores, my findings further contribute to the literature by suggesting that diversity is correlated with preoccupied individuals' significant emotional and cognitive difficulties in diverse group situations (Rom & Mikulincer, 2003).

Consistent with the literature on dismissive avoidant attachment (Rom & Mikulincer, 2003), my results are in line with the notion that diversity is correlated with an increase in anxiety, but not avoidance, when comparing similar and diverse group conditions. This is thought to occur because dismissive avoidants, who believe that their groups will be accepting of them and view them as capable, find their beliefs challenged in diverse group situations. This presents a significant empirical contribution because it supports the theoretical notion that attachment theory can predict how dismissive avoidant individuals will react when faced with a diverse group situation. Their increased levels of anxiety coupled with their already high scores in avoidance suggest that they will have significant emotional and cognitive difficulties in diverse group situations (Rom & Mikulincer, 2003). This further contributes to theory by suggesting that diversity may be correlated with a state specific reaction in preoccupied and dismissive individuals that results in them experiencing similar levels of anxiety and avoidance when primed to think about being in a diverse group condition. In some ways, group diversity may be viewed as an equalizer for differences in anxiety and avoidance for preoccupied and dismissive individuals, albeit in a negative way.

For fearful avoidant attached individuals, my results are consistent with the notion that diversity is not correlated with reported increases in anxiety and avoidance between similar and diverse group conditions. Fearful individuals do not believe in the value of group membership nor do they believe that others believe in the value of group membership (Smith et. al, 1999). Their beliefs are confirmed when in diverse groups resulting in their anxiety and avoidance scores remaining unchanged. This finding may contribute to our theoretical knowledge of individual level differences by predicting how fearful-avoidants will react in diverse group situations. Further, this finding may contribute to organizational behavior theory by suggesting that diversity is correlated with a state specific reaction in preoccupied and dismissive individuals that results in them experiencing similar levels of anxiety and avoidance in diverse groups, not only to each other, but also to fearful avoidant individuals. This is significant because fearful avoidant attachment is associated with several socio-emotional, cognitive, and behavioral deficits and is known to affect both interpersonal (Simpson & Rhodes, 1996) and group (Rom & Mikulincer, 2003) relationships negatively.

### **11.1.2 Group Attachment Dimensions & Conflict Attribution Types**

The second goal of this thesis was to test whether group attachment avoidance and anxiety are correlated to task and relationship conflict attribution. I explored this first in the similar group condition. I proposed that avoidance is positively correlated with task conflict attribution and that anxiety is positively correlated with relationship conflict attribution. The findings of Study 1 and Study 2 fully supported these hypotheses. These results are consistent with other findings in the literature on attachment anxiety and relationship conflict attribution. Brennan & Shaver (1995) found that individuals who scored low on anxiety were less emotionally frustrated with partners than individuals who scored high on anxiety. Mikulincer and Orbach (1995) found that individuals who scored low on anxiety consistently perceived others with less emotional defensiveness than individuals who scored high on anxiety. Building on Jehn's (1995) definition of relationship conflict as being the emotional dimension of conflict attribution, Bono and colleagues (2002) found that the degree of relationship conflict attribution varies across individuals such that some individuals consistently perceive less relationship conflict than others. My research contributes to the theoretical knowledge in organizational behavior by connecting findings in the attachment and conflict fields. Specifically, my findings suggest that individual level group attachment anxiety is correlated with reported attributions of relationship conflict when individuals are primed to think about similar and diverse group situations.

Overall, when considering the group attachment dimensions of anxiety and avoidance across all four attachment styles, my results are consistent with the notion that group attachment styles with low avoidance also reported attributing less task conflict than group attachment styles with high avoidance. Those attachment styles that have low avoidance also reported attributing less relationship conflict than attachment styles with high avoidance. These findings are consistent with the notion that both reported attributions of task and relationship conflict are linked to avoidance rather than to both avoidance and anxiety, respectively.

My research is also consistent with other findings in the literature on attachment avoidance and task conflict. Mikulincer (1997) found that individuals who scored high on avoidance were less cognitively open to the integration of new information within existing cognitive structures than individuals who scored low on avoidance. In line with Jehn's (1995) definition of task conflict as being conflict attribution's cognitive dimension, Bono and colleagues (2002) found that across individuals the degree of task conflict attribution varied such

that some individuals consistently perceived more task conflict than others. My findings add to this knowledge by connecting findings in the attachment and conflict fields. Specifically, my research suggests that the individual level variable attachment avoidance is correlated with reported task conflict attributions when individuals are primed to think about being in similar and diverse group situations.

One unanticipated finding of my research was that in Study 1 reported avoidance was positively correlated with relationship conflict. From a group attachment perspective, this is consistent with the notion that it is an individual's view of his/her group that correlates with task and relationship conflict attributions rather than an individual's view of himself/herself. This is in line with other findings in the literature that indicate that secure and preoccupied attachment overlap in their positive view of self and diverge in their view of others (Bartholemew, 1990). My findings are consistent with the notion that secure and preoccupied individuals have similar levels of task and relationship conflict attributions when primed to think about being in a similar group situation. This suggests that avoidance may be the main determining dimension governing the relationship between group attachment and conflict attribution.

Secondly, I tested whether individuals with different group attachment styles report different task and relationship conflict attributions when primed to think about a similar group situation. The findings of Study 1 and Study 2 indicate that secure individuals report experiencing significantly lower task conflict attributions than dismissive and fearful individuals, but do not report experiencing significantly lower task conflict attributions than preoccupied individuals. These findings are consistent with the literature on attachment and task conflict attribution in non-work situations. Mikulincer and Sheffi (2000) found that secure and preoccupied individuals have a greater degree of cognitive openness than dismissive and fearful avoidant individuals. In the conflict literature, Bono, Boles, Judge, and Lauver (2002) found that the level of task conflict attribution between individuals varies such that some individuals consistently experience less task conflict than others.

The findings of Study 1 and Study 2 indicate that preoccupied individuals report experiencing significantly lower task conflict attributions than dismissive and fearful avoidant individuals, but do not report experiencing significantly lower task conflict attributions than secure individuals when primed to think about a being in a similar group situation. These findings are consistent with the literature on attachment and task conflict attribution. Past research suggests that secure and preoccupied attached individuals have a greater degree of

cognitive openness in groups than dismissive and fearful avoidant attached individuals (Rom & Mikulincer, 2003). As well, Mikulincer (1997) found that some individuals are able to remain consistently open to new information during situations of conflict whereas others become less cognitively focused. Further, the conflict literature suggests that some individuals consistently have lower levels of task conflict attribution than others (Jehn, 1997).

I proposed that secure individuals would have significantly lower relationship conflict attribution scores than preoccupied and fearful avoidant individuals, but not significantly lower scores than dismissive avoidant individuals. The findings of Study 1 and Study 2 indicate that secure individuals report attributing significantly less relationship conflict to groups than either dismissive or fearful avoidant individuals, but not significantly less than preoccupied individuals. Although these findings are only partially consistent with my hypothesis, they are consistent with the idea that a stronger correlation may exist between avoidance and relationship conflict attribution rather than the predicted correlation between anxiety and relationship conflict attribution. Bartholomew (1990) defined preoccupied attachment (high anxiety – low avoidance) by a negative view of self and a positive view of others. Preoccupied individuals lack self-reliance and depend on others for support (Bartholomew, 1990). This lack of self worth and dependency on others results in preoccupied individuals having negative feelings about their own thoughts and actions whereas they perceive others in a positive light (Bartholomew, 1990). In situations of conflict, their negative self-views may lead them to perceive their own actions as the cause of conflicts with others. Further, preoccupied individuals' positive views of others may lead them to perceive others actions as constructive rather than conflict oriented. As such, preoccupied individuals may take it upon themselves to try and make amends with others for the conflicts they believe they themselves have caused. This may result in less relationship conflict attributions. In the conflict literature, Bono, Boles, Judge, and Lauer (2002) found that some individuals consistently experience less relationship conflict than others.

Bartholomew (1990) defined dismissive avoidant attachment (low anxiety – high avoidance) by positive views of self and negative views of others. Dismissive individuals are self-reliant and do not depend on others because they believe others to be incompetent. This overestimated sense of self worth and lack of confidence in others results in dismissive individuals having positive feelings about their own thoughts and actions while perceiving others in a negative light (Bartholomew, 1990). In situations of conflict, the negative views that dismissive individuals have of others may cause them to perceive others as the source of the

disagreements, whereas their positive self-views will lead them to view their own actions as constructive. As such, dismissives may attribute relationship conflicts to those others that they view as a hindrance to their own goal achievement. This may lead to increased relationship conflict attributions. In the conflict literature, Jehn (1997) found that some individuals consistently experience more relationship conflict than others.

I proposed that dismissive avoidant individuals would have significantly lower relationship conflict attribution scores than preoccupied and fearful avoidant individuals, but not significantly lower scores than secure group attached individuals. The findings of both Study 1 and Study 2 are consistent with the notion that dismissive individuals report significantly more relationship conflict attributions when primed to think about the similar group condition than either secure or preoccupied individuals, but not a significantly different amount than fearful avoidant individuals.

Although these findings did not support my hypothesis, similar to the findings on preoccupied attachment and relationship conflict, the results may be explained by the theoretical postulates of attachment theory. Bartholomew (1990) defined dismissive avoidant attachment by a positive view of self and a negative view of others. Dismissive individuals have a strong sense of self-reliance and do not depend on others for support (Bartholomew, 1990). This lack of reliance on others coincides with negative feelings towards others and their abilities (Bartholomew, 1990). Consequently, dismissive avoidant individuals may see conflicts as being caused by others, rather than by themselves, possibly leading to high relationship conflict attributions.

Several empirical contributions also arise when the examining the differences in relationship and task conflict attributions between the four attachment styles. In general, each group attachment style was found to have its own distinct pattern of both task and relationship conflict attribution in the similar primed condition. Secure individuals reported attributing the same amount of relationship conflict to groups as preoccupied individuals. Preoccupied individuals reported attributing less relationship conflict to groups than either dismissive or fearful avoidant individuals. Secure individuals reported attributing the same amount of task conflict to groups as preoccupied individuals and reported less task conflict to groups than those who were either dismissive or fearful avoidant individuals. Preoccupied individuals reported attributing less task conflict to groups than those who were either dismissive or fearful avoidant.



### **11.1.3 Attachment & Conflict Attribution in Similar versus Diverse Groups**

The third goal of my thesis was to test whether diversity activates the group attachment system causing reported attributions of task and relationship conflict for some group attachment styles to be higher than others. The findings of Study 1 and Study 2 suggest that when secure individuals (low anxiety - low avoidance) are primed to think about the diverse group condition, this is correlated with a reported increase in attributions of task and relationship conflict.

