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**Proper punctuation: a qualitative exploration of changes in
conflict management processes during revolutionary periods in
teams**

Cody J. Thompson

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Pepperdine University
Graduate School of Education and Psychology

PROPER PUNCTUATION:

A QUALITATIVE EXPLORATION OF CHANGES IN CONFLICT MANAGEMENT
PROCESSES DURING REVOLUTIONARY PERIODS IN TEAMS

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Philosophy in Global Leadership and Change

by

Cody J. Thompson

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DOCTOR OF PHILOSOPHY

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ABSTRACT

Teams experience periods of dramatic change, known as revolutionary periods, during their developmental life cycles. These periods have an outsized impact on performance as they provide an opportunity to reconsider and reshape the fundamental assumptions and processes that teams deploy to accomplish their goals. The transient and durable changes to transition, action, and interpersonal processes which occur during revolutionary periods are critical mediators which convert the team's inputs into outcomes including productivity, group viability, and individual group member satisfaction. Teams are ubiquitous in for-profit organizations, and these organizations are situated in increasingly dynamic and volatile environments. Despite this, little research directly examines how teams cope with this dynamism through interpersonal process adaptations during revolutionary periods. This study explores how, if at all, teams modify their conflict management processes during revolutionary periods. It does so by utilizing a qualitative, multiple-case method to examine changes in the conflict management processes of two teams that had undergone revolutionary periods and emerged with improved performance. The results show that there was not a universal pattern of qualitative changes in conflict management processes or styles during revolutionary periods. Instead, teams engaged in transitory subversion of previous predominant conflict management styles as they addressed urgent threats through unique blends of alternative approaches. Later, both teams transitioned to new, stable blends of conflict management styles in the ensuing period of equilibrium where collaborating predominated. Results also show that teams reduced the level of detail and dynamic complexity in their conflict management processes at the onset of the revolutionary period and incrementally restored complexity as they transitioned to periods of equilibrium. The first conclusion supports both the notion that revolutionary periods create sensitive far from

equilibrium states as well as the contingency theory of conflict management. The second conclusion supports structural adaptation theory and the proposition that systems readily transition to states of lower complexity. The generalizability of these conclusions is limited as this study was exploratory, but they offer value to practitioners and researchers alike. They can both inform further inquiry on longitudinal changes in conflict management processes and serve as heuristics guiding leader's and team member's actions during revolutionary periods.

Keywords: punctuated equilibrium, revolutionary periods, teams, team development, team adaptation, conflict, conflict management, interpersonal processes, complexity

Chapter 1: Introduction

Chapter Overview

Chapter 1 begins with a brief summary of the practical and academic background for the problem and the present study. This is followed by a statement of the problem that will be explored and an overview of the purpose of this study. The significance of the study is presented, a set of definitions for key terms are provided, and the research questions are then enumerated. The chapter closes with a brief discussion of limitations, delimitations, a statement of positionality, and a chapter summary.

Background

For-profit organizations are struggling to cope with a set of challenges that have been brought forth by two interconnected trends: dynamism in their external environment, and changes to the composition and organization of human capital. With regard to the first trend, recent decades have seen a steady increase in the levels of volatility, uncertainty, complexity, and ambiguity (VUCA; Johansen & Euchner, 2013). Since its appearance in the work of Bennis and Nanus (1986) and its further promulgation by futurists like Johansen (2017), the VUCA construct expanded far beyond its original application in military education (Gerras et al., 2010; Stiehm, 2002). Today, its broad utility is evinced by its application in a wide array of fields including public policy (Burns et al., 2018; Flink, 2017), teaching education (Hadar et al., 2020), ecological conservation (Schick et al., 2017), and management (Millar et al., 2018). VUCA can devolve into a trite defense for feelings of futility (N. Bennett & Lemoine, 2014), but it is a valuable analytical tool when each element is considered both individually and in concert with one another. When it is applied in this way, it provides a useful framework for academics and practitioners who are concerned with rising dynamism in the competitive environment. This

dynamism is consequential as it imperils both short-term performance and long-term survival of organizations (N. Bennett & Lemoine, 2014).

Volatility, which is the size and frequency of unanticipated fluctuations in the environment (Glazer & Weiss, 1993), is on the rise both economically and socially. Outside of macroeconomic factors like trade flow volatility, which steadily increased in the wake of the 2009 global recession (F. Bennett et al., 2016), globalization has caused an increase of volatility at the firm level (Haltiwanger, 2011). Economic volatility adversely affects all participants in a market (Ramey & Ramey, 1995), but it is most disruptive for fledgling participants (Betancourt, 1996). This volatility contributes to the failure rate of new ventures, which the US Bureau of Labor Statistics estimates to be 20% within the first year and 45% within the first 5 years of a venture's inception (U.S. Bureau of Labor Statistics, 2021), as well as the demise of corporate giants as the top 12 largest bankruptcies by assets at the time of filing have occurred in the 21st century (Statista Research Department, 2021). The challenges presented by economic volatility are further compounded by social volatility. Changes in the economic landscape both induce and exacerbate forms of non-normative social behavior and sentiment (Durkheim, 1972; Hagan et al., 1998; Levi et al., 2020), and large-scale social media-fueled movements, including Occupy Wall Street and the Arab Spring (Tufekci & Freelon, 2013), as well as public support for the Black Lives Matter movement (Freelon et al., 2020), provide acute modern examples.

Uncertainty, which can be defined as the absence of adequate information regarding the probabilities associated with a set of known possible outcomes (Schrader et al., 1993), also exerts pressure on firms. One vivid example comes in the realm of politics and election forecasting. Forecasters deal with a constrained set of possible outcomes, with as few as two possible outcomes in enormously consequential elections, but they still struggle to assign and

effectively communicate the probabilities associated with these outcomes (Gelman et al., 2020), and this comes in spite of a deluge of available polls (Toff, 2018). As a result, organizations are handicapped in their attempts to preemptively prepare for policy and regulatory changes that may occur when a political regime either changes or is perpetuated following an election.

Complexity, according to Senge (2006), can be separated into two sub-dimensions: detail complexity and dynamic complexity. Detail complexity is concerned with the volume of pertinent data, while dynamic complexity is related to the volume of both linear and non-linear causal relationships (Senge, 2006). Detail complexity has increased dramatically, and the growth of available data is outpacing Moore's Law (Chen & Zhang, 2014). This information glut has strained practitioners who are tasked with extracting value from this data (Sivarajah et al., 2017), and a number of peripheral concerns including data quality, privacy, and security have thus far been largely intractable (I. Lee, 2017). As a result, the majority of organizational leaders are concerned that investments in big data will not yield adequate returns (Accenture, 2016). The rise of big data may also produce secondary effects, specifically overconfidence without a proportionate improvement in decision accuracy (Peterson & Pitz, 1988; Tsai et al., 2008), which adversely affect an organization's performance by degrading decision quality. An increase in dynamic complexity is also challenging as it taxes a leader's limited capacity for systems thinking and exposes a widespread inability to shift from static problem frames to dynamic, systems-based problem frames (Forrester, 1971; Moxnes, 2000; Senge, 2006; Sterman, 1989).

Ambiguity is closely related to uncertainty, but it is distinct in that it entails an open set of possible outcomes. Unlike uncertainty, where the possible outcomes are constrained, ambiguous situations are marked by a lack of clarity with regards to the problem's structure as well as the appropriate problem-solving process (Schrader et al., 1993). Akin to Heifetz's (1998)

conceptualization of adaptive challenges, ambiguous situations contain unknown unknowns, and they call for the creation of new means capable of producing desirable but ultimately unclear ends. Ambiguity is set to become nearly omnipresent as the complex economic, social, and technical institutions of globalization continue to expand (Kellner, 2002), and teams and organizations often lack the reflexivity and creativity to meet these demands in real time (Levine et al., 2019).

This confluence of forces, and their endemic challenges, has produced an environment where organizations will, with great frequency, confront events that trigger periods of profound disequilibrium. In order to successfully navigate these events and ensure their long-term viability, organizations will have to maximize the efficacy of their human capital. Gary Becker (2009) argues that human capital, which is broadly framed as the skills and knowledge of a company's employees or country's citizens, has stood as a prime driver for progress and prosperity throughout the 20th century (Becker, 1962; Langelett, 2002). A firm's human capital is not just existentially important in the short term, it is also vital for growth. Employee's ideas and know-how constitute the kind of non-rival goods that are critical to development (Romer, 1990).

The VUCA trend has been paralleled by a change in the composition and organization of human capital. Organizations have, for multiple decades, turned to teams as a means of coping with these forces by producing the requisite improvement in the performance of their human capital. While teams are experiencing a renaissance, the use of teams is far from a modern phenomenon. The archaeological record indicates that traits for prosociality in humans emerged between 200 and 100 thousand years ago, and the prevalence of these traits increased thereafter (Hare, 2017; Simpson & Beckes, 2010). Further, the Social Brain Hypothesis (SBH), originally the Machiavellian Intelligence Hypothesis (Byrne, 2018; Hopper et al., 2018), argues that

increases in prosociality were central to human evolution and survival. According to the SBH, mankind's current cognitive capacities can be attributed to the evolutionary pressures created by the demands of social coordination and bonding (Dunbar & Shultz, 2007; McNally et al., 2012). Teamwork has long been central to mankind's prosperity and progress, and it will likely be so in the future.

Teams proliferated in early 20th-century Western organizations, but Steiner (1972) criticized their early use and stated that teams were often neither necessary nor well suited to the context that they were applied to. Steiner's admonition, however, had little apparent impact on the rate of adoption. The influx of Japanese manufactured goods into the Western market during the 1980's, an early exemplar of the challenges presented by globalization, imperiled American firms and accelerated the movement towards teams. American firms copied the quality circles which were popular among their Japanese competitors, but this team-based approach failed to yield sustained performance benefits (Argyris, 2012; Ferris & Wagner, 1985; Griffin, 1988). Eventually, quality circles were discarded and dubbed a fad (Edward & Susan, 1985).

The ill-fated trend of quality circles troubled practitioners, and the study of teams within academia produced similarly disquieting results. Studies conducted during this era routinely pointed to the dubious efficacy of teams (Hackman, 1991) and researchers found that teams regularly failed to outperform their best members (Schoner et al., 1974). Worse yet, teams often performed at the level of their weakest member (LePine et al., 1997). Team failures were so common that early conceptual models, like Steiner's process loss model (1972), focused on the consequences of faulty team processes rather than the synergistic effects that organizations were seeking. In addition to the general shortcomings that were revealed in practice and in research, high profile events like the Bay of Pigs (Janis, 1972) and the Tenerife Airport Disaster (Weick,

1990) exposed the vulnerabilities of teams and the potential dangers associated with group think and the interruption of key team routines in consequential environments.

Despite all of this, teams were continuously romanticized because of their perceived, and actual, socio-emotional and competence-related benefits (Allen & Hecht, 2004). The movement from individual contribution to team-based work gradually expanded (Devine et al., 1999; Lawler et al., 1995) and teams now constitute the essential building blocks for organizations (Mathieu et al., 2019). Researchers have argued that teams are better suited for dynamic environments due to their extended networks, experiences, and information processing capacities (Ancona & Caldwell, 1992; Zaccaro & Bader, 2003), and organizations now depend upon team-based structures to drive organizational adaptation (Bell et al., 2018; Bernstein et al. 2016; Galbraith et al., 1994). Teams also serve as the fundamental learning unit within modern organizations (Senge, 2006) and they are seen as an essential tool in the modern environment (Edmondson & Schein, 2012). With the parallel rise of VUCA and teams, organizations must come to understand how high performing teams effectively operate in the turbulent environments that they often occupy (Burke et al., 2006; Rico et al., 2020).

Background of the Study

In spite of this imperative, and the steadily expanding role of teams in organizational life, gaps persist in the study of small groups and teams. The Hawthorne studies are generally recognized as the genesis of modern, formalized team and small group research (Sundstrom et al., 2000). This set of studies, conducted by Elton Mayo et al. from 1924 and 1933 (Wickström & Bendix, 2000), eschewed the materialist scientific paradigm promoted by theorists like Fredrick Taylor in *The Principles of Scientific Management* (Taylor, 2020). Instead, the Hawthorne studies focused on the dynamics of social systems and the impact that these dynamics

have on performance (Mathieu et al., 2018; Sonnenfeld, 1985). This vein of research begot the Harvard School, which constituted the first of the three major schools of small group and team research (McGrath, 1997). The Harvard school was one of the first lines of research which viewed groups, rather than individuals, as the primary unit of social analysis (Mathieu et al., 2018). This approach, which Steiner labeled as a ‘groupy’ orientation (Steiner, 1972), viewed individuals as parts of a larger whole whose behaviors were patterned through their ongoing participation in a group. To understand how this patterning process occurred, the Harvard school depended heavily on Bales’ (1951) Interaction Process Analysis (IPA) method and the experimental study of ad hoc groups.

The second major school, the Michigan School, emanated from Kurt Lewin and his intellectual progeny (Mathieu et al., 2018; McGrath, 1997). Lewin, a seminal figure of modern social psychology (Billig, 2015; Moreland, 1996), advocated for the development of sound theory through the study of experimental groups (Kariel, 1956; Lewin, 1997; Lewin et al., 1939). Through lab-based studies, the Michigan School sought to identify and quantify universal social laws that are brought to bear on individuals in social settings (Lewin, 2013; Lewin et al., 1939; Likert, 1947; Mathieu et al., 2018; McGrath, 1997). Steiner (1972) later described this orientation as “individualistic” because it framed the group as a holistic dynamic system that functioned as the individual’s environment within Lewin’s $B = (f)PE$ equation. This equation posited that an individual’s behavior is a function of the interrelationship of an individual person (P) and their environment (E; Lewin, 2013). This perspective pushed the field forward by reifying the group as an entity, which was a debated notion at the time (Mathieu et al., 2018), but it framed the group as the independent rather than the dependent variable.

The third major school, the Illinois School, built upon and drew from both of the schools that preceded it (Mathieu et al., 2018). McGrath, the scholar whose work is most strongly associated with the Illinois School, applied Michigan's nomothetic approach as he sought to identify universal properties and processes which predict group performance (McGrath, 1997). The Illinois School was also linked to the Harvard School through its parallel focus on the attributes of individual members (Mathieu et al., 2018). By synthesizing these foci, the field of team research progressed into an era when small groups were reconceptualized as complex systems (Mathieu et al., 2019; McGrath et al., 2000). This development, along with the emphasis on temporal factors (McGrath, 1991), contextual factors like task type (Straus, 1999), and the proliferation of Input-Process-Output (I-P-O) framework (Hackman & Morris, 1975), created the foundation for modern small group research (Mathieu et al., 2018).

Despite these advancements, these three schools failed to adequately determine what predicts team performance (Mathieu et al., 2018). The Integration Period began in the early 1990's and sought to redress this gap through multifaceted and multilevel theory building and research (Mathieu et al., 2018). The I-P-O model was foundational for decades of research (Mathieu et al., 2017), but it progressively fell out of favor due to its rigidity and linearity. These aspects of the IPO model ran counter to the prevailing conceptualization of teams as multilevel, dynamic, adaptive systems (Ancona & Chong, 1999; Mathieu et al., 2008).

This led to the development of more complex, multilevel models like the Input, Mediator, Output, Input (IMOI) model put forth by Ilgen et al. (Ilgen et al., 2005). Within the IMOI model, the mediator category was made more inclusive, and it came to encompass concepts including the psychodynamic states described by Cohen and Bailey (1997) as well as processes described by Marks et al. (2001). The IMOI model also concluded with an additional input phase which

indicates the presence of cyclical causal feedback (Ilgen et al., 2005). After reviewing the literature that followed this reconceptualization, Mathieu et al. (2017), developed a comprehensive overlapping domain framework which encompassed each relevant team level input and mediator.

This represented significant progress with regard to identifying and categorizing facets of team performance, but temporal factors, as well as the role of longitudinal change and development, remained relatively unexamined. Dynamic processes were predominantly examined as if they were static states, and studies primarily utilized ad hoc groups that were tasked with inconsequential undertakings in experimental settings (Kozlowski, 2015). This approach effectively precluded consideration of how, and to what extent, endogenous and exogenous forces affect team processes or performance over longer periods of time (McGrath, 1993). The majority of research that accounted for these factors was conducted in therapeutic groups, so its generalizability and practical utility is limited (Levine & Moreland, 1990).

Repeated calls for further research on team development, the subfield which examined these longitudinal changes, went largely unheeded (Kozlowski & Bell, 2012; Kozlowski & Ilgen, 2006). This led to subsequent calls to “revisit the fundamental temporal nature of team evolution and dynamics” (Mathieu et al., 2017 p. 460), to move beyond snapshot cross-sectional studies (Arrow et al., 2004), and to determine “whether there are critical moments or stages in development or whether discontinuous changes such as ‘tipping points’ might increase our understanding of the function of team mediators over time” (Mathieu et al., 2008, p. 433). The theory of Punctuated Equilibrium (PE; Gersick, 1988), which portrays team development as a process driven by periods of revolutionary change and adaptation, offers a useful analytical lens for researchers who seek to answer these calls.

As research begins to apply this lens to the three domains put forward by Mathieu et al. (2017), mediating mechanisms offer an intriguing starting point. The process facet of mediating mechanisms is especially promising because processes are “more malleable and proximal to team outcomes” (DeChurch et al., 2013, p. 560). Marks et al. (2001) developed a framework that divided team processes into three categories: transition, action, and interpersonal processes. While a number of alternative models for team processes exist (Rousseau et al., 2006), subsequent meta-analyses confirmed the construct validity of these three categories (LePine et al., 2008; Mathieu et al., 2018, 2019).

Of these categories, interpersonal processes are particularly interesting because they are most susceptible to interruption by unpredictable events. Interpersonal processes operate continuously, unlike the cyclical transition and action processes, and they are not bound to individual performance episodes (Mathieu et al., 2017; Thiel et al. 2019). Further, Maynard et al. (2015) suggest that team adaptation primarily impacts interpersonal and action processes. Marks et al. (2001) identified three sub-categories of team level interpersonal processes: conflict management, affect management, and confidence building. While each is integral to team performance, the present study will focus on conflict management. By tracing changes to conflict management processes during critical periods in a high performing team’s lifespan, researchers can improve their understanding of team development, team adaptation, and team performance. This can subsequently aid practitioners as they apply that understanding to teams in the field.

Problem Statement

Currently, the competitive environment for for-profit organizations is growing increasingly VUCA. Concurrently, organizations have steadily elevated the rate with which they utilize teams within their organizational designs. As a consequence of these two parallel trends,

teams will confront exogenous and endogenous events that have the potential to trigger revolutionary periods of paradigmatic change and development with increasing frequency. These periods potentiate positive transformational change and stepwise development “when systems directions are formed and reformed” (Gersick, 1988, p. 16).

Therefore, the performance and prosperity of today’s for-profit organizations will be directly and significantly impacted by the ability of their teams to translate this potential into positive change and productive adaptation. In order to do so, teams will need to adapt their processes, which are defined by Marks et al. (2001) as “members’ interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward organizing taskwork to achieve collective goals (p. 357).

Nevertheless, team development and adaptation are relatively understudied subdomains in the field of team research (Kozlowski & Bell, 2012; Kozlowski & Ilgen, 2006; Mathieu et al., 2008; Mathieu et al., 2019), and little is known about how teams dynamically adapt as they transition from stable periods of routine activity to periods marked by nonroutine tasks (Lei et al., 2016). Gersick’s model of Punctuated Equilibrium (1988) offers some general guidance, but there is no clear model depicting how, to what extent, and for what purpose, teams modify their conflict management processes during these transitions. This leaves practitioners bare, and scholars are not yet capable of providing managers and other organizational leaders with clear recommendations that are capable of consistently improving team performance during these critical periods (LePine et al., 2008).

Purpose Statement

The purpose of this qualitative multiple case study is to explore interpersonal process changes during revolutionary periods in teams and to gain a greater understanding of the manner

and extent to which high performing teams embedded within a for-profit organization modify their conflict management processes during these periods. Through intensive semi-structured interviews, this study has constructed a construct a rich, tick description of the qualitative changes that occur when teams manage conflict during these critical periods of disequilibrium. At this stage of the research, the modification of conflict management processes is defined as a substantive departure from the normative reactive and proactive behavioral patterns that team members engage in while responding to real or perceived incompatibilities in thoughts, actions, or interests within the team.

Significance of the Study

This study offers value to academic researchers and practitioners alike. It contributes to the fields of team and small group development, team adaptation, and team conflict management. Further, it benefits practitioners who execute work in teams, who lead teams, or who operate within a team based organizational design.