I proposed that for individuals who are preoccupied group attached (high anxiety - low avoidance), group diversity will be correlated with a reported increase in task conflict but not a reported increase relationship conflict. My findings partially support this hypothesis. In Study 1, priming individuals to think about being in a diverse group was related to a significant increase in reported task conflict attributions and a marginal increase in reported relationship conflict attributions. In Study 2, priming individuals to think about a current group, which was observed by the researcher to be cross-functionally and nationally diverse, was related with a marginal increase in reported task conflict and a significant increase in reported relationship conflict attributions.

Although these findings are only partially consistent with my hypothesis, they may be explained by the literature. For preoccupied individuals, psychological stressors, such as diversity (Collins & Read, 1994), can activate their attachment systems (Bartholomew, 1990). These state increases in avoidance were not reported for individuals whose trait levels on these attachment dimensions were high. Given my findings that both reported attributions of task and relationship conflict are correlated with the group attachment avoidance dimension, preoccupied attached individuals may have reported changes in attributions of task and relationship conflict between the similar and diverse group conditions because of their changes in avoidance. This finding is further supported by both the attachment (Brennan & Shaver, 1995) and conflict (Jehn, 1995) literatures.

I proposed that for individuals who are dismissive avoidant group attached (low anxiety - high avoidance), being in a diverse group condition would be related with changes in relationship conflict attributions but not in task conflict attributions. I also proposed that for individuals who are fearful avoidant group attached (high anxiety - high avoidance), diversity would not be related with changes in attributions of task or relationship conflict. Generally consistent with these predictions, I found no significant difference in conflict attributions (task or

relationship) for dismissive avoidant and fearful avoidant individuals in the diverse group (as compared to the similar group) situation in Studies 1 and 2.

Overall, my findings are consistent with the literature in the field. As with preoccupied individuals, the attachment systems of both dismissive and fearful avoidant individuals can be activated by psychological stressors (Bartholomew, 1990), such as diversity (Collins & Read, 1994). However, even though diversity acts a stressor that increases attachment dimensions that have low traits levels (in homogeneous groups), it may have no significant affect on attachment dimensions that have high trait levels. Because dismissive and fearful attached individuals are already high on avoidance in the similar group condition, their avoidance does not increase in the diverse group, and this may explain why their reported attributions of task and relationship conflict also do not increase in the diverse group condition.

My research on attachment and conflict attribution in groups may contribute to the theoretical knowledge in the conflict field on several fronts. First, my results suggest that priming individuals to think about being in a diverse group condition activates the group attachment system and their reported state specific task and relationship conflict attributions. Second, priming individuals to think about being in a diverse group is related with the conflict attributions of each group attachment style in a specific way. This furthers our knowledge in the field because it supports the idea that attachment can be used as a predictor variable to determine individuals' task and relationship conflict attributions in similar and diverse groups.

Third, I found that reported task and relationship conflict attributions are correlated with group attachment avoidance in both the similar and diverse group conditions. This means that the conflict attributions of secure and preoccupied group attached individuals seem to be affected by diversity whereas those of dismissive and fearful avoidant group attached individuals do not. This furthers our knowledge in the field because, from an attachment perspective, it is consistent with the notion that conflict attribution is mainly a function of our views of others rather than a function of both our views of others and our views of ourselves, as is suggested by other conflict theories (Blake & Mouton, 1966).

## **11.2 Practical Implications, Theoretical Implications & Findings**

In line with previous research, my results are consistent with the notion that the dynamics between members of work groups in organizations may be governed at least in part by group attachment bonds (e.g., Popper & Mayseless, 2003; Rom & Mikulincer, 2003; Smith et al., 1999). My findings are in line with the idea that the negative effects of diversity may be an

attachment system activation issue rather than a diversity specific issue. Research indicating that diversity can affect individual group members resulting in intra-group conflict is far from a new concept (Jehn et al., 1999). The idea that diversity causes the activation of the group attachment system inhibiting the exploration and learning about other group members' divergent emotions, thoughts, and behaviors is a new advance. Further, this advance may change the focal point of the value in diversity conversation.

The fact that individuals' attachment systems seem to be activated when they are primed to think about being in a diverse group suggests that actually being in a diverse group may be a significant liability in jobs where exploration and learning are fundamental to group performance and outcomes, such as cross-functional teams. Gruenfeld, Mannix, Williams, and Neale (1996) found that when group members had unique information to contribute in a problem-solving context, similar groups outperformed those that were less similar. This is because team members who do not consider other group members ideas are unable to integrate other members' input. This may be detrimental to the productivity of their group. For example, research has shown that functional group diversity negatively impacts both team and management rated performance scores in cross-functional teams (Ancona & Caldwell, 1992). Further, if the activation of a group member's attachment system increases his/her anxious and/or avoidant emotions and cognitions, then attachment activation may have a negative impact on group processes, such as group cohesion and commitment, as well as a group's overall ability to work together (Rom & Mikulincer, 2003).

In applying this knowledge to the workplace, my findings suggest that if managers can keep their work group members' attachment systems deactivated, they may be able to mitigate some of the negative effects of diversity and harness its benefits. Organizations should focus their efforts on fostering a culture whereby group members view their group as a secure base. One way to achieve this is for organizations to focus their efforts on building groups that are viewed by their members as an environment that supports exploration and learning. In doing so, the presence of the group in itself may be enough to deactivate its members' attachment systems allowing the group to benefit from the diversity of its members.

My findings suggest that the underlying dimension of group attachment avoidance may play a critical role in the changes in reported conflict attributions between similar and diverse group conditions. This is consistent with the notion that it is the target's view of his/her group, not the target's view of self that is central to changes in conflict attributions. One implication of

this finding is that organizations may be able to mitigate the negative affects of attachment system activation by focusing on enhancing group members' views of their group. With the attachment system in a deactivated state, group members may enact their primary attachment strategy of proximity seeking to their group (Smith et al., 1999). One way to achieve this is to focus on commonalities within the group. Chatman, Polzer, Barsade, and Neale (1998) in their study on more than 250 first year MBA students, found that by encouraging participants to focus on collectivist values, they were able minimize the negative effects of diversity on work groups.

My research is consistent with the notion that group dynamics and performance may be handicapped when group members engage in secondary attachment strategies (Rom & Mikulincer, 2003). Since the four attachment styles reported differential changes in group attachment anxiety and avoidance as well as differential changes in task and relationship conflict attribution when primed to think about diverse as compared to similar group contexts, it may be challenging to target group-level variables that are intended to decrease negative effects of diversity across all attachment styles simultaneously. For example, some studies have shown that cohesion improves socio-emotional and instrumental functioning in groups resulting in positive outcomes for members who are preoccupied group attached. However, for those members who are dismissive avoidant group attached, cohesion further exacerbated instrumental group functioning deficiencies resulting in negative outcomes (Rom & Mikulincer, 2003).

Although in many cases the activation of the attachment system cannot be prevented, the resulting enactment of secondary group attachment strategies may be circumvented. To do so, managers are best served to direct their efforts towards team building strategies that foster group members to view their group as a secure base with whom they can enact their primary attachment strategies (e.g., Forsyth, 1990). If this is made attainable, then members' may deem their primary attachment strategies as a success, their attachment systems may deactivate, and their secondary group attachment emotions, cognitions and behaviors may be circumvented. In this environment, the group and its members may share new social, emotional, and cognitive skills (e.g., Forsyth, 1990) potentially resulting in improved group processes and outcomes.

The aforementioned theoretical and practical implications focus on proactive methods of managing attachment system activation. Ideally, this is the best way forward in dealing with attachment-related diversity issues. In practice, however, existing diverse work groups that have already been subject to the prolonged negative effects of group attachment system activation also

require management solutions. The question then becomes, “*what can managers do to improve the productivity and performance of existing diverse work groups?*”

Researchers have suggested several broad diversity training and coaching practices that managers can adopt to enable team members to view diversity as an asset rather than as a liability. Among these are management practices that encourage group members to view diversity as an important resource for learning and problems solving. Rynes and Rosen (1995) in a survey questionnaire of 785 human resource professionals found that the successful adoption of diversity training was dependent on managers and group members’ positive beliefs about diversity being an asset to organizational performance. When differences among group members were viewed as an important resource that can enhance group outcomes, members were more willing to find a common ground to achieve group goals and were more open to settling disagreements through constructive conflict resolution (Argyris & Schön, 1978). In support, a meta-analysis of 65 studies has shown that diversity training has an effect on affect-based, cognitive-based, and skill-based outcomes (e.g., Kalinoski, Steele- Johnson, Peyton, Leas, Steinke, & Bowling, 2013).

In framing diversity training within an attachment theory perspective, diversity researchers suggest that such training has the potential to transform diversity from an attachment system activator into an attachment system deactivator. This is because diversity training has the potential to reframe diversity as a potential solution to group problems rather than a hindrance. My findings suggest that diversity training practices may affect different people differently, such that the outcome of diversity training may be dependent on the work group members’ group attachment style. Let us now consider diversity training as it pertains to each group attachment style.

Given that secure individuals have low trait levels of anxiety and avoidance, and remain lower on anxiety and avoidance than other group attachment styles when primed to think about the diverse group condition, they may be particularly amenable to diversity training. Diversity training could have a notable affect on their views of dissimilar others, perhaps improving group processes and performance outcomes, such as conflict attribution and resolution. If secure individuals are coached to view diversity as a resource rather than a threat, then diversity may act to deactivate their attachment systems and return them to their trait attachment profile of low anxiety and avoidance. Further, this may allow secure individuals to explore group diversity

without anxiety and avoidance. For these secure group attached individuals, diversity training may be a successful technique that enables them find the value in diversity.

The outcome may be somewhat different for preoccupied group attached individuals. Preoccupied individuals have high trait levels of anxiety and low trait levels of avoidance. In line with other research, my findings are consistent with the notion that these individuals will continue to report high anxiety when in a diverse group and their avoidance will likely increase significantly. Since these individuals only have low trait levels of avoidance, diversity training may only serve to decrease their level of avoidance but not their level of anxiety in diverse groups. For preoccupied individuals, it is likely that diversity training will only affect aspects of group processes and performance outcomes that are correlated with attachment avoidance, such as group cohesion.

If preoccupied individuals are coached to view diversity as an advantage rather than an uncertainty, then group diversity may act to deactivate their attachment systems returning them to their trait attachment styles of high anxiety and low avoidance. This may allow preoccupied individuals to explore group diversity with less avoidance. Further, given my findings on the correlation between attachment avoidance and conflict, this may result in improved process related outcomes such as decreased relationship and task conflict attributions. Diversity training, however, may only assist in reversing the negative effects correlated with group diversity and group attachment system activation. It will not affect the traits of an individual's attachment style. Thus, pre-occupied individuals may remain high in anxiety in diverse groups, even following diversity training, and the effects of diversity training on group member performance may be less significant for preoccupied individuals when compared with secure individuals.