Team and small group development, in its most general sense, is the longitudinal improvement of team performance (Chang et al., 2006). This heavily cited but relatively understudied sub-field occupies a boundary spanning position in the broader network of team and small group research and it links a number of disparate topics across multiple decades (Emich et al., 2020). This position is a consequence of the fact that team development impacts every other facet that influences a team's performance. As a result, contributions to the team development literature produce secondary benefits for other sub-fields within team and small group research.

Punctuated Equilibrium (Gersick, 1988) helps reconcile team development with team adaptation research by presenting team development as a succession of periods of equilibrium

interspersed and periods of substantial, revolutionary change. This matches the process approach to team adaptation which frames adaptation as “iterative cycles of process mechanisms that are reciprocally linked to performance outcomes that individuals and teams exhibit following a task change” (Baard et al., 2014, p. 78). These iterative cycles, however, are often approached as a black box, and little research has examined them directly (Maynard et al., 2015). This study sheds some light in that black box by engaging in the kind of qualitative, field-based research which the literature on team adaptation currently lacks (Christian et al., 2017). Further, this type of research is capable of seeding and accelerating the development of new theory (Muegge & Reid, 2019).

Conflict management is an inevitable, and integral, facet of life in teams (Chidambaram & Bostrom, 1997). This broad set of activities includes both proactive and reactive measures that occur as a response to incompatible activities or interests within a team (Boulding, 2018; De Dreu & Gelfand, 2008; Deutsch, 1973). Despite the impact that conflict management has on team level outcomes, the majority of research on conflict focuses on its content rather than the conflict management process that is applied to it and scant research attends to changes in conflict management processes over time (DeChurch et al., 2013). This study helps to partially address both of these gaps.

The practical consequences of poor team performance are myriad, and conversely so too are the benefits associated with improved performance. One must look no further than notable historical examples like the aforementioned Bay of Pigs and the Tenerife Air Disaster as evidence of the former, or any number of athletic, political, or social triumphs as evidence of the latter. To borrow from cultural anthropologist Margaret Mead’s Institute for Intercultural studies, one must “Never doubt that a small group of thoughtful, committed citizens can change the

world. Indeed, it's the only thing that ever has" (Mead, 2009, p. 1). By contributing to the development of a robust theory of interpersonal team process changes during revolutionary periods, this study generates knowledge that practitioners need in order to drive longitudinal development within their teams and improve the performance of their organizations as they produce value for their stakeholders.

Definition of Key Terms

- *Team*: Teams are complex adaptive systems in dynamic interaction with smaller embedded systems (i.e., the members) and the larger systems (e.g., organizations) that they are situated within. These groups have fuzzy temporal, spatial, and psychological boundaries that both distinguish them from and connect them to their members and their embedded contexts (McGrath et al., 2000). These complex adaptive systems also satisfy the following criteria: (a) two or more individuals who (b) socially interact (face-to-face or, increasingly, virtually); (c) possess one or more common goals; (d) are brought together to perform organizationally relevant tasks; (e) exhibit interdependencies with respect to workflow, goals, and outcomes; (f) have different roles and responsibilities; and (g) are together embedded in an encompassing organizational system, with boundaries and linkages to the broader system context and task environment (Kozlowski & Ilgen, 2006).
- *Team Processes*: Team processes are the behavioral subset of team mediators which include "Members' interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward organizing taskwork to achieve collective goals" (Marks et al., 2001).

- *Team Performance*: To capture group level productivity, group level viability, and individual gratification and growth, the present study will utilize Hackman's (1987) three-part model to define team performance: the productive output of the group meets or surpasses the standards of the customer; the work processes are such that members ability and desire to work together again are enhanced; and employees are satisfied rather than frustrated with the work experience. Team performance will be defined as the aggregate satisfaction of these criteria.
- *Conflict*: The occurrence, or perception, of incompatible activities or interests (Boulding, 2018; De Dreu & Gelfand, 2008; Deutsch, 1973).
- *Conflict Management*: Proactive measures and reactive responses to instances of conflict (Marks et al., 2001).
- *Development*: The changes over time in group behavior as a newly formed group moves through its life (Chang et al., 2006).
- *Deep Structures*: The fundamental choices that teams make, both explicitly and implicitly, regarding their structure, norms, and processes (Gersick, 1991).
- *Periods of Equilibrium*: Relatively stable periods of time when teams primarily engage in routine, habitual patterns of behavior in pursuit of mutually agreed upon goals (Gersick, 1991; Gersick and Hackman, 1990).
- *Revolutionary Periods*: Periods when dramatic and paradigmatic change are made possible by the disruption of a team's deep structure (Gersick, 1991).

Theoretical Frameworks

Gersick's theory of Punctuated Equilibrium (PE) (Gersick, 1988, 1989, 1991) is ideally suited to serve as the central theoretical framework for this study. PE focuses on the development

of teams and small groups, and it does so through a lens of discontinuous change. Gersick (1988, 1989, 1991) produced a paradigm shift in the way team development was construed by extending the duration of observation and emphasizing the influence of exogenous factors including the passage of time. Through these methodological and conceptual modifications, Gersick discovered two qualitatively distinct phases of development: periods of equilibrium and revolutionary periods (Gersick, 1991).

Periods of equilibrium are distinguished by their relative stability. During these periods, teams engage in routine processes which build upon fundamental choices about their structure, organization, and behavioral patterns (Gersick, 1988). These fundamental choices, or deep structures (Gersick, 1991), are established during the team's most recent revolutionary period. This constellation of decisions calcifies and forms the foundation for the habitual behavioral patterns and processes which facilitate the pursuit and achievement of agreed-upon goals (Gersick, 1991; Gersick & Hackman, 1990). Small, incremental changes occur during these periods, but the deep structures remain intact, and the team's modus operandi remains relatively constant.

Revolutionary periods, in contrast, are marked by dramatic change. These dramatic changes are not a byproduct of incremental changes that occur in quick succession. Instead, they are a qualitatively different kind of change which is the direct result of modifications to the team's deep structures. In Gersick's seminal studies, these modifications were triggered by major temporal milestones at the start, midway point, and conclusion of each team's predetermined timeline. Of these, the midway point proved to be particularly pivotal. The salience of time limits was elevated when this temporal milestone arrived and teams experienced feelings of fear and a sense of urgency which prompted a reconsideration of their deep structures (Gersick, 1988).

Teams that effectively critiqued, dismantled, and reconstructed their deep structures were able to reorient, re-enter a period of equilibrium, and achieve their newly established goals (Gersick, 1988, 1991). Teams that failed to effectively navigate this process either perpetuated their status quo or experienced a decrease in performance which threatened their ability to accomplish their goals. To supplement Gersick's description of revolutionary periods, and to synthesize the extant body team adaptation literature with the literature on team development, this study will also integrate the model of team and small group adaptation which was originally put forward by Burke et al. (2006) and elaborated by Rosen et al. (2011). This model identifies four distinct phases of adaptation: situation assessment, plan formulation, plan execution, and team learning (Rosen et al., 2011). The final phase, team learning, is parsed into its own four phase cycle: recap, reflection, integration, and action planning (Rosen et al., 2011).

Temporal milestones served as the impetus for revolutionary changes in the seminal studies, but Gersick later acknowledged that these periods can be triggered by both internal changes which pull the system apart as well as external changes which threaten the team's capacity to secure the resources that they need (Gersick, 1991). In modern organizations, teams do not always operate on fixed or predictable timelines. Fortuitously, revolutionary periods are still possible because today's VUCA environment frequently produces the kinds of external changes that threaten a team's ability to secure resources. Choi et al. (2010) found that 90% of all crises were triggered by forces external to the team.

Because this study will specifically focus on changes to team's conflict management processes during revolutionary periods, multiple theoretical models on conflict management will be utilized. Jehn's (1995) task and relationship conflict dichotomy will be used to distinguish between conflict types, while Rahim's (1983) dual concerns model, van de Vliert and Euwema's

(1994) activeness and agreeableness model, and Weingart et al. (2015) two-factor conceptual framework of directness and oppositional intensity will be used to distinguish between different forms of conflict management.

Research Questions

The central research question addressed in this study is:

- RQ: How, if at all, do high performing teams modify their conflict management processes over the course of a revolutionary period?

The sub-questions for this study are:

- SQ1: What was the predominate style of conflict management before the onset of the revolutionary period, and during each phase of the revolutionary period?
- SQ2: What was the proportion of each of the five conflict management styles before the onset of the revolutionary period, and during each phase of the revolutionary period?
- SQ3: How did the qualitative features of conflict management processes change during the revolutionary period?
- SQ4: Why did team members modify the way they managed conflict?
- SQ5: What changes to conflict management processes, if any, do team members ascribe their success to?

Limitations

This study was conducted in the wake of the COVID-19 pandemic, and the timing of the study represents a substantial limitation. This disruption fractured the psychological contract, the implicit expectations and perceived obligations that exist between employers and employees (Robinson & Rousseau, 1994), and the long-term consequences of this are difficult to determine

at this point in time. Macro-level social, political, cultural, and economic changes that were instigated by the pandemic may also limit the generalizability of this study's findings.

The sample population for this study was drawn from American for-profit organizations. Because of this purposeful sampling, it is important to acknowledge that the generalizability of the findings may be limited, and they may not apply outside the boundaries of that organization, their industry, or their national or local cultural context. Generalizability is further limited by the focus of the study, revolutionary periods, which are marked by a “move away from the repetitive and the universal to the specific and unique” (Prigogine et al. 1984, p. 13).

All research methodologies contain some endemic limitations (Creswell & Creswell, 2017), and multiple case study designs are no exception. The generalizability of case studies is inherently limited, and the potential for generalizability is further reduced by the practical limitations and resource constraints of dissertation research. The length of interviews, limited to one hour, also limits the quantity and richness of data that can be produced. Variations in participant's perceptions and pre-existing beliefs regarding conflict and conflict management may have also influenced their responses and the subsequent findings that are drawn from them.

Delimitations

This study focuses exclusively on changes in conflict management processes during revolutionary periods, and it does not examine other interpersonal processes, nor does it examine changes in action or transition processes. This decision was made based on the fact that interpersonal processes operate continuously, while transition and action processes operate cyclically according to Marks et al. (2001). Only one revolutionary period is examined for each team, the most proximate example within the team's lifespan, rather than the sum total of revolutionary periods which have been experienced by each team in the sample. Other factors

influencing team performance and processes, including other mediating mechanisms, compositional features, and structural features, are not explicitly examined in this study.

Assumptions

Inevitably, certain assumptions are made in the design and execution of a study. First and foremost, the researcher assumed that the participants were forthright and that their responses represent a veracious account of recent events. Further, it was assumed that this study will yield data which will contribute to the scholarly corpus of literature on team conflict management processes, team development, and team adaptation. Finally, it was assumed that the researcher's data collection and analysis will be as impartial and objective as possible, and that they will effectively mitigate the influence of any biases that exist due to their positionality and preconceived notions.

Positionality

In research, the researcher is inextricable from the collection and analysis of data (Creswell & Creswell, 2017). This is especially true in qualitative research where the aim is to gain understanding of personal and political problems (Stake, 2006). As a consequence, the identity of the researcher, as well as that of the participants, can influence the process and outcomes of research (Bourke, 2014). It is paramount that the researcher, to the best of their ability, takes account of and discloses the elements of their background and experience which can influence the processes of data collection and analysis.

The researcher's decision to study teams, and the critical inflection points that shape their development, is a direct result of their personal and professional experience. The researcher competed as a collegiate athlete while completing their undergraduate studies, and they went on to coach men's and women's collegiate soccer teams during their time as a graduate student. In

this way, they acted as both a participant and as a participant observer in the high-pressure environment of collegiate athletics. Through this experience, the researcher came to believe that teams can serve as a vehicle for both collective achievement and individual development.

Further, the researcher came to believe that change in an individual's life, a player's career, or a team's season does not unfold linearly or gradually. While incremental changes do indeed occur, change is primarily driven, in the researcher's view, by critical moments. During these critical moments, minute interventions and support, or a lack thereof, is enormously consequential. As a result of this belief, the researcher previously worked on the design, development, and implementation of a full-scale coaching education curriculum. This curriculum equipped youth sports coaches with the knowledge, skills, and abilities that they needed to successfully manage these critical moments. In so doing, the curriculum contributed to the mission of the sponsoring organization, which was "To inspire youth to reach their potential, on and off the field, by developing them as athletes and people through the Steel Sports Coaching System".

The researcher's beliefs about teams grew more nuanced during their time as an executive coach and management consultant. There, the researcher came to see that similar dynamics pervaded senior executive teams at Fortune 500 companies. Success or failure, whether it was on a soccer field or in a board room, was largely determined by the effective management of these dynamics. Concrete, material assets and capabilities were, at best, a distant second in terms of impact on performance.

The researcher is not Pollyannaish about teams. Having witnessed both successes and catastrophic failures, they hold the belief that teams are not inherently superior to other methods for organizing or executing work. The researcher will, to the best of their capability, bracket their

experience. This, however, only reduces the level of bias rather than eliminating it altogether (Giorgi, 2009).

Organization of this Study

This study is organized in five chapters. Chapter 1 serves as an introduction to the theoretical and academic context as well as the practical global context that this work is situated in. It provides an overview of the theoretical foundations of the study, the purpose of the study, definitions for key terms, limitations and delimitations, assumptions, and the positionality of the researcher. Chapter 2 is comprised of a literature review that examines and synthesizes the extant literature on team development, team adaptation, and conflict management. Chapter 3 outlines the research methodology and design, as well as the rationale for each. It also presents a broad overview of the sample population, procedures for data collection and analysis, and human subject considerations. Chapter 4 presents the findings of the research, and Chapter 5 follows with an analysis of these findings and a presentation of the study's conclusions as well as recommendations for future research.

Chapter Summary

This chapter presented a brief overview of the forces imperiling organizational performance. This includes both external environmental factors leading to the continual rise in VUCA, as well as the common organizational response to those changes, namely leveraging teams and adopting team based organizational structures. This segued into the purpose of this study, which is to identify how teams modify their conflict management processes when they experience revolutionary periods of dramatic adaptation. This was followed by the definition of terms and a high-level presentation of the central theoretical framework utilized in this study,

Punctuated Equilibrium. The chapter concluded with the study's research questions, limits, delimitations, assumptions, positionality of the author, and organization of the study.

Chapter 2: Literature Review

Chapter Outline

This chapter will present a review and synthesis of the theoretical and experimental literature that is most pertinent to team development, team adaptation, and conflict management. This review will begin with an overview of the field of group development followed by a detailed presentation of the theory of PE. This will include an explanation of the fundamental hypotheses that are put forward within the theory as well as an overview of the form and function of its core components. Support and critiques of this model are drawn from the team development and team adaptation literatures, and they are interspersed throughout. The final sections of the review focus on the major styles of conflict management and the impact that these styles have on team performance.

Context

This literature review was primarily conducted through the Pepperdine University library and the databases therein. The databases that were utilized most frequently for identification of, and access to, peer-reviewed academic journal articles were Scopus, Academic Search Complete, ProQuest, and EBSCOhost. Other databases and search engines, including SAGE Journals Online, Science Direct, and Google Scholar were also utilized. Keyword searches included, but were not limited to, punctuated equilibrium, team and small group development, conflict management, team conflict, team adaptation, team interpersonal processes, and interpersonal process changes. To complement the peer-reviewed academic journal articles that were procured through these channels, books written by academics and experts within the relevant fields were consulted. The reference sections of peer-reviewed articles were also consulted to identify

additional pieces of relevant literature. This review focused on the last ten to fifteen years, but foundational literature, especially theoretical work, was also included.

Models of Team and Small Group Development

In recent decades, the most pervasive model for small group development, both in academic literature (Miller, 2003) and in practical application (Offerman & Spiros, 2001), has been Tuckman's (1965) Developmental Sequence of Small Groups (DSG). Initially, the DSG consisted of four stages: a forming phase characterized by situation testing and dependency, a storming phase marked by intragroup conflict, a norming phase predominated by the development of group cohesion, and a performing phase when functional role-relatedness was solidified (Tuckman, 1965). After a review of the growing corpus of literature focused on team development, Tuckman and Jensen (1977) later added a fifth stage of adjourning. The popularity of Tuckman's model is neither due to a lack of alternatives, as there were already over one hundred distinct models of group development by 1959 (Fawcett Hill & Gruner, 1973), nor is it due to rigor as Tuckman himself cautioned against broad application and generalization due to methodological limitations in its development (Tuckman, 1965). According to Tuckman, the model's popularity can likely be attributed to its pithy naming conventions and quotability (1984). Quotability and popularity, however, are not effective proxies for veracity. Alternative theories for team development, and their underpinnings, ought to be considered.

To organize the abundant literature on team development, Mennecke et al. (1992) developed a typology of group development theories which separated the field into seven sub-categories: equilibrium, linear progressive, life cycle, recurring cycle, punctuated equilibrium, time, interaction, and performance (TIP), and contingency models. These seven sub-categories are clustered in three major categories: progressive, cyclical, and non-phasic models. Smith

(2001) then constructed a more comprehensive typology consisting of three categories: linear progressive, cyclical and pendular, and non-phasic. The following sections of this review will be organized based on Smith's model because of its parsimony and comprehensiveness.

Linear Progressive Models

Linear progressive models assert that teams and small groups develop through a succession of predictable stages as each individual stage builds upon the stage which precedes it. While the precise qualities, number, duration, and nomenclature of stages vary, each variation portrays a common pattern of formation, conflict and unrest, norm and group identity formation, production, and eventual termination (Smith, 2001). These stages are often misconstrued as discrete, but they are better understood as distinct clusters of activity (Chang et al., 2006). Endogenous factors instigate change, while exogenous factors are framed as inconsequential or as impediments to the natural and inevitable evolution of the group (Smith, 2001). As a result, these factors were strictly controlled in the experiments which led to the development and validation of these models (Chidambaram & Bostrom, 1997).

Bennis and Shepard (1956) developed a seminal, and archetypal, linear progressive model. In their model, group development is driven by member anxiety. Group member anxiety, which is caused by member's dependence on the leader and their relationships with one another, crescendos at predictable intervals and barometric events trigger transitions by releasing these tensions (Bennis & Shepard, 1956). Similar to Down's model of organizational development (Downs, 1967), specific subgroups rise to predominance after each barometric event, and they reshape task and interpersonal process norms within the group.

Linear progressive models are shaped by two central assumptions: that the growth of a biological organism is a viable analogy for group development, and that progress is linear and

constant. Groups, like organisms, are said to successively experience distinct, pre-determined, and universal phases from infancy to maturity (van de Ven & Poole, 1995). As noted by Tuckman (1965), this idea has intuitive appeal, and it allows theorists to anthropomorphize groups and organizations. This frees theorists to superimpose linear models of psychosocial or personal development, like those put forward by Piaget (2013) or Erikson (2014), onto collective bodies. The organism analogy, however, fractures when it is scaled to the group or organizational level. Based on a comprehensive review of the literature, Levie and Lichtenstein (2010) asserted that “the proposition that all businesses follow the set sequence is not at all supported by the empirical evidence” (p. 329).

Second, linear progressive models reflect the assumption that progress is linear and ultimately oriented towards a predefined apotheosis. This distinctly Western assumption (Cox, 2018) was cultivated through a series of social, political, and intellectual revolutions (Bury, 1987) and it has long functioned as an a priori paradigm in multiple academic disciplines (Gould, 2007). Unfortunately, this paradigm has often impeded progress and lead to erroneous conclusions by obfuscating the complex, random, and non-linear process of development of science, society, and the environment (Gould, 2007). Despite the intuitive appeal of the organism analogy and the idea’s congruity with popular intellectual paradigms, there are apparent faults in both fundamental assumptions when they are applied to teams and small groups. This category of models is afflicted by problems associated importing theories and metaphors from other fields (Kaplan, 2017), and many scholars in the field of group development have rejected linear theories as inadequate (Mannix & Jehn, 2004).

Cyclical and Pendular Models

Cyclical and pendular models also identify common, distinct stages of small group development (Smith, 2001), but they diverge from their linear progressive counterparts by rejecting strict linear development and giving greater credence to the impact of external variables (Smith, 2001). Fundamentally, pendular models propose that change is oriented towards the satisfaction of needs. While problems can be solved definitively, needs can only be met temporarily. This fact forces developing teams to vacillate, or pendulate, between needs (Smith, 2001).