Dismissive group attached individuals may have a comparable but distinct reaction to diversity training when compared to preoccupied individuals. Dismissive individuals have low trait levels of anxiety and high trait levels of avoidance. When in a diverse group condition, my findings suggest that their avoidance will remain high whereas their anxiety will increase significantly. Because these individuals only have low trait levels of anxiety, diversity training will likely decrease only their anxiety and not their avoidance and diversity training may only impact attachment anxiety related group performance and outcomes. Given the lack of observed links with conflict attributions and attachment in my studies, it is unlikely that diversity training will improve relationship and task conflict attributions in diverse groups for dismissive avoidant individuals. With this in mind, the effects of diversity training on group member performance

may be less significant for dismissive individuals as compared with secure and preoccupied individuals.

Unlike secure individuals who are thought to be the most positively affected by diversity training, fearful avoidant group attached individuals are likely to be the least positively affected. Fearful individuals have high trait levels of both anxiety and avoidance and these remain high in a diverse group condition. Because being in a diverse group does not seem affect to their attachment systems, diversity training may have limited beneficial effects. Specifically, if an individuals' trait group attachment style is high anxiety and avoidance, then regardless of attachment system activation state, the individual will score high on anxiety and avoidance. As such, diversity training may have little effect on fearful avoidant group attached individuals' emotions, cognitions, and behaviors.

Overall, my results are consistent with the notion that that group attachment style might have a notable effect on the results of diversity training. My results further suggest that beyond teaching workers the value of diversity, successful diversity training must also consider the attachment style of those individuals being trained. Some individuals, such as those who are securely group attached, may inherently fair better in diverse groups than others, and may respond more positively to diversity training. On the other hand, others, such as those who are fearful group attached, will have issues in groups regardless of their group's inherent similarities or differences, and regardless of efforts to train them on the value in diversity.

### **11.3 Limitations**

There are several limitations to the research presented herein. First, the findings of Study 1 and Study 2 were based primarily on self-reports, which may be subject to social desirability bias. For attachment style and conflict attribution self-reports were deemed to be the most appropriate measurement technique because the two aforementioned constructs are both dependent on participants' perceptions (Spector, 2006). Despite its appropriateness, this measurement technique is subject to mono-source bias. Such same source variance may explain some of the correlations amongst variables. In order to address this issue, participants were informed that all data collected would be kept confidential. Further, I used varied response options in the surveys so as to create psychological separation between the variables (as suggested by Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Although acknowledging the shortcomings of self-reports, research has indicated that self-reported data are not as limited as commonly perceived (Spector, 1992).

Another limitation related to measurement in the studies was that group similarity and diversity were assessed based on participants' global perceptions, rather than objective measures. This limitation was partially addressed in Study 2 by measuring diversity in situ. I was on site for a period of 6 months to measure group diversity and, based on my observations, I determined that the groups involved exhibited both cross-functional and national diversity. Of these two characteristics, I believe that the key element of diversity that impacted members' group attachment systems was cross-functional diversity. In my sample, the members of each product group consisted of individuals from a variety of different work backgrounds (e.g., software, hardware, & interface design) uniting to complete the common goal of developing a product from start to finish. Inherent to each work background is a different thought process and area of expertise. I think that it was these differences of functional perspective that resulted in activating members' group attachment systems. Despite the quantifiable presence of diversity, no diversity indices were calculated and there is no guarantee that the participants were thinking about diversity when responding to the survey questions about their current group.

Further, there are limitations to relying on my in-situ perceptions of the work groups as being diverse. First, my classification of these groups as being diverse relies on my perceptions rather than an objective measurement technique. Second, the levels of diversity in the different groups was not measured or recorded. For example, although all teams were classified as cross-functionally diverse, some groups may have varied more in their cross functional differences than others. Third, the definition of diversity was very coarse, such that diversity was defined solely with respect to observable domains of cross-functional knowledge and thought processes. These observed domains may have been only marginally significant to group functioning in terms of what is required for these members to collaborate on a product's development. If for example, successful product development relied more on team members having the same negotiating styles when resolving a problem, rather than having a similar knowledge base, then in fact the relevant elements of group diversity may have been missed. Going forward, in order to strengthen the evidence of diversity as an activator of the group attachment system, future research may consider directly measuring distinct types of diversity, such as cross-functional and national, as well as other personal characteristics, in order to better establish the relationship between group attachment system activation, diversity, & stress.

Another limitation of this research was that although diversity was measured, stress was not measured. Bartholomew (1990) postulated that actual or perceived stressors, such as anxiety,



illness, and fatigue can activate the interpersonal attachment system. Consistent with the findings on diversity and interpersonal attachment (Ainsworth et al., 1978), group diversity is also thought to be a stressor, and the related stress is thought to activate the group attachment system. In my study, group diversity was considered to be the stressor variable that activated the group attachment system, but I did not measure the level of stress caused by diversity. Due to this lack of measurement, I was unable to test the underlying mechanism, which I believe is that stress mediates the link between diversity and activation of the group attachment system.

Another limitation of this research is that the measures did not include any aspects of the exploratory system. One of the key outcomes of interest pertaining to the relationship between group attachment and diversity is the effect that group attachment system activation has on individuals' ability to explore and learn in groups. The attachment system is one of many behavioral systems that govern our actions. Activation of the attachment system is thought to inhibit the exploratory system (Bowlby, 1973) and to reduce individuals' ability to learn about other's emotions, thoughts, and behaviors. Within the context of organizations, exploration and learning are thought to be central to reaping the benefits of diverse group situations. In order to increase the direct impact of attachment research on organizational behavior, future studies should measure exploration and learning ability variables along with attachment system activation and diversity in order to determine if activation of the group attachment does limit group members' ability to learn and explore in an organizational context.

Another limitation of this research pertains to the samples employed. For Study 1, the sample consisted of undergraduate business students, who may be in some ways unrepresentative of organizational employees. These participants were surely younger, had less work experience, and were more educated than the current workforce population. Further, in my study, I asked students to consider groups of which they are or were a member. This did not necessarily imply that students specifically considered a work group. On a positive note, the participants did choose actual groups to which they belonged, as opposed to role-playing in simulated groups. As well, the groups they chose were in fact "field" groups such that they would have existed whether or not the research study was being conducted. I addressed some of the aforementioned issues of Study 1 in Study 2 by using participants from an organizational setting who worked in cross-functional teams. The methodological strength of Study 2 is that I investigated existing work groups performing tasks over the course of several months. At the same time the sample for Study 2 also had limitations. Specifically, participants from Study 2 were all selected from a

single organization. Thus, participants may have been constrained by similar omnibus and discrete contexts (Johns, 2006). Specifically, all subjects may have been immersed in the same organizational culture nested with the same industry environment at the same location and at the same period in time. This raises some general questions as to the external validity of my findings across a variety of organizational populations, settings, and industries. Despite these limitations, the results of Study 1 suggest that the findings may be consistent across various contexts.

Moreover, Study 2 was conducted in the year of 2012, which was at the time of the global financial crisis, whereby the high-technology sector was significantly affected. Shortly after the completion of my research, the organization from which I drew my sample began reducing its employee base to right size for the decreased demand in the marketplace. It is possible that participants felt the undercurrents of these events during the time of data collection. These situational factors may have caused considerable stress to the firm's workforce, affecting employees' group attachment systems equally, if not more so, than group diversity. The industry environment at the time of Study 2 may also have resulted in participants reflecting on a similar group situation from the past that was more idyllic, especially when juxtaposed against their current situation, which could have exaggerated differences between the similar and diverse group conditions in Study 2.

Another limitation in the design of both studies is that data collection did not include counterbalancing repeated measures of attachment and conflict attribution in different conditions. In both Study 1 and Study 2, participants were asked to respond to questions pertaining to a work group that they perceived to be similar to them first. Thinking about the similar group context first may have biased reports of the diverse group context in Study 1 and of the current group context in Study 2. In future studies, counterbalancing the survey questions to control for such order effects may serve to improve the research methodology. For example, one half of participants may be asked, firstly, about a work group that they perceive to be similar to them and, thereafter, about a work group that they perceive to be different from them. To counterbalance the research questions, the other half of participants may, firstly, be asked to respond to questions pertaining to a work group they perceive to be different from them and, thereafter, about a work group they perceive to be similar to them.

#### **11.4 Future Research**

The findings presented herein are consistent with the notion that the underlying dimensions of attachment anxiety and avoidance vary systematically across group attachment styles and when comparing similar and diverse group conditions. However, this is only a small step forward on the path of ushering group attachment theory into organizational behavior. In addition to future research that addresses the aforementioned methodological limitations, group attachment theory can contribute to organizational behavior by providing a more complete understanding of individual-level differences in relationships of work groups and their members.

In Study 2 (the field study), only one organizational sample of product development teams was used. As such, participants in Study 2 may have been constrained by similar omnibus and discrete contexts (Johns, 2006), which may limit the generalizability of the findings. In order to provide evidence of the external validity of my findings, future research should examine a variety of work groups in different organizational settings, industries, and industrial climates to see if the findings are replicated.

Further, looking forward to future research, studies may consider examining group attachment variables across a variety of work domains including accounting, finance, and marketing to name a few. Going beyond cross-functional teams, researchers may consider looking at the effects of diversity on other types of groups, such as ad-hoc team, boards or directors, and specialized task forces as well as teams in different stages of development. The relationship between group attachment, diversity, and conflict attribution may have a different effect on teams in the early stages of development when compared to well-established existing work groups.

As well, for the purposes of this study, the definition of diversity was generalized to include both surface- and deep-level diversity. In future studies, researchers may consider examining group attachment style and conflict attribution type within the context of either surface- or deep-level diversity in order to bring further clarity to the field. This can be achieved by having participants respond to multiple-choice questions that quantify how they perceive other group members to be different from them (surface- and/or deep-level diversity) and the degree to which they perceive their differences to be salient. Such surface- and deep-level diversity multiple choice questions can further be quantified into sub-categories of type of surface- and/or deep-level diversity observed.

Rather than finding ways to manage group members' reactions to diverse group situations, future research should focus on finding ways to keep group members' attachment

systems deactivated. My findings are consistent with the notion that group diversity may activate the group attachment system. This group attachment system activation can result in an increase in attachment anxiety, avoidance, or both depending on an individual's specific group attachment style. If group members cannot enact their primary attachment strategy of proximity seeking to their secure base in order to deactivate their attachment systems, they engage in secondary attachment strategies, which can have detrimental effects on functioning and performance. The negative effects of these secondary strategies highlight the importance of future research into systematic ways of establishing the group as a secure base for its members. Rom and Mikulincer (2003) found that the emotional connections between a group and its members could be viewed as a form of attachment bond. In as much as individual attachment figures can act as a secure base, groups may also serve as a support system to foster exploration and learning (e.g., Forsyth, 1990). Future research should be directed at individual and group level variables that can help to forge these attachment bonds, specifically, in groups such as task-forces and cross-functional ad-hoc teams. As well, research should examine methods by which to incorporate this type of bond formation into long-standing existing work groups.

Although my research makes some headway in the organizational behavior field by suggesting that some negative effects of diversity may be a group attachment phenomenon, it also leaves much to consider for future exploration as to the nature of diversity, attachment, and group dynamics. Group attachment is a construct with a complex developmental pathway. Its origins are as a unit level construct that develops through the dyadic relationship between an infant and his/her primary caregiver. After progressing beyond this dyadic relationship, the infant's attachment system evolves into an individual level construct that affects all of his/her other interpersonal relationships throughout his/her lifetime with emotional, cognitive, and behavioral consistency (Bowlby, 1979). These dyadic interpersonal attachments in adults have been well studied over the last half century, but only a handful of papers have addressed attachment in a group context (e.g., Smith et al, 1999; Rom and Mikulincer, 2003). None to my knowledge have addressed the multi-level issue of how attachment evolves from the interpersonal to the group relationships. Future research addressing this emergent phenomenon may add significantly to the OB field from both a theoretical perspective and in terms of managing group performance and outcomes.

Research on the various group compositions based on group attachment style is needed to better understand the effects of attachment on groups. That is to say, research may be

conducted to determine the optimum number of secure, preoccupied, avoidant, and fearful members to have in each group. Questions such as whether or not groups comprised entirely of secure members (or entirely of another group attachment style) exhibit better group processes and performance than groups comprised of heterogeneous attachment styles could be addressed. Such heterogeneous groups may have their own set of advantages that far outweigh homogeneity. For example, secure members will boast the advantage of having the ability to believe in the best of themselves and seek out the best in others, assisting to maintain cohesion and unity within the group. Preoccupied attached members who are emotionally hypersensitive may be adept at early “threat detection” and can preemptively alert their group of potential future challenges in accomplishing group tasks. Further, dismissive avoidant members, who are faster at processing information, may come to conclusions more readily than other members. Dismissive avoidants may become the catalysts that lead to timely and effective decision-making processes bringing balance to the time consuming, cohesive, and group unifying efforts of secure members.

Finally, future research may consider focusing on how group attachment is correlated to other aspects of group conflict, such as conflict resolution. Whereas conflict attributions largely determine how individuals perceive conflicts (Jehn, 1995), conflict resolution styles (Van de Vliert & Kabanof, 1990) determine how individuals address conflicts and are predictive of conflict outcomes. Conflict resolution styles are the systematic behaviors that individuals adopt when responding to a situation of disagreement over limited resources. Empirical findings have shown that whether a conflict has beneficial or detrimental effects to individuals, groups and organizations is in part contingent upon how the conflict is resolved (Van de Vliert, 1997). Conflict resolution has been correlated to several outcome variables including employee performance (Pistole, 1989), commitment (Jassen, Van de Vliert, & Veenstra, 1999), and satisfaction (Pistole, 1989).

Future research may consider focusing on group conflict resolution and group attachment in diverse work groups. One potential direction of research would be a longitudinal organizational field study on work group members that tests for a predictive relationship between group attachment style (Smith et al., 1999), group conflict resolution style (Van de Vliert, 1997) and the outcome variables of group performance, commitment to group, satisfaction with group, and absenteeism. The results may enrich the existing literature by broadening our understanding of how group members resolve group conflicts in an organizational setting. Assessing the

impact of group attachment on group conflict resolution will also determine the value of conflict coaching such that if group attachment has an indirect effect on group conflict resolution then conflict coaching may have a positive effect on managers' ability to handle conflict. If, however, group attachment has a direct effect on group conflict resolution then group conflict resolution may be trait dependent. If so, conflict coaching will do little to help managers. While the above exemplify only some of the possible directions of future research derived from my findings, they elucidate the depth and breadth of potential theoretical and practical contributions group attachment theory can make to the organizational behavior.

### **11.5 Concluding Remarks**

The main goal of my thesis was to examine the relationship between attachment theory and individual-level differences in organizational work groups. Specifically, the attachment theory model was proposed to quantify how individual-level differences in group attachment styles affect group members perceptions of task and relationship conflict attributions differently in both the similar and diverse group conditions. My findings are consistent with the notion that group attachment style can predict how individual group members report attributing relationship and task conflict when they are in a similar or diverse group. I suggested herein that attachment theory, specifically attachment to groups, provides a unique insight into the dynamics of group behavior. Further, I proposed that individual-level differences in group members' attachment styles determine how they view their group and how they perceive their groups to view them.

I tested the hypothesis that diversity is correlated to group members' attachment system activation such that members' group attachment anxiety and avoidance dimensions vary systematically and predictably according to specific group attachment style. I tested whether the underlying dimensions of group attachment anxiety and avoidance are correlated with reported attributions of relationship and task conflict. Further, I tested whether reported group attachment styles have different reported attributions of relationship and task conflict that are trait and state specific.

My research findings are consistent with the notion that diversity may be related to the activation of the group attachment behavioral system resulting in changes in reported anxiety and avoidance. My findings also indicate that reported anxiety and avoidance are positively correlated to reported relationship and task conflict attributions. I also found that the underlying dimension of *group attachment avoidance* might play an important role in individuals' attributions of task and relationship conflict when comparing the similar and diverse group

conditions. From a group attachment perspective, this implies that it is not the individuals' view of self, but rather the individual's view of his/her group that is central to conflict attributions in groups. Further, my research is in line with the idea that people with different attachment styles may report attributing different amounts of task and relationship conflict to group situations.

Overall, several theoretical and practical implications emerge from my research. Most importantly, if diversity does activate the group attachment behavioral system in work groups, and if this does inhibit the exploration of, and learning about, other members' divergent thoughts and emotions, then this may indicate that the negative effects of diversity could be an attachment system activation issue rather than an issue that is diversity specific. This finding has the potential to change the focal point of the conversation of why diversity does not work. The activation of the attachment system by group diversity may be a significant liability in jobs where exploration and learning are fundamental to group performance and outcomes, most specifically in diverse work groups.

In applying my findings to the workplace, they suggest that group attachment bonds may govern at least in part the dynamics between members of work groups in organizations. If firms can implement methods of maintaining work group members' attachment systems in a deactivated state, specifically in diverse groups where diversity in itself is correlated with attachment activation, then the negative effects of diversity may be mitigated and further inroads may be made towards harnessing the value in diversity.

## 12. Tables

**Table 1**

*Summary of Study 1: Intercorrelations, Means, and Standard Deviations for Student Sample Attachment Anxiety and Avoidance and Task and Relationship Conflict Attribution Scores Within Similar and Diverse Group Conditions*

Measure	M	SD	1	2	3	4	5	6	7	8
1. Anxiety Similar	2.45	.65	.83							
2. Anxiety Diverse	2.59	.66	.66**	.82						
3. Avoidance Similar	2.42	.64	.49**	.35**	.87					
4. Avoidance Diverse	2.63	.55	.28**	.34**	.40*	.82				
5. Task Conflict Similar	2.15	.98	.16	-.02	.46*	.20*	.80			
6. Task Conflict Diverse	2.54	1.02	.21*	.24*	.03	.43**	.26*	.95		
7. Relationship Conflict Similar	1.85	.88	.27**	.14	.45**	.32**	.69**	.28**	.88	
8. Relationship Conflict Diverse	2.05	.96	.27**	.33**	.12	.39**	.22*	.59**	.30**	.84

*Note.* Intercorrelations are represented in the below diagonal. Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. Reliabilities are represented in the diagonal.  $n = 115$ . \*\* $p < .01$ , two-tailed. \* $p < .05$ , two-tailed.



**Table 2**

*Summary of Study 1: Paired-Samples t-Tests of Student Sample Between Group Attachment Anxiety and Avoidance Scores and Within Similar and Diverse Group Conditions*

Outcome	<u>Similar</u>		<u>Diverse</u>		n	95% CI Mean		t	df
	M	SD	M	SD		Difference			
<i>Anxiety</i>									
Secure	1.93	.41	2.20	.57	47	-.43, -.12	-3.61**		46
Preoccupied	3.06	.27	3.02	.63	20	-.20, .30	.41		19
Dismissive Avoidant	2.00	.36	2.36	.59	16	-.67, -.05	-2.46**		15
Fearful Avoidant	3.05	.31	3.01	.39	32	-.14, .21	.42		30
<i>Avoidance</i>									
Secure	1.92	.41	2.38	.62	47	-.67, -.25	-4.41**		46
Preoccupied	2.18	.36	2.66	.53	20	-.71, -.25	-4.38**		19
Dismissive Avoidant	2.87	.32	2.83	.31	16	-.14, .22	.48		15
Fearful Avoidant	3.10	.40	2.90	.38	32	-.00, .40	1.99		30

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 115. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 3**

*Summary of Study 1: Means, Standard Deviations, and Sample Sizes for Student Sample Task and Relationship Conflict Between Group Attachments Styles Within Similar Groups*

Measure	M	SD	N
Task Conflict Type			
Secure	1.93	.97	47
Preoccupied	1.75	.75	20
Dismissive Avoidant	2.55	.80	16
Fearful Avoidant	2.52	1.03	32
Relationship Conflict Type			
Secure	1.50	.67	47
Preoccupied	1.66	.76	20
Dismissive Avoidant	2.20	.97	16
Fearful Avoidant	2.30	.94	32

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 115.