Schutz' (1958) work serves as an archetype for pendular models. Schutz asserted that all group relationships are guided by an orientation towards three basic needs: integration, control, and affiliation (I-C-A; 1958). Over the course of dyadic and group relationships, these needs are satisfied sequentially from integration to affiliation (I-C-A). When the group approaches termination, these needs are then satisfied in the reverse sequence (A-C-I). In the interim, each need is revisited and readdressed as the group's composition, goals, or context changes (Schutz, 1958). Each need is never fully satisfied. They are only temporarily allayed. Much like linear progressive models, cyclical and pendular models parallel other conceptual work including psychological needs theories. These theories are associated with the work of Maslow (2017), Alderfer (1969), and McClelland (McClelland & Burnham, 2008).

Maslow (2017) asserted that behavior is motivated by a hierarchical set of needs: physiological, safety, love, esteem, and self-actualization. Maslow's hierarchy, like Tuckman's DSG, enjoyed sustained academic and practical popularity (Abulof, 2017) as well as substantial scrutiny (Barling, 1977; Mathes & Edwards, 1978; Wahba & Bridwell, 1976). While Maslow did

not claim that these needs were addressed in a discrete, linear manner, his hierarchical construction is closer to the DSG and linear progressive models than it is to pendular models.

Alderfer (1969) built on Maslow's work and developed a more parsimonious needs theory which eliminated the hierarchical nature of needs. He proposed three basic needs which provide the foundation for motivation and action: material existence (E), interpersonal relationships (R), and personal development or growth (G). This model was derived from empirical testing and withstood later empirical examination (Arnolds & Boshoff, 2003; Wanous & Zwany, 1977). Like Alderfer, McClelland proposed a tripartite set of needs. His Human Motivation Theory asserts that need for achievement (nAch), power (nPow), and affiliation (nAff) motivate behavior. These three needs, like those presented by Maslow and Alderfer, have shown some predictive validity for individual behaviors (Diaz & Rodriguez, 2003; Suzuki et al., 2002), but broader claims that nAch or nPow predict collective phenomena, like national economic development, lack robust empirical support (Collins et al., 2004; Gilleard, 1989; Schatz, 1965).

Non-Sequential Models

Non-sequential models diverge significantly from both linear progressive and pendular models. These models frame development as a wholly non-linear and dynamic process that is largely contingent on the external environment (Smith, 2001). The emergence of non-sequential models represented a paradigmatic change in the team and small group development literature as team development was conceptualized as a complex process within an open and dynamic system (Mennecke et al., 1992).

Poole's contingency model stands as one of the earliest and most influential non-sequential models (Smith, 2001). The contingency model asserts that team behavior is better

understood as intertwining threads of activity, rather the discrete phasic blocks (Poole & Roth, 1989). The three primary threads of activity are task process, which is the analysis of problems and the evaluation of potential solutions, working relationships, which is the management of interpersonal conflict and integration, and topical focus, which is the selection and pursuit of substantive ends through the small group's activities (Poole & Roth, 1989). The order that a team confronts these threads may tend towards a specific pattern, thus explaining the prevalence of linear models, but they do not necessitate a specific pattern (Poole & Roth, 1989).

These threads are said to wax and wane due to changes in task characteristics, including the degree of coordination required by the team's goals, as well as the leadership behaviors and interpersonal norms which make up the team's social structure (Poole & Roth, 1989). Over the course of a group's life, transitions from one phase to another are prompted by three types of breaking points: normal breaking points, which are organic transitions that do not impede progress, delays, which are regressions to previously addressed problems that now require further attention, and disruptions, which are more significant breaks brought about by a failure and subsequent reconsideration of previously established means or ends (Poole & Roth, 1989).

Punctuated Equilibrium

While Poole's model was seminal, Gersick's (1988) PE model rose to predominance (Smith, 2001). Through a series of field and laboratory studies which extended the duration of observation and cast increased attention on the influence of time and other external forces, Gersick (1988, 1989) found that both linear development models and non-phasic models failed to fully capture the developmental patterns of teams. In their lab study of student teams who were tasked with developing a radio advertisement (Gersick, 1988) and their field study involving a variety of team and task types, Gersick found that teams and small groups almost immediately

establish durable patterns of behavior. This was followed by long periods of equilibrium which were interspersed with periods of rapid and dramatic change (Gersick, 1988). These two periods, while intimately interconnected, were qualitatively distinct and the interplay between them drove the team's development.

Gersick made sense of these findings by drawing upon Gould and Eldredge's (1977) theory of punctuated equilibria. Punctuated equilibria represented an alternative theory of biological evolution which ran counter to the prevailing Darwinian paradigm. While the Darwinian paradigm framed evolution as a process of gradual and continuous changes, similar to linear progressive models of team development, the theory of punctuated equilibria framed evolution as a series of stepwise, discontinuous changes which were instigated by the process of speciation (Eldredge & Gould, 1972). Gould and Eldredge acknowledged that gradual changes occur, but they asserted that evolution is primarily driven by episodes of massive change in relatively short periods of geological time (Gould & Eldredge, 1977). Further, they argued that it was crucial to account for stasis in the study of change (Gould & Eldredge, 1977). The generalizability of these core hypotheses is demonstrated by their application in fields as diverse as economics and policy development to art history and literary criticism (Gould, 2007).

Deep Structures

PE is comprised of two qualitatively distinct periods, equilibrium and revolutionary, but a system's behavior and the relationship between these periods is largely governed by a single construct that Gersick (1991) dubbed deep structures. A team's deep structure is comprised of their fundamental choices regarding their structure, norms, and processes (Gersick, 1991). Teams begin to make these choices, both tacitly and explicitly, within the first few moments that they interact. These tacit and explicit choices are most susceptible to change when they are first

formed (Gersick, 1989), and they grow more durable over time for two reasons. First, the tenacity of early choices dictates that these conscious and unconscious decisions permeate all behavior within a system (Gersick, 1991). Deep structures create boundary conditions for decisions and actions, thus ensuring that these decisions and actions will align with those that preceded them. This is effectively illustrated by Argyris' (1983) ladder of inference. The choices which constitute the deep structure precede and prompt subsequent choices regarding the selection and interpretation of data. This then shapes the group's actions. Second, this network of behavioral patterns calcifies through mutually reinforcing feedback loops. These loops both reify the original choices and amplify their impact (Gersick, 1991). Deep structures persist amidst surface level turbulence, and they produce prolonged periods of equilibrium by actively resisting change as a result of these two factors (Gersick, 1991).

Wollin (1999) elaborated on the concept of deep structures and argued that they are arranged as nested hierarchies. Within nested hierarchies, low level norms and processes are dependent on the higher level, more fundamental norms and beliefs which precede them (Wollin, 1999). As a result, changes at the higher, more fundamental levels of the hierarchy necessitate changes in the sub-sets which branch off beneath them (Wollin, 1999). This construction is generally supported by research in the cognitive sciences which demonstrates that the hierarchical organization and communication of information is a consequence of human neurology (Uddén et al., 2020).

The rapid establishment of deep structures, and the impact of deep structures on team processes, received a broad base of support in the literature which began with Arrow's (1997) extension of the JEMCO workshop study. Arrow (1997) was one of the first to directly compare multiple models for group development through a large-scale field study, and they did so by

leveraging preexisting data on the behavior of 20 factory teams engaged in a broad array of tasks across multiple months. Analysis of group processes compared the robust equilibrium, PE, and adaptive response models to determine which demonstrated the greatest level of construct validity. Through this, the researchers found that the majority of teams quickly established influence patterns that remained stable throughout their duration (Arrow, 1997). This provided significant support for the robust equilibrium model and the construct of deep structures which undergird it. It also provided feeble support for the PE model as a whole, as teams experienced change rates at their midway points which exceeded their weekly means (Arrow, 1997)

Later, Goncalo et al. (2010) found that some student project teams quickly established durable, and counterproductive, process conflict norms and behaviors. A premature sense of collective efficacy was derived from surface level heterogeneity in these teams, and this suppressed the rate of process conflict when they were formed. The low base rate of process conflict was resistant to change, and it persisted in spite of evident poor performance (Goncalo et al., 2010). A similar pattern emerged in a study by Marquez Santos and Margarida Passos (2013) which analyzed the rate of relationship conflict among 92 teams participating in a strategy and management competition. Teams established shared team and task based mental models early in their life cycles, and the sharedness of these models as well as the rates of relationship conflict stayed relatively constant despite changes in the environment. Both of these studies support findings by O'Neill et al. (2018) who determined that unique team conflict state profiles emerge where base rates of task, relationship, and process conflict persist over time.

In a study examining the impact of conflict type and conflict management style on performance, Maltarich et al. (2018) found that early levels of task and relationship conflict were significantly related to later levels of each conflict type. In addition to finding that norms

regarding the rate of conflict remain constant, the researchers found that norms regarding the qualitative approach to conflict management remained stable (Maltarich et al., 2018). Teams that experienced early relationship conflict were found to engage in lower levels of cooperative conflict management and higher levels of competitive conflict management. This approach was durable and consistent despite its adverse effects on performance (Maltarich et al., 2018). In each of these studies, early experiences and fundamental choices shaped conflict management related behavioral patterns which resisted change over time.

Okhuysen and Waller (2002) produced compelling evidence for the hierarchical organization of deep structures by directly manipulating said structures. In their study of teams that were assigned a creative task, the researchers varied the formal instructions preceding the experiment by emphasizing the importance of information sharing, questioning others, or time management. These formal instructions effectively elevated information sharing, questioning others, or time management within the team's hierarchical deep structure. Teams that received instructions which emphasized time management frequently experienced a substantive change in their behavior at the midway point. Teams that held time management at a lower level in their hierarchy, those that received instructions emphasizing information sharing or time management, were significantly less likely to experience substantive changes at the midway point (Okhuysen & Waller, 2002). In a similar study, Okhuysen and Eisenhardt (2002) found that teams that received pre-task instructions intended to elevate two facets of their hierarchical deep structures, specifically time management and questioning others, experienced the same effect. These teams not only clustered their process changes around temporal triggers, but they also engaged in greater levels of reflection and knowledge integration (Okhuysen & Eisenhardt, 2002). These studies effectively demonstrated the hierarchical nature of deep structures, and they provided

evidence for Gersick's (1989) proposition that deep structures are especially malleable when the group is first formed.

These results help to make sense of early studies, most notably by Seers and Woodruff (1997) and Lim and Murnigham (1994), which ostensibly cast doubt on the validity of the PE model. Seers and Woodruff (1997) executed two studies which examined the behavior of student groups across extended periods of time. In their first study, the research team found that both groups and individuals demonstrated increasing rates of activity with a dramatic increase during the final days of the project's duration. In their second study, the research team found that groups displayed a similar pattern of incremental escalation when they were tasked with two separate, consecutive tasks. As a result, they argued that midway point transitions were illusory, unrelated to team development, and best applied at the individual rather than the group. Lim and Murnigham (1994) utilized a different task type and duration, as they observed nine-minute mixed motive bargaining between dyads, but they produced similar findings. Analysis of the quality, volume, and intensity of exchanges showed no evidence for a midway point transition. Pairs demonstrated a pattern of steadily increasing activity, just as the teams did in the pair of studies conducted by Seers and Woodruff (1997).

The teams in these studies likely held time management in a low position within their hierarchical deep structures, similar to the teams that received instructions emphasizing information sharing or questioning others in Okhuysen and Waller's (2002) study. As a consequence, the midway point temporal trigger did not produce a cascade of identifiable behavioral changes. These results can be explained further by the work of Waller et al. (2002). In a replication of Gersick's (1988) original study, with the addition of dynamic deadlines, Waller et al. (2002) found the same steady increase in work rate and attention to time that were

identified by Seers and Woodruff (1997) and Lim and Murnighan (1994), and they also identified qualitative transition periods which were clustered near the midway point. This led to the hypothesis that temporal triggers are a threshold condition which is often met at the midway point, rather than a trigger which is tied to the midway point. Teams with a higher threshold, like those in Seers and Woodruff's (1997) studies, may not experience it until much later in their respective life cycles.

Chang et al. (2003) built upon the work of Waller et al. (2002) by conducting a replication of Gersick's original experimental design with 25 teams. In doing so, they found that nine teams experienced midway point transitions while 21 teams in total experienced identifiable transition points at some other point in time. Like the teams in the study by Waller et al. (2002), the temporal threshold was often, but not always, met at the midway point. This pattern, where transitions clustered near but did not necessarily fall precisely at the midway point, also emerged in Jahng's (2012) analysis of communication and collaboration processes in teams that were operating in a remote learning environment. This further demonstrates that early critiques of PE did not disprove the presence of deep structures or invalidate the likelihood of midway point transitions, nor did they contradict the fundamental hypothesis of PE which is that transformation occurs through radical, brief, pervasive change.

Irrespective of when teams reach the temporal threshold and engage in the process of adaptation, recent research indicates that performance benefits depend on homogeneous views of temporal thresholds across the team. In their study of teams competing in a management simulation, Marquez Santos et al. (2015) found that teams with similar temporal mental models yielded performance improvements from learning processes. Conversely, those that hold dissimilar models experience performance degradation as a result of these same processes due to

the fact that these processes unfolded in asynchronous, fragmented, and disorganized patterns. These behaviors distracted from, rather than contributing to, the effective pursuit of team goals (Marquez Santos et al., 2015). This result, and other studies on mental models, demonstrate that deep structures are a multilevel phenomenon. Both individuals and teams hold deep structures, and variance between the two can adversely affect performance.

Subsequent research revealed that there are limits to the value of the mental model or deep structure homogeneity across team members. Marquez Santos et al. (2016) conducted a study of 68 teams engaging in a five-week management simulation and examined the impact of shared team mental models on performance. Teams that held highly homogeneous, and inaccurate, temporal mental models engaged in fewer learning behaviors and demonstrated lower levels of adaptation. The authors went on to claim that these models led to closed minds and an inability to evaluate or reflect upon their performance (Marquez Santos et al., 2016).

Garfield and Dennis (2012; see also Dennis et al., 2006) produced additional theoretical and empirical support for deep structures. In a study of six nursing teams, Dennis et al. (2006) found that teams who were familiar with one another exhibited developmental patterns consistent with PE, and they attributed this to their ability to enact shared scripts. These scripts, much like Gersick's (1991) deep structures, informed team members behavior and shaped their thinking regarding how the group ought to operate. Teams that lacked these scripts displayed developmental patterns closer to the stage model until they were able to establish scripts and stabilize (Dennis et al., 2006). Garfield and Dennis (2012) produced similar findings in a follow-on study which compared six newly formed teams. Teams that operated in their normal environment quickly enacted shared scripts and exhibited developmental patterns that aligned with PE, while teams that utilized a technologically mediated platform had these scripts

interrupted, thus causing a developmental pattern that was closer to the linear stage model (Garfield & Dennis, 2012). Both studies demonstrate the role of deep structures, or shared scripts, and conversely demonstrate the tumult caused when deep structures are upset.

Periods of Equilibrium

The stability provided by deep structures confers adaptive advantages by enabling the team to engage in the kind of routine, habitual patterns of behavior that are necessary to pursue and achieve mutually agreed upon goals (Gersick, 1991; Gersick & Hackman, 1990; Rousseau, et al., 2006). These routines, which are functionally similar behavioral patterns that are enacted without conscious consideration of alternatives, allow for the efficient execution of task work, and they increase group member comfort and confidence by reducing uncertainty (Gersick & Hackman, 1990; Rico et al., 2008). Much like Torbert's (1974) concept of predefined productivity, periods of equilibrium are fruitful because of their bureaucratic efficiency.

Bureaucratic efficiency is not, however, equivalent to rigid stasis. Teams experience changes during these periods, but these changes are incremental, and the deep structure is left intact. Periods of equilibrium display properties similar to Lewin's (2013) description of quasi-stable equilibria, where internal and external fluctuations are met with resisting forces which draw the team back to equilibrium. This safeguards against recursive and unproductive cycles of flux in coordination, as described by Summers et al. (2012), and enables the previously described productivity. When this stimulus and response cycle does produce change, these changes match Argyris's (1983) description of single-loop learning. The team makes minor modifications to their processes in response to a gap between intention and outcome, but fundamental decisions regarding desired outcomes and acceptable processes are untouched (Gersick, 1991). The

productivity that is achieved during these periods is so great, in fact, that it acts as one of the primary forces preventing the dawn of revolutionary periods (Gersick, 1991).

In addition to the productivity of periods of equilibrium, Gersick (1991) identified three types of barriers that prevent systems from entering into revolutionary periods: cognitive barriers, motivational barriers, and obligations. Gersick (1991) drew on the work of Kuhn (1970) to elaborate on the role of cognitive barriers. In Kuhn's (1970) landmark work *The Structure of Scientific Revolutions*, they claim that events which cannot be explained by the current paradigm, and therefore threaten the current paradigm, will not be seen at all. More modern discoveries in psychology and neuroscience, specifically confirmation bias and inattention blindness, help to validate this phenomenon.

Confirmation bias is a cognitive bias that causes individuals to seek, recall, and consider information that confirms their preconceived notions (Nickerson, 1998). This tendency manifests itself within academic discourse and amongst laypeople engaging in normal dialogue (Greenwald et al., 1986; Kukucka et al., 2017; Taber & Lodge, 2006). The consequences of confirmation bias are compounded by inattention blindness, which causes observers to completely ignore unexpected events or objects (Most et al., 2005; Simons & Chabris, 1999). This blindness is exacerbated by high cognitive loads (Greene et al., 2017; Murphy & Greene, 2017) and it affects both visual and cognitive perception (Raffone et al., 2014). Just as Kuhn (1970) described, events or information which fall outside of the predominant paradigm or deep structure are not just discounted, they effectively disappear. Consequently, teams are prevented from recognizing a problem and a problemistic search (Posen et al., 2018) is never triggered.

The motivational barriers enumerated by Gersick (1991), which include a desire to avoid loss or failure, can be attributed in part to the effects of sunk cost and loss aversion. Sunk cost is

the tendency for individuals to overvalue previous investments of time or resources (Arkes & Blumer 1985; Thaler, 1980). This leads to apprehension when alternative courses of action are considered, and it inhibits the adoption of otherwise rational behaviors (Gifford, 2011; Ho et al., 2018; Keil et al., 2000). This is compounded by loss aversion and the associated status quo bias. This neurologically rooted psychological phenomenon causes a preference for losses caused by omission rather than commission, and it increases negative affect following losses (Gal, 2021; Tom et al., 2007).

The final category of barriers, obligations (Gersick, 1991), comes in two forms: social, and functional. Social obligations pertain to the network within the team, while functional obligations pertain to the team's external network. Gersick (1991), again drawing on the work of Kuhn (1970), states that social obligations emerge from the careful socialization of new entrants into a team or a community. In teams and organizations, the socialization process can be carried out through formal or informal processes (van Maanen & Schein, 1979) or via either institutional or individualized processes (Jones, 1986). During this process, the team or organization changes the new entrant and shapes them into effective contributors to the group's goals (Levine & Moreland, 1994). Participation in these processes and assimilation into the group's norms enables long-term success by granting access to social capital and facilitating its mobilization (Fang et al., 2011). Rejection of these processes, and the social obligations therein, jeopardizes access and mobilization of these critical resources. As a result, and as stated by Kuhn (1970), individuals within a team are unlikely to violate their social obligations and upset equilibrium for fear of alienation. Even if this occurs and there is an interruption of internal inertia, the external environment may stifle the team's ability to change by imposing a network of functional obligations. These obligations are closely related to the concept of auto-coordination in Complex

Adaptive Systems (CAS), which is a process whereby constraints are produced by informal but interdependent activities and structures (Uhl-Bien et al., 2007). Because the team is nested within a larger social system, its ability to change depends on its ability to change within said system.

Revolutionary Periods

Periods of equilibrium end, and revolutionary periods begin, when these barriers are overcome by internal changes which fracture alignment or external environmental changes which jeopardize the team's ability to secure resources (Gersick, 1991). These changes, or triggers, mark the start of the first phase of revolutionary periods (Wollin, 1999). Wollin (1999) categorized triggers by their type, source, polarity, and scale. Alternative frameworks have been put forward by Piperca and Floricel's (2012), who focus on predictability and locus of generation, Morgeson et al. (2015), who based their framework on timing, duration, and strength, and Kennedy and Maynard (2017), who differentiate between task and team-based triggers. There is now general consensus, however, that the most parsimonious framework is based on the trigger's impact on complexity within the system (Rico et al., 2019).

These triggers initiate the first phase of the revolutionary period by disrupting the inertia in a layer of the system's hierarchical deep structure, thus freeing resources (Wollin, 1999). The availability of resources prompts the second phase, variation, when multiple purposeful adaptations are put forward in an attempt to exploit the newly available resources (Wollin, 1999). These adaptations lead to the third phase, sorting, when the viability of each adaptation is assessed via direct and indirect competition (Wollin, 1999). The final phase, retention, occurs when a subset of these adaptations is integrated into the system's deep structure. This then causes a cascade of changes at lower levels within the hierarchy which are manifested in both

observable artifacts like behavioral changes as well as unobservable changes like modifications to underlying beliefs and assumptions like those described in the work of Schein (1985).