**Table 4**

*Summary of Study 1: LSD Post-Hoc Tests for Student Sample Task Conflict Between Group Attachments Styles Within Similar Group Condition*

Measure	Attachment (a)	Attachment (b)	Mean Difference (a-b)	95% CI for Mean Difference
Task Conflict Type	Secure	Preoccupied	.16	-.32, .67
		Dismissive Avoidant	-.62*	-1.15, -.09
		Fearful Avoidant	-.59**	-1.01, -.17
	Preoccupied	Secure	-.18	-.67, .32
		Dismissive Avoidant	-.80*	-1.42, -.18
		Fearful Avoidant	-.77**	-1.29, -.24
	Dismissive Avoidant	Secure	.62*	-.09, 1.15
		Preoccupied	.80*	.18, 1.42
		Fearful Avoidant	.03	-.53, .60
	Fearful Avoidant	Secure	.59**	.17, .98
		Preoccupied	.77**	.24, 1.26
		Dismissive Avoidant	-.03	-.60, .53

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 115. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 5**

*Summary of Study 1: LSD Post-Hoc Tests for Student Sample Relationship Conflict Between Group Attachments Styles Within Similar Group Condition*

Measure	Attachment (a)	Attachment (b)	Mean Difference (a-b)	95% CI for Mean Difference
Relationship Conflict Type				
	Secure	Preoccupied	-.16	-.49, .27
		Dismissive Avoidant	-.70*	-1.00, -.24
		Fearful Avoidant	-.80*	-.96, -.43
	Preoccupied	Secure	.16	-.27, .59
		Dismissive Avoidant	-.54*	-1.08, .00
		Fearful Avoidant	-.63**	-1.09, -.18
	Dismissive Avoidant	Secure	.70**	.24, .98
		Preoccupied	.54*	.00, 1.08
		Fearful Avoidant	-.09	-.39, .40
	Fearful Avoidant	Secure	.80**	.43, 1.17
		Preoccupied	.63**	.18, 1.09
		Dismissive Avoidant	.09	-.40, .59

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 115. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 6**

*Summary of Study 1: Paired-Samples t-Tests of Student Sample Between Task and Relationship Conflict Scores and Within Similar and Diverse Group Conditions*

Outcome	<u>Similar</u>		<u>Diverse</u>		n	95% CI Mean		t	df
	M	SD	M	SD		Difference			
Task Conflict									
Secure	1.92	.97	2.36	.93	47	-.79, -.08	-2.48*		46
Preoccupied	1.75	.75	2.78	1.26	20	-1.64, -.41	-3.47**		19
Dismissive Avoidant	2.55	.80	2.64	.94	16	-.57, .39	-.42		15
Fearful Avoidant	2.52	1.03	2.60	1.03	32	-.54, .37	-.39		30
Relationship Conflict									
Secure	1.50	.67	1.82	.86	47	-.56, -.08	-2.68**		46
Preoccupied	1.66	.76	2.21	.97	20	-1.12, .02	-2.01		19
Dismissive Avoidant	2.20	.97	2.06	1.05	16	-.56, .85	.43		15
Fearful Avoidant	2.30	.94	2.28	1.02	32	-.41, .44	.08		30

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 115. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 7**

*Summary of Study 2: Intercorrelations, Means, and Standard Deviations for Organizational Sample Attachment Anxiety and Avoidance and Task and Relationship Conflict Attribution Scores Within Similar and Diverse Group Conditions*

Measure	M	SD	1	2	3	4	5	6	7	8
1. Anxiety Similar	2.16	.72	.86							
2. Anxiety Diverse	2.42	.71	.54**	.83						
3. Avoidance Similar	2.61	.69	.42**	.17	.82					
4. Avoidance Diverse	3.12	.59	.37**	.20**	.58**	.78				
5. Task Conflict Similar	1.89	.92	.09	.14	.58**	.39**	.80			
6. Task Conflict Diverse	2.03	.89	.11	.31**	.14	.20	.48**	.95		
7. Relationship Conflict Similar	2.01	.92	.49**	.28*	.33**	.19	.09	.15	.88	
8. Relationship Conflict Diverse	2.45	1.04	.35**	.19	.01	.11	-.06	.05	.39**	.84

*Note.* Intercorrelations are represented in the below diagonal. Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. Reliabilities are represented in the diagonal.  $n = 86$ . \*\* $p < .01$ , two-tailed. \* $p < .05$ , two-tailed.

**Table 8**

*Summary of Study 2: Paired-Samples t-Tests of Organizational Sample Between Group Attachment Anxiety and Avoidance Scores and Within Similar and Diverse Group Conditions*

Outcome	<u>Similar</u>		<u>Diverse</u>		n	95% CI Mean		t	df
	M	SD	M	SD		Difference			
<i>Anxiety</i>									
Secure	1.59	.28	2.01	.51	38	-.58, -.27	-5.47**		37
Preoccupied	2.98	.48	3.30	.61	13	-.70, .07	-1.79		12
Dismissive Avoidant	1.73	.38	2.50	.52	11	-1.20, -.36	-4.1**		10
Fearful Avoidant	2.80	.38	2.53	.66	24	-.03, .57	1.8		23
<i>Avoidance</i>									
Secure	2.13	.35	2.87	.58	38	-.90, -.58	-9.46**		37
Preoccupied	2.19	.45	3.15	.43	13	-1.18, -.72	-9**		12
Dismissive Avoidant	3.06	.37	3.05	.64	11	-.34, .38	.11		10
Fearful Avoidant	3.39	.45	3.54	.47	24	-.38, .07	-1.42		23

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 86. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 9**

*Summary of Study 2: Means, Standard Deviations, and Sample Sizes for Organizational Sample Task and Relationship Conflict Between Group Attachments Styles Within Similar Groups*

Measure	M	SD	N
Task Conflict Type			
Secure	1.61	.73	38
Preoccupied	1.63	.94	13
Dismissive Avoidant	2.36	.72	11
Fearful Avoidant	2.24	1.08	24
Relationship Conflict Type			
Secure	1.77	.70	38
Preoccupied	1.73	.75	13
Dismissive Avoidant	2.52	.99	11
Fearful Avoidant	2.32	1.11	24

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 86.



**Table 10**

*Summary of Study 2: LSD Post-Hoc Tests for Organizational Sample Task Conflict Between Group Attachments Styles Within Similar Group Condition*

Measure	Attachment (a)	Attachment (b)	Mean Difference (a-b)	95% CI for Mean Difference
Task Conflict Type	Secure	Preoccupied	-.02	-.57, .54
		Dismissive Avoidant	-.75*	-1.18, -.15
		Fearful Avoidant	-.62**	-1.07, -.17
	Preoccupied	Secure	.02	-.54, .57
		Dismissive Avoidant	-.73*	-1.44, -.02
		Fearful Avoidant	-.61*	-1.2, -.01
	Dismissive Avoidant	Secure	.75*	.15, 1.38
		Preoccupied	.73*	.02, 1.44
		Fearful Avoidant	.12	-.51, .75
	Fearful Avoidant	Secure	.62**	.17, 1.07
		Preoccupied	.61*	.01, 1.20
		Dismissive Avoidant	-.12	-.76, .51

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 86. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 11**

*Summary of Study 2: LSD Post-Hoc Tests for Organizational Sample Relationship Conflict Between Group Attachments Styles Within Similar Group Condition*

Measure	Attachment (a)	Attachment (b)	Mean Difference (a-b)	95% CI for Mean Difference
Relationship Conflict Type				
	Secure	Preoccupied	.04	-.52, .59
		Dismissive Avoidant	-.75*	-1.35,-.08
		Fearful Avoidant	-.55	-.98,-.10
	Preoccupied	Secure	-.04	-.60, .52
		Dismissive Avoidant	-.79*	-1.51,-.08
		Fearful Avoidant	-.59	-1.19, .10
	Dismissive Avoidant	Secure	.75*	.16,1.25
		Preoccupied	.79*	.24,1.51
		Fearful Avoidant	.21	-.43, .83
	Fearful Avoidant	Secure	.55*	-.10,1.01
		Preoccupied	.59	-.21,1.19
		Dismissive Avoidant	-.20	-.43, .83

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 86. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

**Table 12**

*Summary Study 2: Paired-Samples t-Tests of Organizational Sample Between Task and Relationship Conflict Scores and Within Similar and Diverse Group Conditions*

Outcome	<u>Similar</u>		<u>Diverse</u>		n	95% CI Mean		df	
	M	SD	M	SD		Difference	t		
Task Conflict									
Secure	1.62	.73	1.89	.88	38	-.37, -.19	-6.14**	37	
Preoccupied	1.63	.94	2.27	1.07	13	-1.32, .05	-2.03	12	
Dismissive Avoidant	2.36	.72	2.41	.58	11	-.57, .48	-.19	10	
Fearful Avoidant	2.24	1.08	1.93	.89	24	-.23, .86	1.19	23	
Relationship Conflict									
Secure	1.77	.70	2.24	.87	38	-.74, -.19	-3.46**	37	
Preoccupied	1.73	.75	3.10	1.33	13	-2.26, -.47	-3.32**	12	
Dismissive Avoidant	2.52	.99	2.45	1.05	11	-.69, .78	.14	10	
Fearful Avoidant	2.32	1.11	2.42	1.01	24	-.48, .29	-.50	23	

*Note.* Scale ranged from 1 to 5 with higher scores indicative of a more extreme response for the construct presented. n = 86. \*\*p < .01, two-tailed. \*p < .05, two-tailed.

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## **14. Appendices**

### **Appendix 1**

#### **Undergraduate Student Recruitment Handout – Study 1**

Dear Undergraduate Students,

#### **WE WOULD LIKE YOUR ASSISTANCE:**

I am conducting research for my PhD thesis to understand how personality affects the way individuals deal with workplace events. Since a large number of responses are required for meaningful results, your input is both valuable and necessary to ensure the success of this project.

#### **WHAT WE ARE ASKING YOU TO DO:**

Your participation will consist of one 210 question online survey, viewing a 7 minute online video, and the completion of one 102 question survey based on your response to the video and require 2 hours in total to complete. The questions in the surveys pertain to your demographic background, work experience, personality, and workplace events. Private information will be held confidential such that only the researchers will know the identity of the participants and participants names will not be disclosed in the research study publication.

#### **REWARDS:**

To reward for your participation, you will receive extra course credit, up to 2% in total. For those participants that do not complete the study, points will be prorated towards their final grade for the portion of the study you do complete (up to 1 point per hour).

#### **WHERE AND WHEN:**

Each of the two surveys will be issued online in the organizational behavior lab at the John Molson School of Business.

#### **WHAT IF I WANT TO KNOW MORE BEFORE I COMMIT:**

If you have any questions pertaining to this research you can contact Mark Bajramovic at [m\\_bajr@jmsb.concordia.ca](mailto:m_bajr@jmsb.concordia.ca) who will be on hand to answer questions face-to-face during the study.

Thank you in advance for your input. Your time is greatly appreciated.

Best regards good luck with the course,

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## **Appendix 2**

### **Undergraduate Student Consent to Participate Form – Study 1**

#### **CONSENT TO PARTICIPATE IN PERSONALITY AND CONFLICT IN A MANAGERIAL SETTING**

This is to state that I agree to participate in a program of research being conducted by Mark Bajramovic, PhD candidate at the John Molson School of Business Management Faculty of Concordia University (contact: [m\\_bajr@jmsb.concordia.ca](mailto:m_bajr@jmsb.concordia.ca) or Supervising Faculty Member Professor Dr. Marylene Gagne [mgagne@jmsb.concordia.ca](mailto:mgagne@jmsb.concordia.ca)).

#### **PURPOSE**

I have been informed that the purpose of the research is to understand how personality affects the way individuals deal with workplace events.

#### **PROCEDURES**

The proposed study will use online survey questionnaires and video analysis to collect data. I understand that the study requires the completion of one 210 question online survey, viewing a 7 minute online video, and the completion of one 102 question survey based on my response to the video. I understand that the study requires 2 hours in total to complete. Measurement will include self reports. The data collected will remain confidential. In exchange for my participation, I will receive extra course credit. For those participants that do not complete the study, points will be prorated towards their final grade for the portion of the study they did complete (up to 1 point per hour).

#### **RISKS AND BENEFITS**

The results of this study will enrich the existing literature by broadening our understanding of how personality affects the way individuals deal with workplace event. There are no risks related to participating in this study.

#### **CONDITIONS OF PARTICIPATION**

- **I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.**
- **I understand that my participation in this study is Confidential.**
- **I understand that the data from this study may be published.**



**I HAVE CAREFULLY STUDIED THAT ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.**

**NAME**

**SIGNATURE**

---

**DATE**

---

If at any time you have questions about your rights as a research participant, please contact Brigitte Des Rosiers, Research Ethics and Compliance Officer, Concordia University, at (514) 848-2424 Ext. 7481 or by email at [bddesrosi@alcor.concordia.ca](mailto:bddesrosi@alcor.concordia.ca).

## Appendix 3

### Participant Debriefing Handout – Study 1

Dear Undergraduate Students,

Thank you for participating in our study on how personality affects the way individuals deal with workplace events. Specifically, this study examined how an individual's attachment to work groups affected individual's conflict attribution type and conflict resolution styles.

Our study predicted that an individual's attachment type in a managerial context has a direct effect on individuals' conflict attribution such that secure attachment will be negatively related to both task and relationship conflict; anxious-ambivalent attachment will be negatively related to task conflict and positively related to relationship conflict; dismissive-avoidant attachment will be positively related to task conflict and negatively related to relationship conflict; and fearful-avoidant attachment will be positively related to both task and relationship conflict.

Our study also predicts that attachment type in a managerial context has a direct effect on individuals' conflict resolution styles such that secure attachment will be positively related to problem solving conflict resolution and negatively related to avoiding conflict resolution; anxious-ambivalent attachment will be positively related to yielding conflict resolution style and negatively related to forcing conflict resolution style; dismissive-avoidant attachment will be positively related to avoiding conflict resolution style and negatively related to problem solving conflict resolution style; and Fearful-avoidant attachment will be positively related to forcing conflict resolution style and negatively related to yielding conflict resolution style. The results of our study are intended to be published in an academic journal. Individual responses and organizational identities will not be published, but aggregated such that only general relationships between attachment and conflict are discussed.

#### **REWARDS:**

Those eligible for extra course credit, up to 2% in total, will have these points put toward their final grade for the portion of the study you they did complete (up to 1 point per hour).

Thank you again for your participation and if you have any further questions please feel free to contact:

Mark Bajramovic M.B.A.  
PhD Graduate Student  
John Molson School  
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Concordia University  
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## **Appendix 4**

### **Undergraduate Student Demographic Questions ( Kahneman, Kreuger, Schkade, Schwarz, & Stone, 2004) ( Self-Report) – Study 1**

1. What year were you born?
2. How many years of work experience do you have?
3. What is your gender (M/F)?

## Appendix 5

### Group Attachment Style (Brennan, Clark, & Shaver, 1998) (Self-Report) – Study 1 – Wave 1

Please answer the following questions in reference to a group that you considered your group members to be similar to you

1 (Strongly disagree); 2 (Disagree); 3 (Somewhat Disagree); 4 (Neutral); 5 (Somewhat Agree); 6 (Agree); 7 (Strongly Agree)

- 1 - I find it difficult to allow myself to depend on my group
- 2 - I sometimes worry that I will be hurt if I allowed myself to become too close to my group
- 3 - I want to feel completely at one with my group
- 4 - I find it relatively easy to get close to my group
- 5 - I do not often worry about my group getting too close to me
- 6 - It is very important for me to feel independent and self-sufficient
- 7 - I am nervous when my group gets too close
- 8 - My desire to feel completely at one sometimes scares my group away
- 9 - I prefer not to depend on my group or to have my group depend on me
- 10 - I often worry that my group does not really accept me
- 11 - I am comfortable not being close to my group
- 12 - I often worry that my group will not always want me as a member
- 13 - I am somewhat uncomfortable being close to my group
- 14 - My group is never there when I needed it
- 15 - I find it difficult to completely trust my group
- 16 - I don't worry about being alone or not being accepted by my group
- 17 - I find my group is reluctant to get as close as I like
- 18 - I am not sure that I can always depend on my group to be there when I need it
- 19 - Often my group wants me to be more open about my thoughts and feelings than I felt comfortable being
- 20 - I am comfortable having my group depend on me
- 21 - I sometimes worry that my group doesn't value me as much as I value my group
- 22 - I am comfortable depending on my group
- 23 - I know that my group will be there when I needed it
- 24 - I want to be emotionally close with my group, but I find it difficult to trust my group completely or to depend on my group
- 25 - I do not often worry about being abandoned by my group

## Appendix 6

### Conflict Attribution Type (Jehn, 1995) (Self-Report) – Study 1 – Wave 1

Please answer the following questions in reference to a group that you considered your group members to be similar to you

1 (Almost Never); 2 (Rarely); 3 (Occasionally); 4 (Sometimes); 5 (Frequently); 6 (Usually); 7 (Almost All the Time)

- 1 - How much friction is there in your group?
- 2 - How much are personality conflicts evident in your group?
- 3 - How much tension is there in your group?
- 4 - How much emotional conflict is there in your group?
- 5 - How often does your group disagree about opinions regarding the work being done?
- 6 - How frequently are there conflicts about ideas in your group?
- 7 - How much conflict about the work is there in your group?
- 8 - To what extent are there differences of opinion in your group?

## Appendix 7

### Group Attachment Style (Brennan, Clark, & Shaver, 1998) (Self-Report) – Study 1 – Wave 2

Please answer the following questions in reference to a group that you considered your group members to be different from you

1 (Strongly disagree); 2 (Disagree); 3 (Somewhat Disagree); 4 (Neutral); 5 (Somewhat Agree); 6 (Agree); 7 (Strongly Agree)

- 1 - I find it difficult to allow myself to depend on my group
- 2 - I sometimes worry that I will be hurt if I allowed myself to become too close to my group
- 3 - I want to feel completely at one with my group
- 4 - I find it relatively easy to get close to my group
- 5 - I do not often worry about my group getting too close to me
- 6 - It is very important for me to feel independent and self-sufficient
- 7 - I am nervous when my group gets too close
- 8 - My desire to feel completely at one sometimes scares my group away
- 9 - I prefer not to depend on my group or to have my group depend on me
- 10 - I often worry that my group does not really accept me
- 11 - I am comfortable not being close to my group
- 12 - I often worry that my group will not always want me as a member
- 13 - I am somewhat uncomfortable being close to my group
- 14 - My group is never there when I needed it
- 15 - I find it difficult to completely trust my group
- 16 - I don't worry about being alone or not being accepted by my group
- 17 - I find my group is reluctant to get as close as I like
- 18 - I am not sure that I can always depend on my group to be there when I need it
- 19 - Often my group wants me to be more open about my thoughts and feelings than I felt comfortable being
- 20 - I am comfortable having my group depend on me
- 21 - I sometimes worry that my group doesn't value me as much as I value my group
- 22 - I am comfortable depending on my group
- 23 - I know that my group will be there when I needed it
- 24 - I want to be emotionally close with my group, but I find it difficult to trust my group completely or to depend on my group
- 25 - I do not often worry about being abandoned by my group

## Appendix 8

### Conflict Attribution Type (Jehn, 1995) (Self-Report) – Study 1 – Wave 1

Please answer the following questions in reference to a group that you considered your group members to be different from you

1 (Almost Never); 2 (Rarely); 3 (Occasionally); 4 (Sometimes); 5 (Frequently); 6 (Usually); 7 (Almost All the Time)

- 1 - How much friction is there in your group?
- 2 - How much are personality conflicts evident in your group?
- 3 - How much tension is there in your group?
- 4 - How much emotional conflict is there in your group?
- 5 - How often does your group disagree about opinions regarding the work being done?
- 6 - How frequently are there conflicts about ideas in your group?
- 7 - How much conflict about the work is there in your group?
- 8 - To what extent are there differences of opinion in your group?

## Appendix 9

### Research Proposal – Study 2

# Why We Fight: Assessing the effect of Employees' Personalities on performance, satisfaction, commitment, & turnover

**Researchers:** Mark Bajramovic, MBA, PhDc, Concordia University  
Marylène Gagné, Associate Professor, Concordia University  
Jean Poitras, Associate Professor, HEC

**Phase 1:** Survey Questionnaire

**Phase 2:** Managerial Performance Evaluations

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Managers spend at least 20% of work time dealing with conflicts. How managers solve conflicts greatly influences client relationships, employee performance, and the organizations bottom line. Conflicts are incompatible activities between individuals that occur when one individual's behavior interferes with or negatively influences an others. Over the last decade, there has been an increase in research on how managers solve conflicts. Research has shown that whether conflict has positive or negative effects on the organization is dependent upon how the conflict is perceived and, thereafter, how it is resolved.

This research generates a framework by which to classify employees into 1 of 4 personality types predictive of their conflict attribution type and conflict resolution styles. This can act as a performance maximization tool by matching employee personality types with positions with job characteristics that optimize employee performance and maximize the firms performance outcomes. Using this body of research to improve organizations ability to recruit and place employees will increase employee commitment, satisfaction, and overall individual employee and organizational performance and decreases employee turnover.

Whether conflicts are perceived as task or relationship based often impacts the outcome of the conflict. For example, task conflicts are generally associated with the positive outcomes of higher quality group decisions, increased group performance, and improved employee satisfaction. On the other hand, relationship conflicts are generally associated with the negative outcomes of decreased commitment to firms and lower social interaction with others. Despite the upsurge in conflict research, tjo date little focus has been placed on personality traits that influence individuals' conflict attribution type and conflict resolution style. Moreover, to our knowledge, there is no empirical work that examines the relationship between personality traits and conflict attribution type and conflict resolution style.