Wollin's (1999) four phases parallel the four-phase model of group adaptation which was put forward by Burke et al. (2006), expanded by Rosen et al. (2011), and later validated by Georganta et al. (2020). Within this model, teams begin with a situational assessment where they strategically scan their environment for problems and identify potential consequences (Rosen et al., 2011). In the second phase, plan formulation, teams reflect on their current state and tentatively develop new courses of action to cope with the consequences of the problems identified in the first phase (Rosen et al., 2011). This process leads to the third phase, plan execution, when teams engage in an array of individual and group level activities aimed at their new goals (Rosen et al., 2011). After these activities are assessed and coordinated, the team enters the final phase of adaptation: team learning. At this point, "teams realize the consequences of completed actions, recognize where the team stands and understand how unintended consequences could have been prevented" (Georganta et al., 2020, p.3), thus retaining certain adaptations and reconstructing their deep structures.

The team learning phase is based largely on the work of Edmondson et al. (Edmondson, 1999; Edmondson et al., 2001, 2007) who framed team learning as a process whereby a team acquires, develops, and integrates new knowledge through experimentation, error surfacing, feedback seeking, and other activities. To further elucidate how this occurs at the team level, Rosen et al. (2011) developed a four phase sub-cycle which they integrated into the final phase of their framework. The four phases in this model, which they labeled recapping, reflection, integration, and action planning, are largely derivative of Kolb's (1984) experiential learning theory (ELT). ELT's four phases of concrete experience, reflective observation, abstract

conceptualization, and active experimentation portray a process whereby experience is grasped and transformed, thereby creating new knowledge which guides future action (Kolb, 1984). This theory produced a rich body of research which largely supported its validity (Kayes, 2002; Kolb et al., 2001), but generalization from the individual to the collective level has not yet replicated this level of support. Additional research is needed to validate this model at the group level.

Gersick (1991) notes that revolutionary periods potentiate, but do not necessitate, these cycles of positive change or learning (Gersick, 1989). Teams can squander these windows of opportunity by failing to complete the cycle, perpetuating the status quo, or engaging in maladaptation (Gersick, 1991; Koseoglu et al., 2017). Frick et al. (2018) developed a four-part integrative model of team adaptation, based largely on model put forth by Rosen et al. (2011), and identified four potential causes of maladaptation: failure to recognize or appropriately ascribe meaning to a trigger for change, failure to develop a plan to respond to said cue, failing to act on said plan, and failure to integrate these learnings into future operations.

Each of the failures described by Frick et al. (2018) are categorized as failures of omission in the taxonomy developed by Ackoff (1999). Mitroff and Silvers' (2010) error model identifies an additional category, failures of commission, which complements this model and creates a more comprehensive framework. Failures of omission, as mentioned previously, are often preferred due to loss aversion and the status quo bias, but errors of commission still occur and should be accounted for. These errors are divided into three distinct types. Type I errors include instances when the system identifies a problem which is not real, while Type II errors include instances when the system ignores a real problem (Mitroff & Silvers, 2010). Both of these error types take place in the first phases described by Wollin (1999) and Rosen et al. (2011), and they are the active dimension of Frick et al.'s (2018) failures to appropriately ascribe

meaning to a trigger. These errors are also closely related to the cognitive barriers described by Gersick (1991). Type I and Type II errors can cascade into the later phases of the adaptive process and cause Type III errors which occur when the system wastes resources on the examination and extirpation of the wrong problem (Mitroff & Silvers, 2009). This error type is unexamined in Gersick's work (1991), but it can be situated in the second, third, and fourth phases of the adaptive cycles.

During each phase of the revolutionary period, the system is said to be in a far from equilibrium state. According to Gersick (1991), systems in far from equilibrium states are governed by different laws and norms which cause qualitatively distinct patterns of behavior (Gersick, 1991). Similar to the physical systems described by Prigogine et al. (1984), deterministic laws give way to stochastic processes and the system becomes inordinately sensitive as it approaches critical bifurcation points. Systems move "away from the repetitive and the universal to the specific and unique" (Prigogine et al., 1984, p. 13). In the case of team development, far from equilibrium states are distinguishable by the manner in which cognition generates insights, the role of emotion within the system, and the system's openness and willingness to make external contact (Gersick, 1991).

When revolutionary periods conclude, the deep structure re-calcifies. The team's norms and processes re-stabilize, and this re-stabilization allows the system to segue into a new period of equilibrium (Gersick, 1991). The system then remains in this renewed state of quasi-stability until a subsequent disruption occurs and the adaptive cycle is triggered once again (Gersick, 1991; Wollin, 1999). The team's performance during this period is largely predicated on the team's management of the inflection point which preceded it (Gersick, 1991). Because of this, teams that effectively manage these periods prosper, while those that squander these windows

see performance degradation (Gresick, 1988, 1991). Research on team adaptation provides preliminary support for the construct validity of the early stages in Rosen et al. (2011) model of team adaptation, and additional research points to a multitude of ways that teams diverge from normative patterns of behavior during these periods.

A meta-analysis of team adaptation conducted by Christian et al. (2017) demonstrates that processes do indeed change when teams enter far from equilibrium states. Previous research on team effectiveness largely indicates that inputs including cognitive capacity, personality composition, and size have a significant influence on team performance, but the meta-analysis by Christian et al. (2017), however, found that these inputs only have a marginal impact on adaptive performance. Conversely, team processes had a far greater impact than anticipated. This indicates that during periods of adaptation, “certain inputs may operate differently under non-routine circumstances” (Christian et al., 2017, p.16). In essence, it demonstrates that the system is governed by different rules during these periods, just as Gersick (1991) and others proposed.

This meta-analysis broadly demonstrated the general validity of Gersick’s (1991) description of far from equilibrium states, and Zaccaro et al. (2009) demonstrated its validity as it pertains to the provision of feedback. Previous prevailing theory indicated that public feedback has detrimental effects including self-attentional focus, increased social comparison, and decreased motivational orientation to the group (Zaccaro et al., 2009). Through a series of experimental studies which observed the behavior of teams engaging in highly interdependent tasks, Zaccaro et al. (2009) found that public, team level, positive feedback was associated with elevated team adaptation and improved performance. In dynamic environments, the rules that normally govern feedback became outmoded and incongruous with the needs of the situation at hand.

Rico et al. (Rico et al., 2019) offer a theoretical explanation for why the rules governing feedback change during these periods. In their theoretical model, teams adapt through a series of comparisons between team mental models (TMM), which are their long-term a priori beliefs about the team and its goals, and shared mental models (SMM), which are immediate apprehensions of the current environment (Rico et al., 2019). When the task and environment are stable, teams can operate successfully while relying on implicit coordination. When the task and environment change, however, explicit coordination and communication allows for rapid TMM-SMM comparisons. This theory gained empirical support from Uitdewilligen et al. (2018) who found that student teams engaging in a simulated task experienced a marked decrease in action processes, a type of emergent and implicit coordination, after an interruption.

Resick et al. (2010) also demonstrated the role of shared mental models in dynamic environments by examining four-person decision making groups operating in a virtual environment. After a simulated crisis, teams with high quality mental models, and those with low quality but highly similar mental models, were able to respond to crises quickly and efficiently. In contrast, teams that held low quality or dissimilar mental models were incapable of doing so. Marks et al. (2000) showed the importance of mental models in novel environments by assessing the performance of teams engaged in a simulated task environment. Through this, they found that the relationship between mental model similarity and team effectiveness increased when teams transitioned from routine to novel environments, and effective teams were able to maintain flexible mental models which they adapted during this transition. This adaptation was facilitated by improved team leader briefings and team-interaction training, and it was moderated by explicit communication (Marks et al., 2000). In the case of Zaccaro et al. (2009), the public, positive, team level feedback enabled teams to develop a SMM which they were then able to

juxtapose against their a priori assumptions, or TMM, regarding the team's efficacy and operational efficiency. Through these comparisons, they were able to adapt their processes and improve their fitness in the new environment.

Waller (1999) contributed some of the earliest evidence for the transition from implicit to explicit coordination during adaptive periods. Waller (1999) found that rapid adaptive responses and an increased rate of task focused information collection and transfer were significantly related to performance in a study which examined process changes among flight crews facing nonroutine events (Waller, 1999). This study did not, however, examine or code for adaptations to interpersonal or transition processes, and the generalizability of their findings is limited due to the fact that they focused on brief, individual performance episodes. It is also important to note that increasing the speed of an action is not universally beneficial. Kennedy and McComb (2014) found that team performance suffers when adapted action processes occur before transition processes take place. In addition to raising questions regarding the value of speed of action, this result provided some additional support for the sequence of activities that was laid out by Rosen et al. (2011).

Later, Lei et al. (2016) utilized a similar population of civilian flight crews to examine team interaction processes and planning in action during routine and non-routine tasks. Through observations of crews engaging in simulated flights, the researchers found that changes were not limited to the transition from implicit to explicit communication and coordination which had been identified previously. Qualitative changes also occurred. High performing crews transitioned from complex and reciprocal patterns of communication during periods of routine task execution to simple, unidirectional communication patterns during non-routine tasks. This supported findings by Zijlstra et al. (2012) and Stachowski et al. (2009) who independently

examined interaction patterns during the execution of routine and non-routine tasks by aviation crews and teams at nuclear powerplants. More salient to the present review, it contributed to the team adaptation literature by finding that high performing crews adapted their communication processes when they were faced with a transition, while their low performing counterparts lacked this adaptive capacity (Lei et al., 2016).

Research by Grote et al. (2010) provides further confirmatory evidence for changes in coordination patterns during non-routine tasks as well as some additional nuance regarding the qualitative features of coordination. When civilian flight crews faced higher levels of task load brought about by increases in complexity, high performing crews demonstrated the same staccato communication and coordination patterns described by Lei et al. (2016) as well as an increase in explicit communication. This provides further support for the theory outlined by Rico et al. (2019) and matches the findings produced by Waller (1999).

In a second level of analysis, Grote et al. examined the role of heedful interrelations. This form of communication includes direct efforts to prompt reconsiderations regarding the team's actions in relation to its environment (Grote et al., 2010). By qualitatively coding crew member communications, the research team found that this specific form of communication positively impacted performance when they occurred reciprocally across the team (Grote et al, 2010). Evenly distributed heedful communications had the effect of prompting TMM-SMM comparisons (Rico et al., 2019), and neutralizing the Type II errors described by (Mitroff & Silvers, 2010) by effectively ascribing meaning to cues and increasing the salience of threatening changes in the environment (Grote et al., 2010).

This parallels later findings by Rousseau and Aubé (2020) who discovered that empowering leadership behaviors, which include encouraging others to voice their views,

improve adaptive performance by elevating the level of shared leadership across teams. Grote et al. (2010) did not, however, attend to instances when heedful interrelations produced conflict and required some form of conflict management. Later theoretical work by Grote et al. (2018), which was based on these and other studies on adaptive team coordination, proposed that the qualitative changes that occur during adaptation are contingent on the type of trigger and the relative change in demands for stability or flexibility. Based on this theory, the shift towards heedful interrelations may not be universal, as other types of triggers may call for exploitative, explorative, experiential, or ambidextrous forms of coordination (Grote et al., 2018).

A separate stream of research examined team adaptation through the lens of structural adaptation theory (SAT; Johnson, 2003; Johnson et al., 2006). SAT hypothesizes that the direction of adaptation is significant because systems readily transition to states of lower levels of complexity, but they struggle to transition to states of higher levels of complexity (Johnson et al., 2006). In a study of 80 student teams, Johnson et al. (2006) found supporting evidence for SAT by demonstrating that performance decreased when teams transitioned from competitive to cooperative reward structures, but not vice versa. They also found, in accordance with previous research on coordination and communication, that there was an increase in the rate of task related information sharing following changes in incentive structures (Johnson et al., 2006). Information sharing and coordination functioned as a mediator in the relationship between reward structure and decision speed and accuracy, and cooperative teams who transitioned to competitive reward structures retained the communication patterns that they had previously developed (Johnson et al., 2006). Moon et al. (2004) produced similar findings when they examined the impact of structural transitions within teams. Student teams engaged in a simulated task environment naturally transitioned from functional to divisional structures, but they struggled to transition

from divisional to functional structures and their performance decreased. The relationship between structure and performance was mediated by communication patterns, as teams who started in functional structures had more interconnected communication networks that persisted through the transition (Moon et al., 2004).

Beersma et al. (2009) replicated this study and produced similar results regarding the role of coordination and information sharing as a mediator between reward structure and performance. This study made an additional contribution to the literature by examining the role of conflict following a change in reward structure, but the negative relationship that was identified was not statistically significant (Beersma et al., 2009). This provided some preliminary evidence that relationship conflict may increase during adaptive episodes, but the finding was not definitive. It also was not directly relevant to the interpersonal process of conflict management as the conflict variable was based on the volume of relationship conflict rather than the qualitative features of the team's conflict management.

Hollenbeck et al. (2011) provided further support for SAT by utilizing an identical task, a simulated combat environment, while modifying the decision structure of teams. Teams that transitioned from a centralized to a decentralized decision structure did so without a loss in performance, while those who transitioned in the opposite direction suffered significant reductions in performance (Hollenbeck et al., 2011). None of these studies, however, examined the qualitative features of the information sharing process as Lei et al. (2016) did, and their generalizability is constrained by dependence on simulated tasks, ad hoc teams, and laboratory environments (Beersma, 2009; Hollenbeck et al. 2011; Johnson et al., 2006).

A study conducted by DeRue et al. (2008) was exceptional in that it examined quantitative as well as qualitative changes to team processes. The research team utilized the same

simulated task environment as previous SAT researchers to test how team performance was impacted by various types of structural decomposition, and they produced divergent results from those produced by Hollenbeck et al. (2011) and others. DeRue et al. (2008) found that teams who retained their hierarchy and their central members after a reduction in size, teams who retained their central members but lost their hierarchical structure, and teams who retained neither their central members nor hierarchical structures, all experienced quantitative reductions in information sharing which mediated the relationship between these changes and the team's consequent reduction in performance (DeRue et al., 2008). In their analysis of qualitative changes, they found that this particular trigger did not prompt qualitative changes to information sharing processes, but the researchers acknowledged that other conditions are likely to do so when disruptions occur over longer periods of time (DeRue et al., 2008).

Outside of studies utilizing the lens of SAT, changes in the rate of information sharing during adaptive episodes were also examined by Vera and Crossan (2005). Through an action research study involving a training intervention for public employees, they found that the volume and quality of real-time information sharing moderated the relationship between improvisation and performance in ambiguous environments. The relationship between improvisation and performance was mediated by team member expertise (Vera & Crossan, 2005), and this mediating relationship was also found in Kahol et al. (2011) examination of productive and unproductive deviations from protocol among teams in Level 1 trauma units. Teams with greater levels of expertise produced a greater volume and proportion of positive deviations, or innovations, while teams comprised of novices produced a greater volume and proportion of negative deviations, or errors (Kahol et al., 2011). In this context, however, teams often failed to

integrate these innovations into their processes and thus failed to complete the adaptive cycle through team learning.

A broad range of individual level characteristics have been examined as mediators in the process of team adaptation (Maynard et al., 2015), most notably the work of Pulakos et al. (2000, 2002) on individual-level adaptability and LePine et al. (2003, 2005) on cognitive ability, goal orientation, and openness, but these fall outside the scope of the present review which is focused on process changes during adaptive episodes. LePine (2003) did obliquely address process changes by noting that team role structure adaptation (RCA), which is the modification of roles and routines in response to a change in the environment, mediated the impact of cognitive ability and performance. Both metrics for RCA, however, were limited as they related to the volume of change rather than the qualitative features of change.

Later, LePine (2005) directly measured interpersonal processes through qualitative coding for lack of negative comments, politeness and respect, and the provision of support after mistakes were made. Supplemental analysis of this data indicated that teams with both a high level of performance orientation and difficult goals were least likely to adapt, and they displayed the lowest quality of interpersonal processes during disruptions (LePine, 2005). Researchers hypothesized that low-quality interpersonal processes constrained these team's adaptive capacity by lowering morale, and they suggested that "training that reinforces the importance of behaviors that support interpersonal and transition processes during times of rapid change may be beneficial" (LePine, 2005, p. 1163). This, however, came with the caveat that additional research in naturalistic settings was needed as this study, like most research on teams and team adaptation, this study was conducted in an experimental laboratory setting where ad hoc teams were engaged in simulated tasks (LePine, 2005).

Summary and Gaps in the Literature

Much like the broader field of team research, which has long relied on teams that conducted inconsequential tasks in laboratory settings (J. Bradley et al., 2003; Mathieu et al., 2018), the team adaptation literature has predominately been carried out via experimental laboratory research designs. In Christian et al. (2017) meta-analysis, 26 of the 38 studies on process changes took place in a lab setting. Beyond the dependence on laboratory environments, Dennis et al. (2006) noted that the early corpus of literature contained little research which focused on process changes.

Much of the early literature supported the construct validity of Gersick's (1988, 1991) PE model and Rosen et al.'s (2011) model for team adaptation, but substantial gaps persist regarding the specific process changes that occurred during each phase of the adaptation process or revolutionary periods. After Garfield et al. (2006) initially called attention to this gap, the research that emerged almost exclusively pertained to either coordination or communication processes. Maynard et al. (2015) identified coordination and communication process categories as central themes in the literature, while Christian et al.'s (2017) meta-analysis of team adaptation literature also found that research indexed heavily toward these processes. Twenty-eight of the 38 studies that they identified focused on either coordination or communication. The remaining studies focused on stimulus-specific actions, learning behaviors, or plan formulation (Christian et al. 2017). This leaves the majority of team processes that were identified by Rosen et al. (2011) unexamined.

The well-established link between the onset of revolutionary periods and an increase in communication, coordination, and interdependence beckons additional research on conflict management in particular. According to social interdependence theory (Johnson, 2003), an

increase in interaction and interdependence within a group will lead to a parallel increase in tension and conflict between its members. Nevertheless, research on changes in conflict management processes during periods of adaptation is lacking. Fortunately, there is a rich body of literature on conflict, and conflict management, which can inform research.

Conflict in Teams

Conflict is broadly defined as the occurrence, or perception, of incompatible activities or interests (Boulding, 2018; De Dreu & Gelfand, 2008; Deutsch, 1973). Jehn (1994; 1995) initially proposed that this broad array of events and activities can be subdivided into two categories based on the substance of incompatibility: task conflict and relationship conflict. Task conflict includes instances when the incompatible activities pertain to the work that is performed by the group (Jehn, 1994). This includes incompatible activities, views, opinions, and ideas concerning task relevant activities. Relationship conflict, on the other hand, includes instances when interpersonal incompatibilities emerge and produce social tension, anxiety, anger, or frustration (Jehn, 1994, 1995). Jehn's model is buttressed by a number of frameworks that make similar differentiations between substantive and affective conflicts (Guetzkow & Gyr, 1954; Pinkley, 1990) and it gains further support from the task and relationship dichotomy which appears in classic management and leadership theories put forward by Stogdill and Bass (1981) and Blake and Mouton (1981).

Two additional categories of conflict have been identified since the introduction of the task and relationship model of conflict. Jehn et al. (Jehn, 1997; Jehn et al., 1999, see also Mannix, 2001) identified process conflict, which involves incompatibilities regarding how a task ought to be executed, and Bendersky and Hays (2012) identified status conflict, which deals with disputes over positions within the social hierarchy. Research has attempted to examine the

impact of each form of conflict but isolating them has proven difficult as each conflict type frequently co-occurs with at least one other type (Bendersky et al, 2014).

Researchers have, however, reached a general consensus regarding the impact of relationship conflict (Simons & Peterson, 2000). Studies have found that relationship conflict has a deleterious impact on a wide range of outcomes including decreases in team identification, satisfaction, creativity, loyalty, organizational citizenship behaviors, and learning behaviors, as well as increases in negative emotionality, somatic complaints, and turnover (Bayazit & Mannix, 2003; Choi & Sy, 2010; Ensley et al., 2002; Gladstein, 1984; Jehn, 1995; Jehn & Bendersky, 2003; Meier et al., 2013; Peterson & Behfar, 2003; Rispens & Demerouti, 2016; van Woerkom & van Engen, 2009; Wall & Nolan, 1986). Pelled (1996) asserted that three underlying information processing mechanisms cause these adverse effects. First, relationship conflict reduces team member's capacity for cognitive processing and impedes effective analysis. Second, it reduces receptivity to alternative perspectives. Third and finally, it reduces the amount of time that is spent on task relevant behaviors. Thiel et al. (2019) put forward an explanation based on threat rigidity, where relationship conflicts are perceived as a threat to self which then limits the individual's capacity for information processing, unbiased judgement, and control. Process, like relationship conflict, has been found to consistently produce negative effects on team outcomes (de Wit et al., 2012) and the burgeoning body of research on status conflict also indicates that this conflict type has broadly negative effects on relevant team outcomes (Greer & Dannals, 2017).