Our research is based on the well-established theories of conflict attribution and attachment. Attachment is a theory of personality that accounts for variations in individuals'

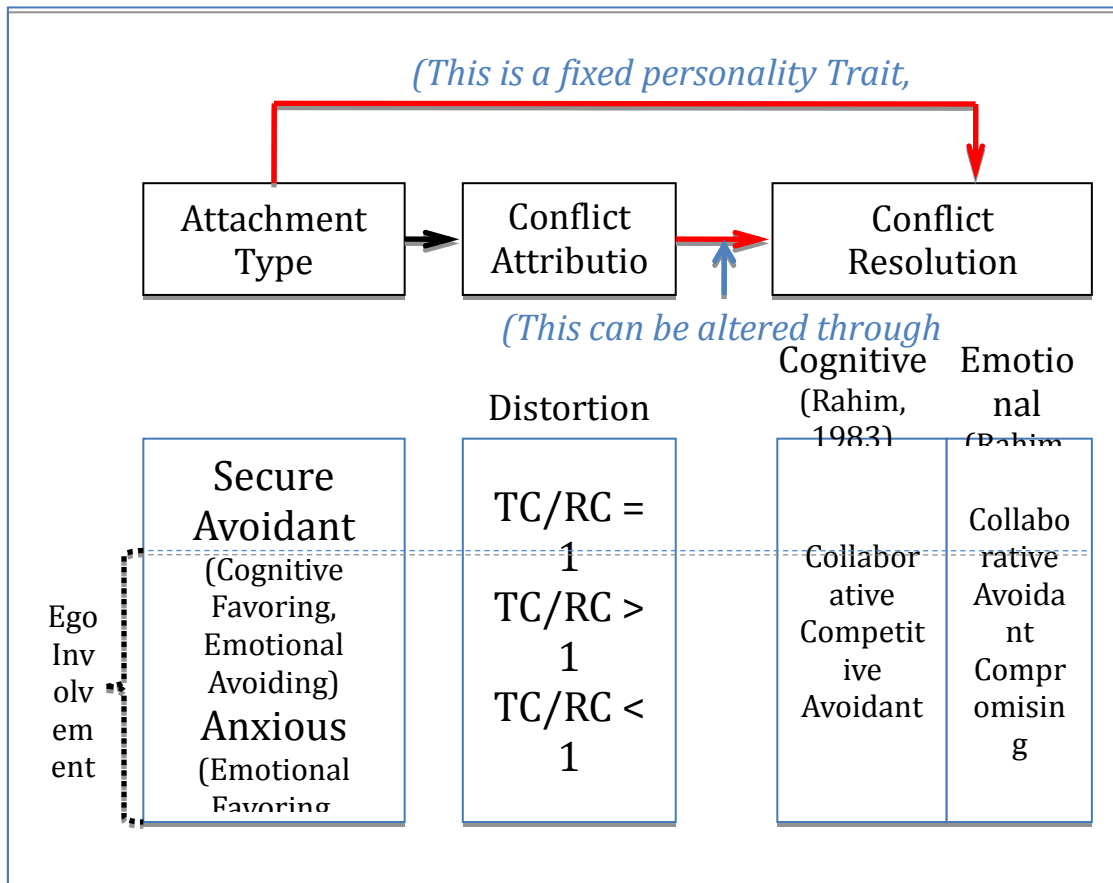


interpersonal and social interactions with others. The proposed study will address the relationship between an individual's attachment type and its effects on conflict attribution type and conflict resolution style in a managerial context. Based on our model, we will test multiple hypotheses using a survey questionnaire, a 10 day diary study, and a brief period of historical data collection.

### Survey Questionnaire, and Managers Performance Assessments

**In addition to the data we wish to collect, we would be pleased to collect data on issues that interest your firm specifically. No cost is incurred to you for any of our research efforts.**

This section pertains to the procedural and measurement techniques used in this research project. The purpose of these measurements is to test a model where personality type may influence conflict attribution type and conflict resolution style, which in turn, influence several performance outcomes.



Our research requires that both managers and their subordinates complete the research survey. Further, in order to properly analyze the data, our research requires assigning each participant an identification number. Employee names will be kept strictly confidential and

behind locked doors. To ensure confidentiality, all questionnaire and dairy data will be entered using the participants identification number only. Data will be maintained on a secure server at the John Molson School of Business and, thereafter, be stored on a secure computer at the John Molson School of Business at Concordia University.

### **Measurement Scales to be included in the Survey**

#### **Phase 1: Survey Questionnaire**

##### **Personality Questionnaire – Self-Rating (36 Questions)**

**Purpose:** To assess employees' and managers' co-worker behavioral attachment styles.

##### **Sample Questions:**

1. I prefer not to show coworkers how I feel deep down.
2. Just when coworkers start to get close to me I find myself pulling away.
3. I don't feel comfortable opening up to coworkers.
4. I want to get close to my coworkers, but I keep pulling back.
5. I try to avoid getting too close to my coworkers.
6. When I'm not involved in coworkers group activities, I feel somewhat anxious and insecure.

##### **Conflict Attribution Questionnaire – Self-Rating (8 Questions)**

**Purpose:** To determine if employees' and managers' generally attribute conflict to be task or relationship based.

##### **Sample Questions:**

1. How much are personality conflicts evident among co-workers?
2. How much emotional conflict is there among co-workers?
3. How much tension is there among co-workers?
4. How often do co-workers disagree about opinions regarding the work being done?
5. How frequently are there conflicts about ideas among co-workers?
6. How much conflict about the work is there among co-workers?

**Phase 1: Total Number of Questions: 91**

**Phase 1: Estimated Time for Completion: 45 minutes**

#### **Phase 2: Managerial Performance Evaluations**

For those participating in the study, their supervising managers will be asked to evaluate their performance for the time period during which the study is taking place.

## **Conditions for Participation**

- The firm will receive a full report of our findings and we will provide recommendations on how to improve the firm's human resource base.
- No cost is incurred to your organization for the research conducted by our scientists.
- The only cost to your firm is your time to complete one survey and a ten day journal entry.
- Our research is funded by grants from government bodies such as the Social Sciences and Humanities Research Council. Your firm and its employees are regarded as participants in this research.
- The purpose of our research is to uncover new behavioral theories that can improve organizational performance. The measure of our success is the publication of our findings in academic journals.
- We are bound by a strict ethical code, and assure you confidentiality and security of participant data.
- We sign confidentiality agreements to assure participating firms anonymity in all our publications.

## **What Organizations Gain**

- Your firm, at no cost, will have collected data that can improve bottom line performance metrics and that evaluate the state of their human resource base.
- The data collected can be used to develop a four category measurement tool that rates employee ability to manage conflict. This tool can be used as performance maximizing tool by matching employee personality types with positions with job characteristics that optimize employee performance and maximize the firms performance outcomes.
- An understanding of how employee's personality type is influencing performance, and peer and client relations.
- An understanding of how the firm's employees' performance, peer relations, and client relationships are influenced by conflict attribution type, and conflict resolution style.
- An understanding of the firm's human resource base and their conflict resolving style, conflict resolution type, employee satisfaction level, and level of employees' commitment to the firm.

## **The Researchers**

**Mark Bajramovic** began his *McGill University* education in Honors Biochemistry and went on to receive a Bachelor of Commerce in Information Systems (1999), an MBA in Marketing and Entrepreneurship (2002), and is a PhD candidate in Organizational Behavior at the *McGill, John Molson School of Business*, and *HEC* joint PhD program. His business experience began in 1993 working for BiHMED, a non-profit organization focused on securing medical supplies and funds for war victims of Bosnia. In 1997, Mark co-founded *Deanmark*, a medical product distribution company. In 2001, Mark co-invented the *AirMouse*, a computer mouse designed to reduce the pain associated with computer related repetitive stress injuries and to improve mouse pointing speed and accuracy. In January of 2010, the *AirMouse* was featured on CBC's Gemini Award winning *Dragon's Den*, and was labeled, "one of the smoothest deals in the show's history". Several journals have featured the *AirMouse* including the *National Post*, the *Montreal Gazette*, the *Ottawa Citizen*, *FHM Magazine*, *South East Globe Magazine*, *BeSpoke Magazine*, as well as numerous websites including *engadget.com* and *gizmodo.com*. In April of 2010, the *AirMouse* was one of 60 international products nominated for the Health and Technology

Innovation Award at *Well-Tech* in Milan, Italy. Mark has won multiple academic scholarships and awards, including the *Power Corporation of Canada Graduate Fellowship* and the *Social Sciences and Humanities Research Council of Canada Research Assistantship Bursary*, and is the author of several book chapters and media articles that have been presented at conferences internationally. Mark teaches Organizational Behavior at the *John Molson School of Business*. His 2010 TV and radio appearances include CBC's *Dragon's Den*, *Global's Focus Montreal*, *107.7*, and *88.5 LIVE* to name a few. Mark devotes his time and energies to developing in products and endeavors that have social benefits and contribute directly to the fabric of our global community.

**Marylène Gagné** is an expert on work motivation, with particular interests in factors that influence it, such as leadership, job design, and compensation systems. She has conducted laboratory and field research on job design, leadership, management, information technology acceptance, and coaching. She also teaches undergraduate and graduate courses on the topic of organizational behavior, leadership and motivation.

**Jean Poitras** a développé une connaissance approfondie de la gestion des conflits en intégrant son expérience de consultant, les résultats de ses projets de recherche et les conclusions des plus récentes études scientifiques. Subventionnés par le Fonds québécois de la recherche sur la société et la culture et le Conseil de recherche en sciences humaines du Canada, ses recherches sont publiées notamment dans le « *Negotiation Journal* » et le « *Conflict Resolution Quarterly* ». Depuis plus de dix ans, M. Poitras aide les professionnels à développer leurs habiletés de négociateur et de médiateur. Pédagogue au dynamisme communicatif, il axe son enseignement sur l'acquisition de stratégies d'intervention à la fois perspicaces et pratiques.

## **Appendix 10**

### **Employee Recruitment Handout – Study 2**

Dear Employee,

#### **WE WOULD LIKE YOUR ASSISTANCE:**

I am conducting research for my PhD thesis to understand how personality affects the way individuals deal with workplace events. Since a large number of responses are required for meaningful results, your input is both valuable and necessary to ensure the success of this project.

#### **WHAT WE ARE ASKING YOU TO DO:**

Your participation will consist of completing 6 paper and pencil surveys administered over a period of 6 months. Your supervisor may be contacted to attain your performance ratings, however, your supervisors will not have access to your personal responses. Private information will be held confidential such that only the researchers will have access to your individual responses and not your employers

#### **REWARDS:**

In exchange for my participation, I understand that my name will be placed in a rafel with the chance to win 1 of 9 prizes as follows:

- 1. One prize of \$200 cash**
- 2. One prize of \$100 cash**
- 3. One prize of \$50 cash**
- 4. One of six prizes of \$25 cash**

#### **WHERE AND WHEN:**

The survey questionnaire and daily journal will be issued online.