The pronounced negative effect of relationship, process, and status conflict help to explain early theoretical work which framed conflict as a form of process loss (Steiner, 1972) that produced wholly negative performance effects by impeding effective execution of a group's

tasks (Hackman & Morris, 1975). This claim, however, was rejected by other theorists who promoted the potential performance benefits of task conflict. Early theorists including Lawrence and Lorsch (1967) argued that direct conflict and open confrontation were beneficial, while Janis (1972) proposed that an absence of conflict was one of the concrete manifestations of group think. Ackoff (1999) later stated that conflict could theoretically be eliminated from an organization by eliminating choice and reducing employees to automatons, but he argued that this was an undesirable state.

Empirical studies indicate that task conflict is capable of producing positive effects including enhanced critical thinking, open mindedness, innovation, improved decision quality, elevated team cohesion, and overall performance improvement (Amason, 1996; B.H. Bradley et al., 2012, 2013; De Dreu & West, 2001; Nemeth et al., 2004; Tekleab et al., 2009; Tjosvold, 1982, 2008). Tekleabe et al. (2009) also noted that there is an increase in task conflict at the midway point within group's lifespans, the critical window identified by Gersick (1991), and indicated that this increase had a positive effect on team performance. The positive relationships that were discovered between task conflict and relevant emergent states and outcomes have tended to be curvilinear, with moderate levels of task conflict producing the greatest benefits, while excess rates produce deleterious effects (De Dreu, 2006). Unfortunately, research has not yet determined the optimal volume of task or other forms of conflict (Loughry & Amason, 2014).

Additional research demonstrates the potential pitfalls of task conflict and indicates that it is not an unmitigated good. Task conflict has been associated with decreased team member satisfaction, interdependence, autonomy, and trust in self-managing teams (Langfred, 2007), distraction due to emotionality (Jehn et al., 2008), delays in the decision-making process (de Wit

et al., 2013), and even psychosomatic physiological ailments (Jehn, 1995; Spector & Jex, 1998). Further, task conflict closely correlates with relationship conflict (Simons & Peterson, 2000), and the co-occurrence of task and relationship conflict leads to opinion rigidity and biased information selection (de Wit et al., 2013). This process of conflict spillover, where task conflict instigates affective conflict (Mooney et al., 2007), can be attributed to the autonomic physiological responses to task conflict identified by Jamieson et al. (2014) and subsequent psychological processes including attribution errors and rumination caused by self-verification (Amason & Schweiger, 1997; Simons & Peterson, 2000; Swann et al., 2004; van Kleef et al., 2004). This process, however, is not inevitable. It is less likely to occur when there is high intrateam trust, team members possess high levels of trait self-control, or the team is engaged in a task that is of high importance (Choi & Cho, 2011, Jimmieson et al., 2017; Rispens, 2012). Further, spillover tends to dissipate over time as team members learn to effectively differentiate between task and relationship conflict (Humphrey et al., 2017).

The ambivalence of conflict is evidenced by multiple meta-analytic studies. A landmark metanalytic study by De Dreu and Weingart (2003) found that all conflict, irrespective of type, is negatively correlated with team performance and satisfaction ($p = -0.23$). A later meta-analysis by de Wit et al. (2013) built upon these findings and indicated that the relationship between task conflict and performance was actually closer to a zero correlation ($p = -0.01$). O'Neill et al. (2013) found a statistically significant negative relationship between task conflict and performance ($p = -0.06$), but the authors later argued that the magnitude of the effect was marginal (O'Neill & McLarnon, 2018).

The contingency theory of conflict sought to make sense of these inconsistent findings by producing some unifying theoretical explanation (Shaw et al., 2011). This theory framed conflict

as quasi-functional and sought to identify the conditions that are conducive to creating positive post-conflict outcomes (Behfar & Thompson, 2007; Korsgaard et al., 2008). In a review of conflict literature, Rahim (2002) asserted that “organizational conflict must not necessarily be reduced, suppressed, or eliminated, but managed to enhance organizational learning and effectiveness.” (p.229).

Mannix and Jehn (2004), found that the timing of specific conflict types is a salient contingency. In their longitudinal study of task group development, they found that successful teams experienced high levels of process conflict during their early stages followed by low levels throughout. They also found that these teams experienced low levels of relationship conflict throughout, with high levels of task conflict during their early stages and at their midpoint. Low performing teams contrasted with these patterns, as they experienced low task conflict at their midpoints, a dramatic increase in task conflict at their deadline, and steadily escalating rates of relationship conflict throughout. DeChurch et al. (2013) later found that the qualitative features, the style of conflict management, was a critical contingency. They concluded that the conflict management style that was applied had an impact on relevant outcomes that was four times greater than that of conflict type.

Conflict Management

Marks et al. (2001) categorized conflict management processes temporally and established two discrete categories: preemptive conflict management and reactive conflict management. Preemptive conflict management includes all actions intended to create conditions which stymie or minimize conflict before it occurs, while reactive conflict management encompasses processes that teams deploy to work through conflict after it has emerged. Preemptive conflict management, in Marks et al. (2001) conceptualization, does not include

actions like the installation of devil's advocates (Janis & Mann, 1977; Priem & Price, 1991; Schwenk, 1988) or the utilization of dialectic inquiry (Mitroff & Emshoff, 1979) which are intended to elicit productive forms of conflict. The present review will also exclude these measures as conflict is likely to emerge organically during revolutionary periods due to the factors identified by Johnson (2003) and other Social Interdependence Theorists.

Reactive conflict management styles are frequently categorized by the degree of concern for one's own interests and the degree of concern for the interests of the other party (De Dreu & Beersma, 2005; van de Vliert & Kabanoff, 1990). This dual concerns model, based on the work of Blake and Mouton (1981), led to the development of five distinct and empirically validated conflict management styles: dominating, avoiding, yielding, compromising, and collaborating (Rahim, 1983; Rahim & Magner, 1995). Similar to the task, process, and relationship model put forth by Jehn (1994), there is some debate regarding the nomenclature and precise boundaries for each style, but the model gained broad support (Ma et al., 2008).

It is important to note that these styles are not necessarily applied in isolation, as conflict management frequently involves a combination of these styles rather than the application of a single, distinct style (van de Vliert, et al., 1995). Munduate et al. (1999) found that the style pairs with significant, positive correlations were compromising and integrating, compromising and obliging, and avoiding and obliging. In addition to this, they found that avoiding and integrating as well as dominating and obliging were incompatible with one another, and the remaining possible pairs had no relationship to one another. Conflict management styles are also dynamic. Teams and individuals have default styles, but these styles are not used exclusively, and they are prone to change across time and space (Ayub et al., 2017).

van de Vliert and Euwema (1994) built upon the dual-concerns model and created an integrative meta-taxonomy based on two factors: activeness and agreeableness. This allows for the ordinal organization of each style across two observable behavioral continuums. Most recently, Weingart et al. (2015) introduced a two-factor conceptual framework based on directness and oppositional intensity which provides additional insight into the effects of different forms of expressed conflict. Unfortunately, conflict management has long been understudied and it only comprises a small minority of the expansive body of conflict research (DeChurch et al., 2013), and evidence for the mediating relationship between conflict management style and performance or satisfaction is mixed. The present review will utilize the five styles identified by the dual concerns model while integrating the activeness, agreeableness, directness, and intensity dimensions to provide additional nuance.

Dominating

The dominating style of conflict management occurs when one party holds a high concern for their own interests and a low concern for the interests of the other party. It is framed as a win-lose orientation where an outcome, process, or position is imposed by one party upon the other (Rahim & Magner, 1995). Behaviors associated with this style include personal criticisms, outright rejection of alternatives, ultimatums, aggressive interrogation, rigid assertions, and other overtly confrontational behaviors (Wilmot & Hocker, 2011). Of the five conflict management styles, it ranks third highest on the active dimension and lowest on the agreeableness dimension (van de Vliert & Euwema, 1994). Dominating styles are also associated with high levels of directness and oppositional intensity (Weingart et al. 2015).

Early research on competitive, contentions conflict management demonstrated that it was associated with significant decreases in performance (Tjosvold, 1997, 1998). In a longitudinal

study of autonomous student teams, Behfar et al. (2008) found that this style led to a steady decline of team performance and satisfaction over time. In a study manipulating the conflict management style of pairs, Gross and Guerrero (2000) found that participants who displayed a dominating style were rated as both less effective and less appropriate by their partners. Perhaps more consequential for small groups and teams, the dominating style was found to be contagious. Participants reciprocated dominating behaviors and struggled to display alternative conflict management styles (Gross & Guerrero, 2000). The propensity to mirror conflict management styles, including dominating styles, was also found in Brett et al.'s (1998) study of negotiation reciprocity.

Similar evidence of negative performance effects emerged in studies of hospital clinical groups. There, dominating styles were associated with concurrent escalations of experienced task conflict, relationship conflict, and stress (Friedman et al., 2000). Syna Desivilya and Yagil (2005) also found a positive correlation between contentious forms of conflict management and negative emotionality among 69 medical teams in Israeli healthcare centers. This pair of studies demonstrated the propensity for dominating styles of task conflict management to spill over into relationship conflict.

Later, Maltarich et al. (2018) found that competitive conflict management also moderated the relationship between task conflict and performance, with competitive styles leading to decreased levels of performance. While DeChurch and Marks (2001) did not find a relationship between disagreeable forms of conflict management and performance, they did find that conflict management styles moderated the relationship between task conflict and satisfaction. Within groups that utilized disagreeable forms of conflict management, which included both domination and avoidance, there was a negative correlation between task conflict and satisfaction. In groups

that utilized agreeable forms, the relationship was reversed (DeChurch & Marks, 2001). The same moderating relationship was found by Lovelace et al. (2001) in their study of functionally diverse teams across 16 different high-technology firms. In addition to these adverse effects, early theoretical and empirical work indicated that dominating and competitive conflict management impedes the identification and utilization of opportunities for joint gains (Ben-Yoav & Pruitt, 1984).

In manager-employee dyads, managers with dominating styles of conflict management have been found to cause their subordinates to be less satisfied, less committed to directives, and less communicative with their supervisor and one another (Rahim & Buntzman, 1989; Richmond et al., 1983). These behaviors have also been found to resist change and radiate into the wider network of intragroup relationships in a team, thus exacerbating adverse effects (Tepper et al., 2011). In a study on the conflict climate in a large Australian government agency, Way et al. (2016) found that supervisors that displayed high levels of forcing during conflicts with subordinates caused an array of negative employee outcomes including anxiety and perceptions of workplace bullying.

Virtual teams are one notable exception to the negative correlation between competitive or dominating conflict management and performance. In virtual environments, researchers have found a positive correlation between these styles of conflict management and performance (Montoya-Weiss et al., 2001). The lean communication environment that exists in virtual teams, where communication is depersonalized by the lack of non-verbal and paraverbal cues, effectively insulates against the negative effects of the dominating style. Conflict spillover is neutralized, and the positive effects of task conflict are amplified (Martínez -Moreno et al., 2012; Montoya-Weiss et al., 2001; Pazos, 2012; Purdy et al., 2000). The amplified positive effect can

also be attributed to this style's capacity to surface latent conflict. Unspoken conflicts often fester in virtual environments as they go unaddressed for extended periods (Griffith et al., 2003; Purdy et al., 2000), and eliciting these conflicts enables virtual teams to benefit from the positive relationship between task-conflict and virtual team performance identified by De Jong et al. (2008).

Avoiding

The avoiding style of conflict management occurs when one party holds a low concern for both their own interests as well as the interest of the other party (Rahim & Magner, 1995). Avoiding stands at the bottom rung of van de Vliert and Euwema's (1994) ladder of activeness, and it is neutral with regards to agreeableness. Within Weingart et al. (2015) framework, avoiding is low in both directness and oppositional intensity. Behaviors associated with this style include overt or covert physical and psychological withdrawal, sidestepping, minimization, and deflection (Rahim & Magner, 1995; Wilmot & Hocker, 2011).

Avoidant behaviors are some of the most prevalent within organizational life (Kolb & Bartunek, 1992; Roloff & Ifert, 2000), and they account for the majority of responses to communication breakdowns (Ayoko et al., 2002). This propensity is exacerbated in collectivist cultures, where avoidance is adopted as an identity strategy (Ohbuchi & Atsumi, 2010). This behavioral pattern is central to Argyris' (2012) construct of defensive routines. Argyris (2012) proposed that organizations are plagued by a common four-stage organizational defensive routine. This routine consists of sending a message that is inconsistent, acting as if it is not inconsistent, making the first two stages undiscussable, and making the undiscussables undiscussable. These routines effectively avoid real or potential points of conflict by obfuscating and ignoring them (Argyris, 2012).

Similar to the dominating style, which stands at the opposite pole on the activeness dimension, research indicates that avoiding conflict has deleterious effects on satisfaction and performance across multiple contexts. This pattern is referred to as stonewalling (Gottman, 1993) within romantic dyad research, and it is associated with proximal negative outcomes in the form of decreased satisfaction and distal negative outcomes in the form of decreased long-term viability and satisfaction (Busby & Holman, 2009; Gottman, 1991; Gottman & Levenson, 1992). Montoya-Weiss et al. (2001) found that conflict avoidance in virtual teams had a significant negative effect on performance as it compounds the preexisting challenge of surfacing and effectively managing conflict in remote and distributed teams, while Behfar et al. (2008) found that avoidant strategies were associated with low performance and low satisfaction over time in their longitudinal study. While the negative impact of avoidance on performance was universal, some teams were able to maintain harmony and satisfaction through avoidance (Behfar et al., 2008).

The performance costs of avoidance can be attributed to the distortions in the sensemaking process (Morrison & Milliken, 2000), increased ideological and affective polarity (Sunstein, 2003), and counterproductive behavioral conformity like that found in seminal experiments by Darley and Latane (1968), and Asch (1951). Further, avoidance prevents deeper exploration of one's own viewpoints and the viewpoints of others, which is a process that is a hallmark of collaborative forms of conflict management (Tjosvold et al., 2014). Avoidance, to echo J.S. Mill (2002), leaves individuals with knowledge of only their side, and little knowledge of that.

While avoidance is perceived as an ineffective, inappropriate, and unsatisfactory strategy (Gross et al., 2004), it does offer some utility in specific contexts. Rahim (2002) suggests that

avoidance is beneficial when the cost of conflict outweighs the benefits generated by its resolution. Murnighan and Conlon's (1991) landmark study of string quartettes supports this assertion. When successful quartets encountered inconsequential disagreement or relationship conflict, they frequently avoided it and returned to their task. Other conflict theorists also assert that emotion laden relationship conflict ought to be consciously avoided, especially in multicultural teams with linguistic and cultural barriers (Von Glinow et al., 2004). This was supported by Tabassi et al. (2019) who found that leaders in cross-cultural project teams frequently utilized the avoidance approach in such a way that it contributed to improved team performance. De Dreu and Van Vianen (2001) similarly found that relationship conflict avoidance was associated with increased satisfaction in student groups.

Later, Thiel et al. (2019) found that collaborative conflict management may not be necessary when relationship conflict arises, and avoidance may suffice because individual level cognitive reappraisal is capable of effectively mitigating the adverse effects of relationship conflict. Thiel et al. (2019) proposed that the process of cognitive reappraisal alleviated the threat rigidity which is elicited by relationship conflict and allowed for the restoration of normal, productive team processes. They went on to propose that this process can occur individually without collective action. This parallels the argument put forth by Jehn et al. (2008) who claimed that emotion reduction is key to minimizing the adverse effects of relationship conflict.

Bear et al. (2014), however, cautioned that the utilization of avoidance as a means of attenuating negative emotions associated with relationship conflict may be limited to a subset of team members. In their study of healthcare workers, men who utilized avoidance benefitted from the emotion reduction described by Jehn et al. (2008), but women did not experience that benefit (Bear et al. 2014). Through a study of Chinese top management teams, Liu et al. (2009)

produced findings that contest the validity of this theory. In these teams, avoidance aggravated the adverse effects of both task and relationship conflict, and it caused both team and firm level performance loss. Further, when relationship conflict is entirely unavoidable, Edmondson and Smith (2006) found that the direct management of relationship conflict, when done tactfully and with an expressed intent of cooling the conflict, led to improved decision making.

Compromising

Compromising occurs when the relevant parties hold relatively equal power as well as a moderate, roughly proportional level for concern for themselves and the other parties (Rahim, 1983; Rahim & Magner, 1995). This give-and-take style of conflict management is associated with a search for intermediate positions, splitting the difference between two positions, and identifying tradeoffs (Wilmot & Hocker, 2011). Similar to the avoidant style, compromising is a common form of conflict management in organizations especially amongst junior managers and employees (Slabbert, 2004). Hendel et al. (2007) also found that compromising was the most frequently used mode of conflict management, irrespective of respondent's titles or demographic characteristics. In van de Vliert and Euwema's (1994) framework, compromising was similar to collaborating on the activeness dimension, but lower on the agreeableness dimension. This diverges slightly from Gross and Guerrero's (2000) study which indicated that compromising was rated as neutral in terms of both effectiveness and agreeableness. Compromising was not explicitly examined by Weingart et al. (2015), but it is likely to generally fall in the moderate range for activeness with its level of oppositional intensity varying based on the specific expression of conflict.

The prevalence of compromising, like avoidance, can be attributed to the common managerial theories in use identified by Argyris (2012). These theories have four governing

values: achieving one's intended purpose, maximizing winning and minimizing losing, suppressing negative feelings, and behaving in a way that you consider rational (2012). Each of these governing values is satisfied when resolution is achieved through compromise. All parties involved are able to achieve their purpose to a degree (van de Vliert & Hordijk, 1989), neither side loses while both sides win, negative feelings are avoided, and the process is at least ostensibly rational.

Compromising was one of the primary strategies for all teams studied in Behfar et al. (2008). The effect of compromises was contingent on the reason compromises were reached, and the desired outcome. In teams that experienced performance and satisfaction degradation over time, compromises served as a of pseudo-avoidant behavior caused by a reticence to experience negative emotions or a desire to maintain perceived equality and fairness (Behfar et al., 2008). Conversely, teams that experienced performance and satisfaction improvements saw compromises as equitable and adequate solutions to conflicts (Behfar et al., 2008).

In their study of remote teams, Montoya-Weiss et al. (2001) also found that compromising had a significant negative effect on performance. Compromising has shown promise as it pertains to affective states, as Weider-Hatfield & Hatfield (1995) found a positive correlation between compromising and satisfaction with interpersonal outcomes, but they did not find a relationship to performance outcomes. The null effect on performance may be due to the selection of acceptable, but suboptimal alternatives which neglect the integrative potential described by Fisher et al. (2011). Trudel and Reio Jr (2011) found that compromising neutralized incivility but did not produce productive outcomes when compromising is applied to relationship conflict. Further, efforts to compromise, especially in situations involving long standing

ideological issues or personality dispositions, have been found to be counterproductive (Harinck et al., 2000).

Yielding

Yielding occurs when there is a low concern for one's own interests and a high level of concern for the other party's interests (Rahim & Magner, 1995). The yielding process often consists of suppressing one's own desires, emphasizing a need for cooperation, making concessions, and engaging in passive acceptance (Wilmot & Hocker, 2011). This strategy was rated as the most agreeable by van de Vliert and Euwema (1994), and it was the second least active. Gross and Guerrero's (2000) results differed slightly, as their study indicated that accommodation is viewed as either neutral or as slightly inappropriate.

Like avoidance, yielding can be beneficial in situations when the preservation of a relationship is paramount (Rahim, 2002). Through yielding, the obliging party is viewed favorably, and a degree of ingratiation is produced (Yukl & Tracey, 1992). Counter to the intuitive expectation which indicates that yielding can leave one vulnerable to mistreatment, yielding was not associated with experienced incivility on the part of the accommodator in Trudel and Reio Jr's (2011) study of 615 employees across three privately held companies in the United States. While obliging does not beget incivility, it can beget more conflict. Weider-Hatfield and Hatfield (1995) found that high obligers experienced significantly more conflict than those who were less prone to this style. This increase, coupled with the phenomenon of conflict contagion (Jehn et al., 2013), may cause conflict to elevate to a counterproductive level across the team. Alternatively, if this contagious effect does not occur, it may cause conflict asymmetry which can have negative effects on performance (Jehn et al., 2010). Yielding can, however, offer some utility in contexts where time is limited. This style allows for efficient,

rapid decision making (Trubisky et al., 1991) and resistance to yielding decreases when time constraints are salient (Druckman, 1994).

Managers are especially well positioned to leverage yielding for group benefit, as it has been shown to enhance supervisor effectiveness (Van de Vliert et al., 1995). Further, accommodation produces an increase in subordinate satisfaction with supervision (Lee, 2009) as well as improvements in the perception of supervisor performance among subordinates (Korabik et al., 1993). Despite these potential benefits, managers have been found to infrequently apply this style (Antonioni, 1999).

The negative effects of yielding, however, emerge in multiple contexts. Montoya-Weiss et al. (2001) found that yielding is essentially ambivalent in remote and distributed teams, as it had no positive or negative impact on performance. This ambivalence may be explained by studies which indicate that yielding, like avoiding and compromising, leads to suboptimal outcomes which neglect integrative potential and opportunities for mutual benefit (Fry et al., 1983). Yielding has also been correlated with decreased performance and satisfaction over time when it is rotated throughout at team as a means of creating equality (Behfar et al. 2008), and passive conflict management, including avoidance and yielding, in response to relationship conflict has also been correlated with greater levels of stress when it is applied to relationship conflicts (Dijkstra et al., 2009). This increase in stress may counterbalance the benefit of personal ingratiation which was mentioned previously.

Collaborating

Collaborating conflict management, which involves a high level of concern for both one's own interests as well as a high level of concern for the interests of the other party (Rahim & Magner, 1995), is the most active and second most agreeable form of conflict management

according to van de Vliert and Euwema (1994). Gross and Guerrero (2000) similarly found that this style was rated as both effective and appropriate. This process is enabled by antecedent conditions like trust and positive regard (Thomas, 1992), and it is associated with behaviors including analytic remarks and commentary, concessions, acceptance of responsibility, ideating on alternative solutions, and soliciting elaboration and further contribution from other parties (Wilmot & Hocker, 2011). Early theorists including Blake and Mouton (1981) and Deutsch (1973) argued that collaborative approaches are the most adaptive form of conflict management, and the extant body of conflict management literature largely confirms that the benefits are myriad, but collaborating does have limitations and it is not a panacea.

A collaborative approach enables the exploitation of joint gains and the development of durable solutions (Friedman et al., 2000). Consequently, a collaborative style has repeatedly produced superior affective and performance outcomes when compared to competitive or dominant approaches (De Dreu et al., 1999; Tjosvold, 1998, 2003, 2006, 2019). This has held true in laboratory experiments involving negotiation (De Dreu et al., 2000; Weingart et al., 1993), simulated social conflicts (Carnevale & Pruitt, 1992) and field studies of top management teams (Liu et al., 2009).

Further, studies have found that collaborative styles and their associated behaviors improve satisfaction, perceived decision quality, participation, passion, affective trust, and performance within teams (Alper et al., 2000; Kuhn & Poole, 2000; Hempel et al., 2009; Nemeth et al., 2004; Paul et al., 2004; Yin et al., 2020). Collaborating also occupies a mediating role in the relationship between both task interdependence and task identity on performance in long term teams, thus exploiting their potential for performance gains (Somech et al., 2009). These benefits also accrue over time, and they create cumulative gains in both performance and

satisfaction in longitudinal studies (Behfar et al., 2008). Similar performance and affective benefits have also been found in remote environments (Montoya-Weiss et al., 2001).

The potency of this conflict management style, according to B.H. Bradley et al. (2015), can be attributed to its ability to simultaneously maintain high levels of directness and low levels of oppositional intensity. In doing so, it enables cocreation rather than imposition, thus avoiding the cognitive and emotional effects associated with the dominating style and halting unproductive conflict spirals (Brett et al., 1998).

As previously noted, however, there are some limits to the utility of the collaborative style. Maltarich et al. (2018) discovered that teams that utilized collaborative approaches to relationship conflict suffered larger performance deficits as a result. This supports earlier findings by Murnighan and Conlon (1991), who found that collaboration was unlikely to resolve the tensions associated with relationship conflict and thus constituted an unproductive allocation of the team's time. This provides further evidence for Thiel et al.'s (2019) theory which was described previously. Auh et al. (2014) also found that collaborative approaches to conflict management effectively attenuated the negative effects of task conflict on information exchange within sales teams, but performance benefits remained elusive. In effect, collaborative approaches may reduce harm without producing a discernable benefit (Auh et al., 2014). In a study of short-term project groups, Rispens et al. (2021) even found that collaborative problem-solving approaches to conflict management harmed performance when there was a high level of homogeneity in conflict management styles across individual group members. In these teams, conflict management scripts were silently agreed upon and enacted without considering alternatives or explicitly identifying an optimal strategy (Rispens et al., 2021). In Gersick's (1988, 1989) seminal PE studies, the development and eventual performance of multiple teams

was stunted by excessive collaboration without resolution which reduced the time they were able to spend on productive task work.

Summary and Gaps in the Literature

There is, as mentioned previously, a large volume of literature that directly examines the impact of conflict type, and there is a comparatively small body of literature that directly examines the role of conflict management styles. Overreliance on cross-sectional analysis and laboratory studies constitutes a gap in team research more generally (Mathieu et al., 2017, 2019), and research on conflict management within teams is not an exception. The extant literature is primarily comprised of cross-sectional studies, with some exceptions including Behfar et al. (2008), and laboratory studies involving ad hoc teams and artificial tasks. This gap can be filled through field studies where intact teams are engaged in organic, consequential tasks, as well as studies that employ longitudinal approaches which capture how, and why, conflict management processes change over time.

The research on relationship and process conflict types is fairly conclusive and indicates that these are at best unproductive and often counterproductive. Research on task conflict is more complex, and the contingency approach has not, as of yet, conclusively determined the contexts that are most amenable to productive task conflict. The research on conflict management styles, namely dominating, avoiding, compromising, yielding, and collaborating, has also produced mixed results. The dominating style has largely been associated with negative outcomes, but it has demonstrated utility in virtual teams (Montoya-Weiss et al., 2001) and it may safeguard against the perpetuation of latent conflict in other environments. The avoiding style, despite its prevalence, has produced predominantly negative outcomes. Similar to the dominating style, however, it shows some promise in a narrow set of contexts. Avoiding may be beneficial when it

is applied to relationship conflict, but this is contested. Based on the current literature, it appears unlikely that either dominating or avoiding will increase in high performing teams that are engaged in a revolutionary period. Compromising is perhaps the most ambivalent style. It has often been shown to produce neither optimal, nor disastrous outcomes with regards to performance and satisfaction. The yielding style represents an intriguing area of inquiry in the present study, because it demonstrates utility in multiple contexts, including those where time is limited, and it has thus far been an underutilized style amongst leaders and managers. Finally, research on the collaborating style has largely confirmed early theoretical work which claimed that it was the optimal approach. While it has repeatedly been shown to produce performance improvements, it may not be ideally suited for revolutionary periods as it is time and energy intensive.

Chapter Summary

This chapter presented modern theoretical and experimental literature focused on team development, team adaptation, the theory of PE, conflict, and conflict management. The relatively novel synthesis of the team development and team adaptation literature led to the identification of a significant gap in the literature, as longitudinal changes in team processes were found to be relatively unexamined. Within the conflict management literature, the subset of interpersonal team processes that the current study will focus on, was also found to be lacking with regards to clear theory or empirical examinations of modifications to team conflict management processes during revolutionary periods.

Chapter 3: Methods

Introduction

Chapter 3 will consist of a comprehensive presentation of the research methodology for this study. After a brief review of the purpose of this study, the chapter will provide an overview of, and rationale for, the research approach, design, and method that will be utilized. This will be followed by a description of the sampling procedure and the sample population. Next, the data collection process, including the interview protocol will be presented. This is followed by a detailed description of data management and analysis. Finally, there is an overview of the steps that will be taken to protect the human subjects and the ethical considerations managed throughout the study. The chapter closes with a summary.

Methodological Alignment

Successful research depends on sufficient alignment between philosophical presuppositions and the methods that are utilized to conduct research (Holden & Lynch, 2004). This congruity is complimented by an alignment between the features and goals of the study. This includes the worldviews held by the researcher, the research approach that is selected, the research design that is developed, and the research methods and techniques that are ultimately employed (Creswell & Creswell, 2017). The goal of this study is to explore interpersonal process changes and gain a greater understanding of the manner and extent to which high-performing teams embedded within in a for-profit organization modify their conflict management processes during revolutionary periods.

The central research question addressed in this study is:

- RQ: How, if at all, do teams modify their conflict management processes over the course of a revolutionary period?

The sub-questions for this study are:

- SQ1: What was the predominate style of conflict management before the onset of the revolutionary period, and during each phase of the revolutionary period?
- SQ2: What secondary or tertiary styles of conflict management occurred prior to the onset of the revolutionary period, and during each phase of the revolutionary period?
- SQ3: How did the qualitative features of conflict management processes change during the revolutionary period?
- SQ4: Why did team members modify the way they managed conflict?
- SQ5: What changes to conflict management processes, if any, do team members ascribe their success to?

By exploring this research question, and its associated sub questions, this study helps to address the problems presented by the increasingly VUCA environment that teams occupy while also contributing to the remediation of the general lack of sound theory or practical knowledge regarding how teams adapt their processes as they move through revolutionary periods (Lei et al., 2016). The researcher determined that the most efficacious and practical approach to accomplishing goal is to apply a qualitative research approach with a multiple case study design that relies primarily on the methodology of individual interviews for data collection.

Approach and Worldview

The three general approaches outlined by Creswell and Creswell (2017), which are also referred to as modes of enquiry (Kumar, 2018), are quantitative, qualitative, and mixed methods approaches. The distinction between quantitative and qualitative research is longstanding, while mixed-methods research has recently risen in popularity and established itself as the third major research approach (Johnson et al., 2007). It is important to note that these three categories are

neither discrete nor adversarial. They are better understood as three points across two continua. Quantitative and qualitative approaches occupy positions at the poles, while a mixed methods approach occupies the midway point (Creswell & Creswell, 2017). Each holds unique merits that are contextually dependent (Guba, 1990).

The first continuum is at the philosophical level where research approaches can be distinguished by the milieu of beliefs, which are referred to as either a worldview (Creswell & Creswell, 2017) or a paradigm (Guba, 1990), that undergird them. Within this broader set of beliefs, Richards and Morse (2013) propose that epistemology is central as it both informs the questions that are asked and shapes the means through which an answer is pursued. Epistemology, or the way that knowledge is defined and how one comes to know it (Tennis, 2008), effectively shapes every phase of the research process.

Quantitative research, which is broadly defined as the accumulation and analysis of numerical data on a phenomenon (Babbie, 2014), is associated with positivist epistemologies which assert that there is an objective reality which can be identified through deduction. This epistemology prompts the selection of research questions that are focused on causal relationships between variables, rather than those that focus on processes (Denzin & Lincoln, 2005), and research designs that include quantitative data collection, controlled experiments, replication via the scientific method, and generalizable statistical inferences (Park et al., 2020).

Because knowledge and reality exist outside of the observer, postpositivist quantitative researchers are encouraged to extricate themselves and assume a distant, dispassionate position throughout the process (Guba, 1990). The positivist paradigm caused four imbalances in research: rigor over relevance, precision over richness, elegance over applicability, and verification over discovery (Guba, 1990). These imbalances have also emerged in the corpus of

research on teams in general and team processes more specifically (Arrow et al., 2004; Kozlowski & Bell, 2012; Kozlowski & Ilgen, 2006; Mathieu et al., 2017). The utilization of an alternative approach could be justifiable on these grounds alone.

Qualitative research, on the other hand, is difficult to define in a way that would appease all qualitative researchers (Avis, 2005). It can, however, be effectively conceptualized as a dual emphasis on processes, rather than quantifiable entities, and the socially constructed aspects of reality (Denzin & Lincoln, 2005). This emphasis aligns more closely with constructivist worldviews (Guba, 1990; Lincoln & Guba, 1985). The constructivist research paradigm was put forward to address the research imbalances created by the positivist paradigm and to compensate for other gaps including the lack of recognition for the theory-ladenness of facts, the underdetermination of theory, and the interactive nature of the inquirer-inquiree dyad (Guba, 1990). Constructivists sought to accomplish this by acknowledging two ideas: the relativity of social and experiential realities, and the impact of local and specific contexts. This then necessitates a subjectivist epistemology where the individually constructed, socially mediated knowledge held by individuals is elicited through qualitative methodologies that constitute hermeneutic partnership between the researcher and the researcher participants (Guba, 1990).

Some argue that quantitative approaches are reconcilable with constructivist and other postpositivist paradigms (Clark, 1998), but qualitative approaches are more frequently utilized because they are better equipped to examine situations and events as interconnected wholes (Creswell & Creswell, 2017). In addition to this capability, qualitative approaches provide a more nuanced view of lived experiences which are not readily communicated in numerical data (Anderson, 2010) as well as a clearer picture of individual's varied perspectives on a single phenomenon (Merriam, 2009).

The researcher conducting this study holds a social constructivist epistemology, where individual members are said to construct their realities through ongoing dialogue and interaction (Barrett et al., 1995), and they view conflict management as a shared and public activity. Through this lens, actions in the conflict management process are assigned meaning based on their use within the larger context of the team's interactions. These actions, and the interpretation of these actions by other individual members, are informed by the immediate context as well as each member's preexisting theories and values they hold which are related to conflict management. As a consequence, the holistic nature of qualitative research approaches as well as their capacity to surface varied perspectives and tease apart the lived experiences of participants, are paramount to this study's success.

Methodological Fit

After selecting a qualitative research approach, the researcher must select from an array of research designs. Creswell and Poth (2018) organized qualitative research designs into five categories: narrative, phenomenological, grounded theory, ethnography, and case study. Much like the three major approaches to research, these categories are not discrete, as they overlap in both the ends they pursue and the means that they utilize, and each offers unique benefits in specific contexts. The present study applies a multiple case study design as it satisfies the conditions that are necessary for the use of case studies, the study's purpose aligns with the strengths of case study designs, the phenomenon it focuses on is amenable to case study research, and alternative designs have apparent limitations which limit their fit.

Case studies, which are “a form of empirical inquiry that investigate a contemporary phenomenon in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident” (Yin, 2014, p. 16), are utilized when understanding of a phenomenon relies on an understanding of relevant contextual conditions. Yin (2014) proposes a three-pronged test to determine the fit and utility of case study designs, and each of these criteria are satisfied in the present study. The three criteria include:

- Whether or not the research question is a “how” or a “why question.”
- Whether or not the researcher has little or no control over behavior and events.
- Whether or not the focus of the study is a contemporary, rather than historical phenomenon or event.

With regards to the first criterion, the primary research question is focused on how teams adapt their conflict management processes during revolutionary periods, rather than what conflict management process is optimal in a given context or what level of task or relational conflict is optimal during revolutionary periods. With regards to the second criterion, the researcher does not have control over the emergence of triggers for revolutionary events nor do they have control over a team’s behavioral response to those triggers. Further, the manipulation of these triggers and behavioral responses would jeopardize the generalizability and credibility of the data while simultaneously causing a number of ethical concerns. With regard to the third and final criterion, the researcher is focused on a contemporary event and interviews were conducted within relatively close temporal proximity to the event itself. The event is still effectively living, and participant’s recollections and perceptions are susceptible to change.

These three criteria are necessary but ultimately insufficient to determine whether a case study design is an ideal fit for the present study. The design must also align with the problem and

purpose of the study. Yin (2014) states that: “Whatever the field of interest, the distinctive need for case study research arises out of the desire to understand complex social phenomena [...] and retain a holistic and real-world perspective” (p. 4). The purpose of this study, which centers on the exploration of the complex social phenomena of conflict management, aligns perfectly with this. Further, this research has a secondary purpose of filling a persistent void in the academic literature caused by an overreliance on positivist-influenced experimental, cross-sectional, and lab-based studies at the expense of field-based studies of intact teams. This also aligns well with case study designs. A case study provides the kind of holistic, real-world perspective that is relatively lacking in this field.

Beyond the alignment between case study designs and this study’s purpose, the phenomenon that this study intends to examine is well suited for this design. Understanding changes to team conflict management during revolutionary periods requires analysis of a constantly evolving interpersonal process, or a set of interdependent acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities (Marks et al., 2001), which is intertwined with the highly variable individual perceptions of team members. These challenging features of the phenomenon are effectively managed by case studies. The social sciences have historically struggled to measure change (Cronbach & Furby, 1970), but one of the core strengths of case studies is their ability to capture rapid or constant fluctuations in organizational and social life (Hartley, 2004). Case studies do so by offering a means of investigating complex social units consisting of multiple variables of potential importance (Merriam, 2009). This phenomenon is also bounded by time and space, as it is limited to a singular period of time within a bounded social unit, which invites the use of a case design where there is “an inside and an outside. Certain components lay within the system, within the boundaries of the case; certain

features lie outside” (Stake, 2006, p. 3). Additionally, this phenomenon takes place within the complex adaptive system of teams. As mentioned previously, interest in complex social phenomena is a primary impetus for the application of case study designs (Yin, 2014). Finally, there is a relative lack of comprehensive theory on this phenomenon, and this feature lends itself to qualitative research broadly where “partial or inadequate theories exist for certain populations and samples or existing theories do not adequately capture the complexity of the problem” (Creswell & Poth, 2018, p. 48).

While these points demonstrate that a case study design is appropriate, they do not sufficiently demonstrate that it is an optimal approach when compared to other major qualitative methodologies identified by Creswell and Poth (2018) which include phenomenology, ethnography, narrative research, and grounded theory. Each of these, however, has at least one limitation or deficiency which adversely affects their fit for the present study. With regards to phenomenology, the phenomenon of interest in this study extends beyond the lived experiences of the participants and it includes the cognitive, verbal, and behavioral processes that they engage in. The deficiencies of ethnography are largely practical, as prolonged periods of field research are not feasible and there is no way to pre-emptively initiate this method in advance of a revolutionary period. While there will be narrative elements in this case, as chronology will be considered, a strict narrative approach would have been prone to failure as constructing a unified and collectively agreed upon team level narrative of a revolutionary period, or even a single episode of conflict management, would be inordinately challenging. Finally, grounded theory is an enticing alternative, but it would be premature to apply this method at such a nascent stage in this line of inquiry. This study may, however, serve as a valuable antecedent to a later grounded theory study.

Once a case study design has been selected, there are four types of designs that can be chosen which are arrayed in a two-by-two matrix. The top left quadrant consists of single case designs that are holistic, while the top right quadrant includes those that are multiple-case and holistic. The bottom left quadrant consists of single case designs that are embedded, while the bottom right quadrant includes those that are multiple case and embedded. Each type is distinguished by the number and the embeddedness of the cases. Embedded cases utilize sampling or cluster techniques to analyze subunits within a larger case or multiple larger cases (Yin, 2014). For instance, a researcher operating in the lower left corner of the matrix may examine the fundraising efforts of multiple athletic teams within a single college or university (e.g., baseball, basketball, and soccer at Pepperdine), while a researcher operating in the lower right-hand quadrant may examine fundraising efforts of multiple athletic teams at each university in a larger conference (e.g., baseball, basketball, and soccer at each school in the West Coast Conference). Holistic case studies, on the other hand, are used when the research question is concerned with the global nature of an entity, when there are no logical subunits, and when the underlying theory is holistic. In the present study, the research question is focused on the team level process of conflict management, no logical subunit can be produced without changing the unit of analysis entirely, and the underlying theories of PE (Gersick, 1991) and team adaptation (Rosen et al., 2011) are holistic.

Yin (2014) advises that multiple case designs ought to be used whenever it is feasible because they increase the likelihood of a positive outcome within a study by reducing the risks associated with reliance on a single case while simultaneously affording analytic benefits. Prime among these analytic benefits is the ability to compare and contrast the individual cases (Stake, 2006). Because far from equilibrium states are, according to Gersick (1991), marked by a distinct

lack of universal laws and rules, this analytic benefit is of significant value in the present study. Without the ability to juxtapose multiple cases, it would be impossible to examine the validity of a claim which is central to the integrated multilevel theory of PE. Furthermore, multiple case studies can be executed effectively as a dissertation (Stake, 2006), as their complexity and the interconnectedness of data collection, analysis, and reporting nearly necessitate that they are executed by a single researcher (Stake, 2006). Finally, this design's fit is demonstrated by the fact that Gersick's (1988) study which produced the theory of PE utilized a design that can be described as a multiple case study.