#### **WHAT IF I WANT TO KNOW MORE BEFORE I COMMIT:**

If you have any questions pertaining to this research you can contact Mark Bajramovic at [m\\_bajr@jmsb.concordia.ca](mailto:m_bajr@jmsb.concordia.ca) who will be on hand to answer questions face-to-face during the study. Thank you in advance for your input. Your time is greatly appreciated.

Mark Bajramovic M.B.A.  
PhD Graduate Student  
John Molson School of Business  
Concordia University  
Tel: (514) 983.6275  
[M\\_bajr@jmsb.concordia.ca](mailto:M_bajr@jmsb.concordia.ca)

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[mgagne@jmsb.concordia.ca](mailto:mgagne@jmsb.concordia.ca)

## Appendix 11

### Employee Consent to Participate Form – Study 2

#### CONSENT TO PARTICIPATE IN PERSONALITY STUDY

This is to state that I agree to participate in a program of research being conducted by Mark Bajramovic, PhD Candidate at the John Molson School of Business Management Faculty of Concordia University (contact: [m\\_bajr@jmsb.concordia.ca](mailto:m_bajr@jmsb.concordia.ca) or Supervising Faculty Member Professor Dr. Marylene Gagne [mgagne@jmsb.concordia.ca](mailto:mgagne@jmsb.concordia.ca)).

#### PURPOSE

I have been informed that the purpose of the research is to understand how personality affects the way individuals deal with workplace events.

#### PROCEDURES

The proposed study will use and take approximately 2 hours to complete. **ALL PERSONAL RESPONSES WILL BE KEPT CONFIDENTIAL AND SUPERVISORS WILL NOT HAVE ACCESS TO YOUR PERSONAL RESPONSES.** The data collected will remain confidential and the individual information collected will only be made accessible to the researchers conducting the study and not your employer. Measurements will include self-reports, and reports by supervising managers. I understand that the study requires the completion of six 120 question surveys to collect the data.

In exchange for my participation, I understand that my name will be placed in a rafel with the chance to win 1 of 9 prizes as follows:

1. One prize of \$200 cash
2. One prize of \$100 cash
3. One prize of \$50 cash
4. One of six prizes of \$25 cash

Participants will be eligible for the prize if they complete all six survey questionnaires

#### RISKS AND BENEFITS

The results of this study will enrich the existing literature by broadening our understanding of how personality affects the way individuals deal with workplace events. There are no risks related to participating in this study.

**CONDITIONS OF PARTICIPATION**

- I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.
- I understand that my participation in this study is Confidential.
- I understand that the data from this study may be published.

**I HAVE CAREFULLY STUDIED THAT ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.**

**NAME (please print)** \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_

**DATE** \_\_\_\_\_

I, Mark Bajramovic, the principle researcher, assure the above participant that the information disclosed by the said participant in the surveys will be kept confidential and supervisors will not have access to their individual results.

**NAME** \_\_\_\_\_ **Mark Bajramovic, B.Comm, MBA, PhDe**

**SIGNATURE**  
\_\_\_\_\_

**DATE**  
\_\_\_\_\_

If at any time you have questions about your rights as a research participant, please contact Brigitte Des Rosiers, Research Ethics and Compliance Officer, Concordia University, at (514) 848-2424 Ext. 7481 or by email at [bddesrosi@alcor.concordia.ca](mailto:bddesrosi@alcor.concordia.ca).

## Appendix 12

### Participant Debriefing Handout – Study 2

Dear Employee,

Thank you for participating in our study on how personality affects the way individuals deal with workplace events. Specifically, this study examined how an individual's attachment to work groups affected individual's conflict attribution type and conflict resolution styles.

Our study predicted that an individual's attachment type in a managerial context has a direct effect on individuals' conflict attribution such that secure attachment will be negatively related to both task and relationship conflict; anxious-ambivalent attachment will be negatively related to task conflict and positively related to relationship conflict; dismissive-avoidant attachment will be positively related to task conflict and negatively related to relationship conflict; and fearful-avoidant attachment will be positively related to both task and relationship conflict.

Our study also predicts that attachment type in a managerial context has a direct effect on individuals' conflict resolution styles such that secure attachment will be positively related to problem solving conflict resolution and negatively related to avoiding conflict resolution; anxious-ambivalent attachment will be positively related to yielding conflict resolution style and negatively related to forcing conflict resolution style; dismissive-avoidant attachment will be positively related to avoiding conflict resolution style and negatively related to problem solving conflict resolution style; and Fearful-avoidant attachment will be positively related to forcing conflict resolution style and negatively related to yielding conflict resolution style. The results of our study are intended to be published in an academic journal. Individual responses and organizational identities will not be published, but aggregated such that only general relationships between attachment and conflict are discussed.

Thank you again for your participation and if you have any further questions please feel free to contact:

Mark Bajramovic M.B.A.  
PhD Graduate Student  
John Molson School  
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Tel: (514) 983.6275  
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Concordia University  
Tel: (514) 848.2424 Ext. 2775  
[mgagne@jmsb.concordia.ca](mailto:mgagne@jmsb.concordia.ca)



## **Appendix 13**

### **Employee Demographic Questions (Kahneman, Kreuger, Schkade, Schwarz, & Stone, 2004) (Self-Report) – Study 2**

1. What year were you born?
2. How many years of work experience do you have?
3. What is your gender (M/F)?

## Appendix 14

### Group Attachment Style (Brennan, Clark, & Shaver, 1998) (Self-Report) – Study 2 – Wave 1

Answer the following questions with reference to a position you held for a company other than your current employer where you considered the members of your work group to be very similar to you

1 (Strongly disagree); 2 (Disagree); 3 (Somewhat Disagree); 4 (Neutral); 5 (Somewhat Agree); 6 (Agree); 7 (Strongly Agree)

- 1 - I find it difficult to allow myself to depend on my work group
- 2 - I sometimes worry that I will be hurt if I allowed myself to become too close to my work group
- 3 - I want to feel completely at one with my work group
- 4 - I find it relatively easy to get close to my work group
- 5 - I do not often worry about my work group getting too close to me
- 6 - It is very important for me to feel independent and self-sufficient
- 7 - I am nervous when my work group gets too close
- 8 - My desire to feel completely at one sometimes scares my work group away
- 9 - I prefer not to depend on my work group or to have my group depend on me
- 10 - I often worry that my work group does not really accept me
- 11 - I am comfortable not being close to my work group
- 12 - I often worry that my work group will not always want me as a member
- 13 - I am somewhat uncomfortable being close to my work group
- 14 - My work group is never there when I needed it
- 15 - I find it difficult to completely trust my work group
- 16 - I don't worry about being alone or not being accepted by my work group
- 17 - I find my work group is reluctant to get as close as I like
- 18 - I am not sure that I can always depend on my work group to be there when I need it
- 19 - Often my work group wants me to be more open about my thoughts and feelings than I felt comfortable being
- 20 - I am comfortable having my work group depend on me
- 21 - I sometimes worry that my work group doesn't value me as much as I value my work group
- 22 - I am comfortable depending on my work group
- 23 - I know that my work group will be there when I needed it
- 24 - I want to be emotionally close with my work group, but I find it difficult to trust my work group completely or to depend on my work group
- 25 - I do not often worry about being abandoned by my work group

## Appendix 15

### Conflict Attribution Type (Jehn, 1995) (Self-Report) – Study 2 – Wave 2

Answer the following questions with reference to a position you held for a company other than your current employer where you considered the members of your work group to be very similar to you

1 (Almost Never); 2 (Rarely); 3 (Occasionally); 4 (Sometimes); 5 (Frequently); 6 (Usually); 7 (Almost All the Time)

- 1 - How much friction is there in your work group?
- 2 - How much are personality conflicts evident in your work group?
- 3 - How much tension is there in your work group?
- 4 - How much emotional conflict is there in your work group?
- 5 - How often does your work group disagree about opinions regarding the work being done?
- 6 - How frequently are there conflicts about ideas in your work group?
- 7 - How much conflict about the work is there in your work group?
- 8 - To what extent are there differences of opinion in your work group?

## Appendix 16

### Group Attachment Style (Brennan, Clark, & Shaver, 1998) (Self-Report) – Study 2 – Wave 3

Answer the following questions with reference to the position you hold at the company that currently employs you

1 (Strongly disagree); 2 (Disagree); 3 (Somewhat Disagree); 4 (Neutral); 5 (Somewhat Agree); 6 (Agree); 7 (Strongly Agree)

- 1 - I find it difficult to allow myself to depend on my work group
- 2 - I sometimes worry that I will be hurt if I allowed myself to become too close to my work group
- 3 - I want to feel completely at one with my work group
- 4 - I find it relatively easy to get close to my work group
- 5 - I do not often worry about my work group getting too close to me
- 6 - It is very important for me to feel independent and self-sufficient
- 7 - I am nervous when my work group gets too close
- 8 - My desire to feel completely at one sometimes scares my work group away
- 9 - I prefer not to depend on my work group or to have my group depend on me
- 10 - I often worry that my work group does not really accept me
- 11 - I am comfortable not being close to my work group
- 12 - I often worry that my work group will not always want me as a member
- 13 - I am somewhat uncomfortable being close to my work group
- 14 - My work group is never there when I needed it
- 15 - I find it difficult to completely trust my work group
- 16 - I don't worry about being alone or not being accepted by my work group
- 17 - I find my work group is reluctant to get as close as I like
- 18 - I am not sure that I can always depend on my work group to be there when I need it
- 19 - Often my work group wants me to be more open about my thoughts and feelings than I felt comfortable being
- 20 - I am comfortable having my work group depend on me
- 21 - I sometimes worry that my work group doesn't value me as much as I value my work group
- 22 - I am comfortable depending on my work group
- 23 - I know that my work group will be there when I needed it
- 24 - I want to be emotionally close with my work group, but I find it difficult to trust my work group completely or to depend on my work group
- 25 - I do not often worry about being abandoned by my work group

## Appendix 17

### Conflict Attribution Type (Jehn, 1995) (Self-Report) – Study 2 – Wave 2

Answer the following questions with reference to the position you hold at the company that currently employs you

1 (Almost Never); 2 (Rarely); 3 (Occasionally); 4 (Sometimes); 5 (Frequently); 6 (Usually); 7 (Almost All the Time)

- 1 - How much friction is there in your work group?
- 2 - How much are personality conflicts evident in your work group?
- 3 - How much tension is there in your work group?
- 4 - How much emotional conflict is there in your work group?
- 5 - How often does your work group disagree about opinions regarding the work being done?
- 6 - How frequently are there conflicts about ideas in your work group?
- 7 - How much conflict about the work is there in your work group?
- 8 - To what extent are there differences of opinion in your work group?