Sampling

The selection of cases is preceded by the identification of the quintain, which is “an object or phenomenon or condition to be studied—a target, but not a bull's eye” (Stake, 2006 p.6). In this study, as discussed previously in this chapter, the quintain is the phenomenon of longitudinal changes in conflict management processes that occur within high performing teams during experiencing revolutionary periods. Once the quintain has been identified, Stake (2006) proposed three general inclusion criteria for selecting cases to include in the sample. These include:

- Is the case relevant to the quintain?
- Do the cases provide diversity across contexts?
- Do the cases provide good opportunities to learn about complexity and contexts?

These criteria are broad, and it is incumbent upon the researcher to determine the precise definition and boundaries for relevance, diversity, and opportunity as they pertain to their study. In doing so, the researcher can effectively engage in purposeful selection (Creswell & Poth, 2018). Because the phenomenon of interest is a team level process, teams will serve as the unit

of study. Teams in this study are defined in accordance with Kozlowski and Ilgen's (2006) definition which is provided in Chapter 1. Relevance was contingent on the team having experienced a revolutionary period and exhibiting high performance after that period. Revolutionary periods, also defined in Chapter 1, were identified through a collaborative effort by the researcher and individuals providing site authorization who have an intimate knowledge of the team's history. Successful navigation of a revolutionary period was determined by a team's ability to fulfill each category of Hackman's (1991) model of team performance provided in Chapter 1. Productive output, desire to work together, and satisfaction were determined by quantitative metrics collected by the teams or organization, which included attrition rates, employee satisfaction surveys, and other key performance indicators, as well as qualitative accounts from team members and individuals who have direct visibility of each team.

Diversity in this study is defined as variability across the compositional and structural features of teams defined by Mathieu et al. (2017). This includes variability in task scope, complexity, and structure as well as their demographic and functional diversity. One unifying thread across these teams will be the fact that they are engaged in knowledge work, which is the type of labor that consists of working with knowledge rather than from knowledge (Scarborough, 1999). This decision was made based on the fact that the proportion of knowledge workers is on the rise, as it has been since Drucker initially coined the term, and they constitute the most economically significant cohort of workers (Davenport, 2005). This category of workers includes all those who engage in labor which is complex, analytic, and abstract (Barley & Orr, 1997).

The opportunity criteria are perhaps the most amorphous of the three, and it is defined here as variety in the organizational structure and contexts described by Mathieu et al. (2017). This includes variety in the operating model of the host organization, the degree of external

leadership, or regional and national culture. Selection of cases was be guided by a replication logic, where each case in the sample seeks to replicate similar results that are predicted by theory, rather than a statistical sampling logic where generalizable insights regarding the prevalence or frequency of the phenomenon are identified (Yin, 2014). While this purposeful sampling is subjective, it is grounded in the researcher's expertise.

The optimal number of teams, as with most other features of a multiple case study design, is context dependent. Stake (2006) offers broad guidance and encourages researchers to aim for between four and ten cases, but Yin (2014) states that judgement is discretionary and "you may want to settle for two or three literal replications" (p. 61). The researcher ultimately must balance accessibility, resource constraints, and depth and quality of data when making this decision. For the present study, two cases were completed. These cases were selected based on the tenants of purposeful maximal sampling, where diverse perspectives on the phenomenon are pursued (Creswell & Poth, 2018).

The researcher utilized their personal network to gain entrée into these populations. Preliminary permission was granted to conduct the study with teams at multiple sites, and final approval was secured upon completion of the preliminary oral defense and the Institutional Review Board (IRB) process. Each research site was a for-profit organization operating in the United States.

Data Collection

Interviews are one of the most common forms of data collection in case and multiple-case studies (Creswell & Poth, 2018; Stake, 2006). The prevalence of interviews as a data collection method, and the reason it will be applied in this study, is their ability to surface rich, vivid descriptions of a phenomenon from the perspective of individuals who have experienced it or

witnessed it. Semi-structured interviews were conducted with individual members of the teams that constitute each case.

In phenomenological research, Polkinghorne (1989) recommends that somewhere between five and 25 interviews are conducted, while Saldaña (2009) offers similar guidance for other forms of qualitative research and Marshall et al. (2013) found that published multiple case studies contained between 10 and 74 interviews. Because teams vary significantly in terms of size, a precise numerical target for interviews within each case, or within the multiple case study as a whole, is not suitable. Instead, the present study adopted a saturation standard. While there is some debate regarding the precise definition of saturation, the generally accepted meaning is that data ought to be collected until nothing new is generated, responses cease to be surprising, and new patterns no longer emerge (O'Reilly & Parker, 2013). This did not occur until the majority of members of each team had been interviewed, and if this standard was not reached due to reluctance to participate, the researcher would have been prompted to pursue new cases and data sources.

Once teams were identified based on the inclusion criteria described in the previous section, members of each team were contacted individually via email and invited to participate in a short semi-structured interview. Each interview was scheduled for 1 hour, and they were not to exceed 60 minutes. Due to the COVID-19 pandemic the health risks associated with traveling and in-person face-to-face interactions, interviews were conducted via Zoom. This medium allowed for a richer communication environment where nonverbal cues could be transmitted (Palvia et al., 2011), and this largely negated the adverse effect that physical distance or virtuality can have on data quality. The initial contact included a personal introduction, as well as the introduction letter and informed consent which are presented in Appendix A.

After a team member agreed to participate, and they provided the researcher with informed consent, the researcher worked with them to schedule an interview. After the researcher identified an appropriate time and date for the interview, they sent a meeting invitation which included a link to a private Zoom as well as a review of the purpose of the study, tips for a successful interview, and a list of questions that they were told would be addressed during the interview. To safeguard against excessive allocation of valuable interview time to the negotiation and clarification of questions, as described by Roulston et al. (2003), the researcher provided participants with a list of potential interview questions, and they encouraged participants to contact them before the interview to ask any questions they have regarding the purpose of the study or the individual questions that were to be covered during the interview. This is presented in Appendix B. Each interview was recorded on Zoom, and an audio recorder was utilized as a redundancy in case of technological difficulties with the Zoom platform's recording feature. These audio files were converted into text, and transcriptions were audited for accuracy by the researcher. Interviews for each individual case in the sample were conducted concurrently with one another over the course of 3 months, from June to August of 2022 and were covered by IRB approvals presented in Appendix C.

According to Stake (2006), it is inadvisable to begin without a plan and anticipate a wholly unstructured study. The present study utilized semi-structured interviews, which “involves prepared questioning guided by identified themes in a consistent and systematic manner interposed with probes designed to elicit more elaborate responses” (Qu & Dumay, 2011, p. 246). In contrast with prolonged case study interviews which unfold over multiple hours and allow for significant latitude in terms of departing from the interview protocol, shorter case study interviews require the researcher to maintain focus and adhere to the protocol more closely

(Yin, 2014). As such, the interviews were guided by the instrument displayed in Figure 1 and Appendix D. The first column of this matrix shows the question's alignment with the study's research question and sub-questions. This alignment is critical to the collection of reliable, useful data (Maxwell, 2005). The second column includes the question type according to the typology developed by Kvale's (1996).

Figure 1

Interview Questions by Purpose and Type

Purpose	Type	Question
Building Report	Throw Away	<ul style="list-style-type: none"> • <i>Can you tell me a little about your team, anything you think would be useful for me to know?</i>
RQ, SQ1	Direct Question	<ul style="list-style-type: none"> • <i>Conflict is broadly defined as an instance when two or more people have incompatible interests, opinions, or behaviors. Prior to [x], when a conflict occurred, how would the team tend to handle it?</i>
RQ, SQ2, SQ3, SQ4	Direct Question	<ul style="list-style-type: none"> • <i>Prior to [x] did the team or individual members ever change the way they handled conflict, and if they did, what changes occurred and why do you think it changed in this way?</i>
RQ, SQ5	Direct Question	<ul style="list-style-type: none"> • <i>What positive or negative impact, if any, do you think your team's conflict management process had on your team's overall performance prior to [x]?</i>
RQ, SQ1	Direct Question	<ul style="list-style-type: none"> • <i>Immediately after [x], or as it was unfolding, how would the team tend to handle it conflicts?</i>
RQ, SQ5	Direct Question	<ul style="list-style-type: none"> • <i>What impact, if any, do you think this had on your team's overall performance immediately following [x]?</i>
RQ, SQ2, SQ3, SQ4	Direct Question	<ul style="list-style-type: none"> • <i>In the [days, weeks, or months] that followed [x], did the team or individual members change the way they handed conflict? If they did, what changes occurred, when did these changes occur, and why do you think they changed in this way?</i>
RQ, SQ5	Direct Question	<ul style="list-style-type: none"> • <i>What positive or negative impact, if any, do you think your team's conflict management process had on your team's overall performance in the [days, weeks, or months] that followed [x]?</i>

Figure 2*Examples of Probing and Interpreting Questions*

Question Type	Examples
Probing Questions	<ul style="list-style-type: none"> • Could you tell me more about [x]? • Could you provide some more information about [x]? • Are there any additional examples you think could help me to understand?
Interpreting Questions	<ul style="list-style-type: none"> • Am I correct in saying that you [think, believe] [x]? • When you say [x] did you mean[y]?

Prior to the first question listed in Figure 1, the researcher established rapport with the participant through informal questions and conversation. In addition to the direct questions that provide the interview with a sufficient level of structure, the researcher interspersed silence, which is used to allow the participant to reflect and provide additional information (Kvale, 1996), probing questions, which are used to elicit more comprehensive responses and narratives (Kvale, 1996), and interpreting questions, which are used to solicit clarifications from the participant. Examples of the latter two categories are listed in Figure 2. The researcher noted when each of these techniques is used during each interview. The total number of questions was limited to under 12 based on the guidance issued by Merriam (2009). These questions were designed to be broad and open-ended as they seek to surface diverse narrative descriptions of conflict management processes before, during, and after revolutionary periods. To refine these questions, the researcher first solicited input from colleagues within their PhD cohort regarding the clarity and effectiveness of the questions. After this feedback was provided, the researcher conducted a brief pilot, a process recommended by Yin (2014), where they conducted two interviews with professional colleagues. These interviews were used to ensure that this

instrument was capable of producing useful data, and the pilot study confirmed that the responses were rich and germane to the topic of interest in this study.

Data Management

After each interview, both the Zoom recording as well as the recording produced by the researcher's backup audio recorder were transferred onto a password protected encrypted thumb drive with FIPS 140-2 Level 3 validation. Audio files were then transcribed and audited for accuracy, and the researcher removed any potentially identifiable information during this audit. Both the audio files and the transcription files were saved with numerical pseudonyms, and a file containing the participant-pseudonym pairs is kept in a separate password protected file on the researcher's local hard drive.

After the researcher completed the audit of the transcription, the file was shared with the interview participant via a password protected google drive link as a means of member checking (Birt et al., 2016). The participant had one week to review the transcription for accuracy and fidelity to their intentions when they initially responded to the interview prompts, and the file was then removed from google drive once this time elapsed. No participants requested changes to the transcripts or indicated that their responses did not capture their intent. The anonymized files were uploaded into NVivo for coding, and these files are also password protected. All data will be stored on the researcher's encrypted thumb drive for a minimum of three years following the completion of the researcher's final dissertation defense. After this time has elapsed, all data will be permanently deleted.

Data Analysis and Presentation

The process of case study analysis is ambiguous, and it lacks the formulaic clarity of quantitative statistical analysis (Creswell & Creswell, 2017; Yin, 2014). This ambiguity,

however, is partially allayed by a review of the literature that is pertinent to team development, team adaptation, and conflict management processes. This process provided the researcher with the expertise that is necessary to effectively analyze the data and identify useful findings, and the theories and taxonomies that were identified through the literature review inform the coding process (Miles et al., 2020).

Analysis began concurrently with data collection. During the interviews, the researcher produced memos, a process made popular in grounded theory research, and it entails filtering observations “through the eyes of the researcher who can’t help but start thinking about and classifying the information” (Corbin & Strauss, 2007, p. 126). This marked the start of the “play” phase of analysis that is described by Yin (2014), where the researcher sought patterns and insights that will inform later analysis. In multiple case studies, this allows the researcher to hold “certain possible influences in mind—but, sweeping widely, the researcher lets his or her mind and eye scan a large number of happenings, variables, and contexts” (Stake, 2006, p. 48).

For each individual case, the play phase was followed by open coding (Corbin & Strauss, 1990) where events and statements were compared to all others within the case for similarities and differences. Through this, themes relevant to longitudinal changes in conflict management processes were identified. This process led to the development of categories (Saldaña, 2009), and the boundaries of these categories were informed by the conflict types described by Jehn et al. (1994), as well as the styles of conflict management as described by van de Vliert and Euwema (1994), Weingart et al. (2015), Wilmot and Hocker (2011) and Rahim and Magner (1995). In accordance with the guidelines presented by Creswell and Poth (2018), themes and categories were limited to less than ten.

These themes, however, were iterative and the researcher collapsed and reconstructed them to build a more accurate and refined explanation for how and why high-performing teams modified their conflict management processes during their revolutionary periods (Yin, 2014). This explanation-building process was complemented by a time-series analysis (Yin, 2014), which has a core strength of mapping changes over time. This process entailed the chronological organization of data where the researcher sought to identify if there were certain time periods when the rate of specific types of events, or specific conflict management processes, diverged from other periods. Throughout the analysis of each individual case, there is a tension between the case and the larger quintain. Stake (2006) refers to this as a case—quintain dialectic, where the case and the whole phenomenon contend with one another for the attention of the researcher and emphasis in the final report of findings.

After each case was individually analyzed, the final phase was cross-case analysis. There, the researcher identified parallels and juxtaposed the cases to identify points of divergence. The synthesis of all cases also enabled the researcher to extrapolate more general findings regarding the overarching quintain or conflict management process changes. To improve the quality of analysis, the researcher took special precautions to attend to all of the data and evidence, assess plausible alternative explanations and interpretations, and center the analysis on the central focus of the study at every stage (Yin, 2014). Upon completion of the study, a report was produced that details the findings of each individual case as well as the cross-case analysis. The majority of this report, as suggested by Stake (2006), focuses on each individual case and concludes with cross-case analysis.

Efforts to Ensure Validity and Credibility

Significant efforts were made to ensure that this study had a high degree of validity. The researcher, to the best of their ability, took account of and bracket their experiences prior to the initiation of the study (Creswell & Poth, 2018), thus suspending their preexisting beliefs and assumptions regarding teams and conflict management and preventing them from having an undue influence on data collections or analysis. In addition to bracketing, and as mentioned in the data collection section, the researcher engaged in member checking to ensure the transcripts are accurate and reflect the words and intentions of each participant.

The data collection and analysis procedures are based on the best practices developed by Yin (2014), Stake (2006) and Creswell and Poth (2018), and the researcher ensured there was a high degree of fidelity between the study design and its execution. As mentioned in the data collection section, these efforts include expert reviews of the interview questions as well as a pilot study and auditing transcripts. The researcher also engaged with an expert reviewer to critique the categories and themes that they identified during data analysis. Following the execution of the study, the report detailing the findings provided a rich, thick description which maintains a clear chain of evidence (Yin, 2014) that allows the reader to follow each piece of evidence from genesis to conclusion.

Most favoritism in qualitative research relates to what is omitted or downplayed (Stake, 2006). Because of this fact, the researcher attended to all of the evidence generated by the data collection process and actively interrogated plausible alternative explanations and interpretations of the data. These two steps, along with tending to the most significant aspect of case studies and leveraging expert knowledge, are key to producing valid, high-quality analysis and findings (Yin, 2014).

Human Subject Considerations

This study was designed, and executed, in a manner that comports with the rules and regulations outlined by the Belmont Report as well as the Pepperdine University IRB. The researcher has completed their university's required Citi training, and they submitted a detailed application to the Pepperdine University IRB prior to the start of the study. The IRB board reviewed and approved this application following a series of minor modifications.

Informed consent, as well as permission to record, were secured via email. These documents were provided as an attachment when the researcher first contacted potential participants. This message also outlined the participants rights, which included the right to be fully informed about the study's purpose and about the involvement and time required for participation, the right to confidentiality and anonymity, the right to ask questions to the investigator, the right to refuse to participate without any negative ramifications, the right to refuse to answer any questions, and the right to withdraw from the study at any time (Richards & Morse, 2013). Participants were reminded of these rights, with an emphasis on their right to withdraw at any time, throughout their time participating in the study. Their confidentiality and the security of their data will be maintained through the processes outlined in the data management section of this chapter.

The semi-structured interview process imposes virtually no hardship, and risks to participants were minimal. Because the focus of the study is on conflict and conflict management, it is possible that participants may have experienced mild emotional distress as they recounted their experiences with conflict. This emotional distress, however, was marginal and it did not appear to exceed the normal level of negative emotions that an individual would

experience in their day-to-day life or work. Additional risks included boredom or fatigue, but these risks were also minimal as the interview duration was limited to roughly one hour.

The potential benefits of participation in this research are twofold. First, participation in the interview process can enhance individual participant's performance by prompting reflection and subsequent behavioral adaptation. Second, following the conclusion of the study, the researcher will make themselves available to all participants to discuss the research findings and offer informal coaching on effective conflict management.

Conclusion

This chapter presented the methodology for this research study as well as the rationale for each facet of the research methodology. A multiple case study utilizing semi-structured interviews for data collection is an ideal fit for the present study based on its congruity between the approach and the researcher's worldview and the methodological fit to the research question, purpose of the study, and the phenomenon of interest. The sampling strategy satisfies the criteria defined by Stake (2006), and the data collection, management, analysis, and presentation are all guided by a steadfast commitment to the protection of the human subjects that participated.

Chapter 4: Findings

Chapter Overview

This chapter begins with a brief summary of the research context. This is followed by a description of the teams that comprised the individual cases within this multi-case study as well as a brief review of the data collection and analysis process. Then, data pertaining to each individual case will be presented followed by a discussion of the quintain as a whole. The chapter concludes with a brief summary of the findings.

Context

The purpose of this multiple case study was to explore how, if at all, successful teams adapt their conflict management processes when they face revolutionary periods of change. Within these adaptations, this study examined transitions from a team's predominant styles to alternative conflict management styles over the course of revolutionary periods. It also considered qualitative changes to processes over time and the ascribed impetus and impact of these changes.

Participants

Purposeful sampling drew participants from the researcher's network. This process was intended to ensure diversity and opportunity criteria were satisfied in the sample. The study identified and examined two teams as individual cases within the multiple case design. Two additional teams were contacted during the sampling period, but one of those teams lacked a sufficient number of voluntary participants while the other team was disqualified as they failed to meet relevance criteria due to a lack of genuine interdependence between team members or a unified goal. This design considered each team as discrete entities and analyzed the singular, collective quintain of changes to conflict management processes during revolutionary periods.

Each team was situated in a global, for-profit organization. These organizations operate in different geographies, generate revenue through widely varied products and services, and utilize operating models that are distinct from one another. Further, each team is situated in a functional domain that was distinct from the other case in the study.

The researcher held preliminary conversations with a point of contact familiar with the team to ensure each team met the relevance inclusion criteria. These conversations were used to confirm that the team in question had recently experienced a revolutionary period, that they were a team, and that their performance had improved through their revolutionary period. The definitions provided in Chapter 1 for terms revolutionary period, team, and performance were used to qualify relevance. This was followed by requests for voluntary participation on the part of each individual team member.

Team 1

Team 1 is a regional sales and operations team in a privately held global food and beverage corporation. The team is based in the Eastern United States, and it is responsible for the end-to-end sales and distribution for an assortment of food and beverage products. It is embedded in a regional sub-unit of a larger organization, and this sub-unit includes peripheral staff that execute ancillary activities ranging from back-office operations to product delivery. The team is co-located, but they briefly worked as a distributed remote team and as a blended team at various points during the revolutionary period. The revolutionary period that this team experienced was triggered by an internal restructuring that coincided with the arrival of COVID-19. Both the restructuring and COVID-19 radically changed the team's operational and competitive landscape, and it posed an existential threat as it jeopardized the team's ability to retain team members and secure the financial and physical resources it needed to continue

profitable operations. Team 1 successfully pivoted the organization's sales and distribution strategy, adapted its internal processes, updated compensation models, and emerged from the period growing in excess of 40% year-over-year. This rate of growth stands in stark contrast to the period of incremental year-over-year revenue decline that occurred in the 5 years preceding COVID-19.

The team is comprised of four members. Three of which participated in the study. All team members were assigned a pseudonym consisting of two initials that were produced by a random letter generator (GF, JA, HO, and WG). No demographic information was directly collected regarding the team's participants, but over the course of the interviews, two of the members of the team self-identified or were identified by others using male pronouns, while the two remaining members of the team either self-identified or were identified by others using female pronouns. With the exception of employment, which was an inclusion criterion for participation in the study, no other demographic information was collected.

Team 2

Team 2 is a senior management team in a professional services firm. The team is responsible for the strategic direction, management, and end-to-end sales and delivery of a suite of information technology services. The team is located in the Western United States. The team is comprised of seven total members. Five team members participated in the study. Team 2, like Team 1, is located in the same geographic region but has operated in a blended fashion due to both COVID-19-instigated changes as well as the intrinsic features of information technology professional service. Over the course of the interviews, four of the members either self-identified or were identified by others using male pronouns, and three members either self-identified or were identified by others using female pronouns. With the exception of employment, which was

an inclusion criterion for participation in the study, no other demographic information was collected.

The revolutionary period that this team experienced was triggered by the acquisition of their company by a larger professional services firm. This acquisition brought about a new organizational culture, prompted changes to the team's structure and composition, prompted an update in its go-to-market strategy, and forced substantial changes in their day-to-day operations. Further, it repositioned the team within the organizational hierarchy as it was no longer a top management team as defined by Finkelstein (2018). Team 2 successfully navigated this inflection point launching a new service line targeted at a new customer market, adapting standard team practices, and integrating peripheral members. All of which accrued to driving financial outcomes and year-over-year growth that surpass those of other segments of the acquiring organization and achieving superior employee engagement and retention compared to all other segments of the acquiring organization.

Data Collection, Preparation, and Analysis

Data collection for this study began after IRB approval was provided by the IRB Office at Pepperdine University. Data collection and storage followed the protocol outlined in Chapter 3. After the conclusion of each interview, the researcher reviewed transcripts for accuracy and removed identifying information. This was followed by member checking which produced no changes to the transcripts or modification of the data.

Each interview consisted of the eight questions included in the interview protocol in Figure 1, as well as probing and interpreting questions which were used to elicit additional details or clarify participant's responses. In addition, there were exchanges during six of the eight interviews when participants requested that a question be repeated, or that a term be defined or

clarified. In four of those six instances, these requests for clarification occurred in the first 5 minutes of interviews as participants sought to align with the researcher on definitions for either team or conflict. The interviews ranged from a minimum of 43 minutes to a maximum of 75 minutes. While the latter figure exceeds the maximum length that was estimated for participation, the interview continued beyond the 60-minute threshold at the participant's discretion. These interviews produced more than 57,000 words and 94 pages of single spaced, 12-point font transcripts. The data had reached a point of saturation prior to the conclusion of the final interview for each team. By this point, relevant, novel details or vignettes were no longer emerging and participants were no longer offering views that ran counter to the prevailing perceptions put forward by the colleagues who preceded them.

Once the anonymized transcripts were validated, the researcher uploaded them to NVivo for coding. Data analysis began prior to the production of transcripts, and concurrently with data collection, through the process of memoing. During each interview, the researcher produced memos relating participants' responses to previous data that had been collected and to relevant theoretical frameworks. This preliminary classification of information was the beginning of the 'play' phase of data analysis described by Yin (2014). The "play" phase then progressed into open coding within NVivo. During the open coding phase, the researcher carefully reviewed and manually coded each line of the anonymized transcripts to identify broad similarities and differences within the data. Open coding identified all data that was pertinent to both conflict management and its effects.

When open coding was complete, the researcher began defining themes and categories to classify the data. These themes and categories were iterative, and the researcher collapsed, modified, and refined the borders of categories during subsequent reviews of the data. This

ultimately produced a final set of four categories: Pre-Revolutionary Period Conflict Management, Pre-Revolutionary Attributed Effects, Post-Revolutionary Period Conflict Management, and Post-Revolutionary Period Attributed Effects. This aligns with the guidance put forward by Creswell and Poth (2018) who indicate that the total number of themes and categories should be no greater than 10. Each individual case was then coded based on these categories and coded chronologically to determine when individual conflict episodes transpired in relation to other events. Within these categories, seven sub-categories emerged which are summarized below in Table 1. The final phase of analysis was cross-case analysis. Here, the researcher compared and contrasted the findings within each individual case and sought to extrapolate generalizable findings about the quintain. The findings are presented in detail in the sections that follow.

Table 1

Summary of Data by Case

Team		1		2	
Period		Pre-Revolutionary	Post-Revolutionary	Pre-Revolutionary	Post-Revolutionary
Conflict Management	Avoiding	13	3	0	9
	Pseudo Collaborative Avoidance	4	0	0	0
	Collaborating	0	56	43	39
	Dominating	6	2	5	26
	Yielding	0	14	0	4
Attributed Effects	Affective Outputs	14	17	10	16
	Productive Outputs	2	10	6	10

Individual Case – Team 1

Pre-Revolutionary Period Conflict Management

Team 1 had a predominate pattern of applying dominating and avoiding styles of conflict management processes in the years prior to their revolutionary period. A novel style, described

here as pseudo-collaborative avoiding, also emerged in the months immediately preceding COVID-19. All participants referenced patterns of avoidant or dominant behavior and described conflict episodes that portrayed avoidant or dominant conflict management processes as normative. There is a total of 23 passages coded as Pre-Revolutionary Period Conflict Management in Team 1. Within this category, three sub-categories emerged: Avoiding, Dominating, and Pseudo-Collaborative Avoidance.

A tendency to withhold information or alternative perspectives was a hallmark of Team 1's predominant, pre-revolutionary period process of avoidant conflict management. One team member described an attempt to launch a new initiative early in their tenure by saying that it was effectively thwarted because another team member would not engage with them. They stated that one team member demonstrated an acute lack of support: "didn't make an effort to give me information or help me in any way. Not that I expected it, but it would have been nice."

As they reflected on the years preceding COVID-19, another team member recounted the scarcity of information sharing and communication.

I mean, there is I think, in the past, a lack of information sharing. As I mentioned they didn't meet very often. If you came to our warehouse office at the time, it wasn't a space where someone could gather information on what was happening.

Team members described the propensity to withhold information as 'siloed'. Siloes were created as members of the team either built or were placed in insular domains where other's viewpoints were neither solicited nor considered in the event that they were provided. When alternative viewpoints were put forward, they were often circumvented by direct appeals to the boundaries of these siloes. Members of Team 1 indicated that the presence of communication stifling siloes is common in large, bureaucratized enterprises while expressing some bewilderment that this pattern of behavior became engrained within the relatively small team and organizational sub-unit that they were embedded in by saying "It was very 'I will worry about

my stuff, you worry about your stuff” you know, even within our tiny little operation of 20 people there were still silos.”

The presence of siloes and the associated lack of communication was also evident beyond the boundaries of Team 1’s core membership. There was an infrequent cadence and low richness of communication between Team 1, which was at the top of this organizational sub-unit’s hierarchy, and the broader organizational sub-unit. Meetings that served as a conduit for the dissemination of essential information, including strategic changes or updates to processes or workflows, were rare. This deficiency in communication persisted in spite of the dynamism and challenges that were intrinsic to the daily operation of the sub-unit. One member described them by stating “In the past we would have in person meetings with them pre-COVID, maybe once a year, maybe twice a year”. While another described them by stating

[...] in the old way of thinking about it, if we had somebody call out sick and there was a different person running that sales route that day. That would just happen, and no one would tell anyone else, but it impacts other people [...] nobody really closed the loop and let everybody in the organization know.

Team 1’s reticence to share information with other members of the organizational sub-unit was reciprocated, thus halting the flow of information up or down the organization’s hierarchy. This reticence became culturally entrenched over time in part due to the fact that the communication of negative information was met with criticism and condemnation.

I think, from what I was able to gather, that it was, it was just a culture and the environment where you were held accountable for your mistakes as opposed to being applauded and encouraged for taking a chance on something.

The team’s tendency to withhold information and engage in avoiding conflict management through insular decision-making was especially stark when decision points emerged where the selected course of action would have wide-ranging, material impacts on multiple team members or the broader organizational sub-unit. One team member highlighted the

organizational sub-unit's relocation process which necessitated a redesign of their warehouse layout and associated processes. They reflected on the fact that the first-order decision regarding the relocation and the second-order impact of warehouse and process redesign, despite their manifold consequences for the team and organization, were both conducted in strict isolation.

So as far as going on-site visits to try to find our new space, the only person that went was [...] Like, why would he care what anyone else had to say. It was, his opinion was the only opinion that mattered to him essentially. [...] When it came time to lay out the new warehouse. The racking, to build it out the way it needed to be [...] weeks of meetings with the real estate division of our company and the consultants that were advising him on this [...] but never once did he invite his direct reports, or any of the warehouse team into that meeting to, any of those meetings to discuss anything.

Avoiding conflict management was not limited to operational minutia, interpersonal friction, or inconsequential decision points that did not justify broader dialog. It was an entrenched, habitual pattern of behavior which manifested itself in a wide variety of circumstances.

Two additional styles emerged when siloes were breeched and conflict could not be avoided: dominating and pseudo-collaborative avoidance. The first was associated with defensive posturing as team members put forward rigid assertions and recalcitrantly stood by them. When team members at lower levels in the organizational hierarchy demonstrated this behavior, their colleagues indicated that this was prompted by the desire to protect others from the aforementioned criticism that was triggered when errors surfaced. One team member encapsulated this phenomenon in stating “[...] and it is funny because it came, I think it came out of a good place. I think it was [...] trying to protect the drivers from getting in trouble, and that was the old thing.”

When these kinds of rigid assertions were offered by members of the team who occupied higher positions in the organizational hierarchy, however, top-down decisions were associated with a commitment to maintaining the status quo in spite of declining performance. Members of

Team 1 also indicated that these dominating conflict management processes were conducted in a way that was perceived as unfair, leading to escalating tensions. One member succinctly stated “Everything, it was not collaborative. It was very top down.” Others gave more detailed accounts, stating

“I am going to do things my way and this is the way we have always done them.” So I think that was that mentality that was pushed down to them before. You know, “if it ain’t broke, don’t fix it, this is the way we have always done it, we don’t need to change” you know, and, and it was always pointing the finger to external factors.

it was pretty consistent across the board and across the team that there was a lot of tension that was there, and I think that with that, just on past incidents where they felt that they were treated unfairly.

Dominating, in these instances, was not met with assent or even acquiescence. It seeded frustration and mistrust which compromised individual and organizational commitment to the resolutions that were reached during conflict episodes. It also created a reciprocal and at times escalating pattern of avoiding and dominating as each party retracted and defended their siloes.

There was a change in the team’s composition in late 2019 which made siloes more permeable and coincided with a change in the team’s conflict management style. A new leader was brought in to replace the previous team lead, and this new leader initiated an increase in open, team-wide dialog when materially significant decisions had to be made. The process was ostensibly collaborative, but one team member undermined collaboration by miming participation while avoiding authentic engagement. After engaging in this process, described here as pseudo-collaborative avoidance, this team member would execute a course of action that ran counter to the conclusion that the team had reached.

And, so, you know we would have group meetings and have the dialogue and work through some of the problems that we had and a lot of back-and-forth dialogue where we would try to address the conflict. And coming out of those meetings, we would come to a decision. We would be like, ok, this is where we are going with this. And what I found is that often, what was agreed to in the meeting, and what was executed by this individual, through his direct reports, was something entirely different. [...] So we weren’t able to

move forward, because of this, you know, tug and pull constantly of two different directions.

In a separate instance, the new team lead recalled that a pilot program was temporarily stalled by the same team member after a similar display of pseudo-collaborative avoidance.

After a week I checked in with our warehouse manager to see how it was going and I was, he said, “well I stopped doing it”. And I asked him why, and he said “well, so and so [...] told me to stop doing it. And all because it wasn’t what he wanted to support. And again, this is just the trial. [...] I confronted the individual, just to ask about it, and you know got a bit of the run around.

The third and final instance of pseudo-collaborative avoidance occurred when the team attempted to select a replacement to fill a key role. During this process, the team member in question was indecisive and failed to articulate or advocate for a particular point of view after a prolonged period of deliberation.

I felt like there was some deliberate indecisiveness [...] we had interviewed, each interviewed all of the candidates and finally came together just to give our opinions on both [...] couldn’t make a decision. [...] So, at that very point, with several examples like the two that I just cited here [...] showed he was holding us back.

In each instance, this team member’s disingenuous engagement in collaboration forestalled the resolution of a conflict or the execution of a proposed solution. This had a direct impact on the complexity of the conflict management process, as it led to protracted, festering episodes of conflict encompassing multiple styles, from collaborating, to avoiding, to dominating, as the team attempted to address the original source of conflict as well as a series of associated points of misalignment over extended periods of time. Ultimately, this team member was removed from the organization and this approach to conflict management dissipated with their departure.

Pre-Revolutionary Period Attributed Effects

Team members attributed a range of effects, all of which were negative, to their conflict management processes prior to their revolutionary period. There are 16 passages coded as Pre-

Revolutionary Period Attributed Effects which fall into two subcategories: Productive Outputs and Affective Outputs

According to members of Team 1, the most immediately evident, proximal effects of their conflict management style were adverse effects on productivity by diminishing decision quality. These adverse effects included both immediate and incrementally accruing revenue decline. Immediate negative effects emerged following the pseudo-collaborative avoidance which halted the trial that was described previously.

There is some potential savings here of 15 – 20 thousand dollars a year in doing this. But, again, trial was thwarted and again without any dialogue or notice to me until I probed into it.

In other instances, negative financial impacts of low-quality decisions were delayed or accumulated incrementally. In one such instance, product prices became fragmented due to the unilateral, dominating imposition of changes by a senior member of the team. This, in turn, led to customer dissatisfaction and attrition when these discrepancies were eventually exposed.

It was the same thing with like our pricing strategy.[...] at the time was we are just trying to charge our customers as much as we can', until they got caught, right, and then they would just, if they lost the account, try to do what they can and give them a discount, give them a reduced rate, reduced price to stay with us just to stay with us. Pricing was a mess and it was all over the board. There was no pricing integrity.

Ultimately, team members indicated that poor decision quality across conflict episodes aggregated to produce substantial declines in financial performance year-over-year. Collectively, the organizational sub-unit saw multiple successive years of declining revenue prior to 2020. In brief, members stated “It just kind of stalled. The business was stalled” and another recounted the decline by stating “You know, for years before that as I mentioned the operation was in decline, so they were very good at removing trucks off the road. Business got smaller and smaller.”

While these were not attributed exclusively to their conflict management process, all team members linked the predominant style of conflict management to the declining revenues that were produced in the years that preceded the arrival of COVID-19. The avoiding, dominating, and pseudo-collaborative avoidance coalesced to create an atmosphere where poor decisions were either shielded from alternative perspectives or forced through despite objections.

The progressive financial decline prior to COVID-19 was paralleled by, and in some instances attributed to, a steady degradation of affective outputs including employee engagement. This disengagement was not solely an affliction which afflicted members of Team 1. It extended beyond the team's boundaries and spread through the sub-unit.

I would say that a lot of them were disengaged [...] they were just here doing the bare minimum and collecting the paycheck and going home. I think because of that the business was eroding for 6 of 7 years.

One prominent manifestation of this disengagement was the self-suppression of alternative perspectives. Members of the team refrained from expressing their viewpoint, especially in public forums, when it ran counter to the opinions of teammates who occupied higher positions in the hierarchy. One team member indicated that “[...] some of them I think are just afraid to voice their opinion in a group setting”, while another described the general experience of stagnation in their account:

I think it's, you know, a classic situation where you are told so many times in one way or another either verbally or nonverbally that your opinion doesn't matter. That you stop offering your opinion. Then the entire organization stagnates.

Beyond the self-suppression of alternative opinions, a second prominent effect of Team 1's conflict management style was ritualism and the execution of tasks without an eye towards maintaining or improving the quality. Team members, and others within the organizational sub-unit, did not actively reject the ends that they pursued or the means that they were told to utilize. Instead, they attenuated the fervor with which they involved themselves in the task and the risks

they were willing to assume in achieving it – in brief, one team member stated “There was no energy, no enthusiasm, no excitement” while others provided additional color by stating that “I don’t think they were going out of their way to sabotage, there was nothing extreme, I just think that you know, most people were you know, very passive” and

I think that things, they were afraid to take risks, and things that they had maybe done, you know, 5, 6, 7, 10 years prior, we tried that, that didn’t work. Ok, that didn’t work back then, it doesn’t mean it won’t work now.

The suppression of novel idea generation or dissemination, the inhibition of risk-taking, and the general malaise associated with maintaining current operations combined to contribute to the ongoing erosion of performance. Processes that broke down were not restored, while opportunities for improvement were either ignored or squandered. As a consequence, the most succinct summation of this was offered by a team member who described this period by saying: “You know, for years before that as I mentioned the operation was in decline, so they were very good at removing trucks off the road. Business got smaller and smaller.”

Post-Revolutionary Period Conflict Management

All participants from Team 1 noted that there was a qualitative shift in the team’s conflict management style that followed the start of their revolutionary period. A total of 75 passages are coded as Post-Revolutionary Period Conflict Management. These are predominately distributed into two subcategories: Yielding and Collaborating.

Each member of Team 1 noted the emergence of yielding as a distinct style of conflict management in the months following the start of their revolutionary period. This approach was most often associated with the new team lead who occupied the highest position within the team and in the organizational sub-unit’s hierarchy. The team lead demonstrated a generalizable willingness to yield to the broader team in the selection and implementation of solutions, even

when those decisions were broad in scope or impact. This began with the fundamental question of returning to work in spite of the burgeoning pandemic.

I mean there was a lot of concern about people wanting to just stay home. They wanted to minimize their risk, so the conversations that I had one on one and in our team calls was that, we were not going to force anyone to come to work.

At that moment in time, it was in the immediate interest of the organization to mandate a return to work and restore revenues, while it was in the immediate interest of individual employees to exercise precaution in a period of time when relatively little was known about the transmission or impact of the virus. Despite this misalignment, many members of the team and organizational sub-unit opted to return. Upon returning, they saw a continuation of yielding to their judgment in issues including schedules, delivery processes, and the provision of personal protective equipment.

I remember one specific individual who said ‘I am not comfortable being on the road 5 days a week, but I am going to come in and hit my priority customers as you asked me, and I am going to do it 3 days a week. No problem. We tailored a work schedule specifically for him to address his concern.

“We also did that with other individuals as well where you know, they, they wanted, something specific masks for them, some of the cloth masks that we were able to source [...]. So we finally sourced that. There were other PPE items, or having sanitizer in the truck. Anything that they needed done to kind of feel somewhat comfortable in the job, we tried to do our best to do it.

In the months that followed, yielding was applied beyond the tactical management of the hyper-ambiguous day-to-day-environment. The team lead empowered members to exercise their best judgement and advocate for new strategies for revenue generation that they felt inclined to pursue. This held true even when solutions entailed risk or impacts beyond the silo that an individual team member previously occupied.

They’ll say I want to implement this change because it will benefit my team in this way, and I will say this has implications to others outside of your department and she is very good at kind of stepping back and taking in my point of view as well, but if it’s

something that she feels very passionate about, she will tell me. She will say, you know what, I want to try, I want to do this. Often times I will say ok, let's do it."

I think I probably said, I have either an opportunity or I know somebody, and he said 'no we don't have the bandwidth to do that, it's not possible'. [...] but I think he, he may have come back to me and said you know, I think we can do this. And I was like "ok, you don't have to ask twice! [...] And from there I guess it kind of moved pretty quickly.

In the months and years that followed, the application of yielding as an approach for conflict management incrementally permeated through the team and spread into the broader organizational sub-unit. First it was leveraged within Team 1 as individual's expertise was recognized and yielded to rather than intensely asserted or defended through dominating approaches.

Like oh yeah you're right it's not my place to make that decision, rather than digging her heels in and saying ugh). She was like 'no, you're right', I shouldn't make that decision, it's on you.

Later, it was utilized by members of Team 1 as they engaged with one another and with peripheral team members in the broader organizational sub-unit.

So I would go down and I had my idea about how we ought to do it. Then the warehouse manager came up with a perfectly decent alternative idea. At the end of the day, it really didn't matter what we did as long as it made sense. So like, I'm not, I don't really give a shit where we put the stuff. This is a good idea Dave, let's do it your way.

We are having some good success, at least on my team in terms of setting up projects where like a couple people work together and try to move a project forward as opposed to me doing the project. So I think that's really cool.

Yielding, which was not mentioned when members of Team 1 discussed the period of decline prior to COVID-19, was adopted as a predominate pattern within the team in the early stages of their revolutionary period. Then, as time passed and the revolutionary period began to subside, yielding became engrained into the team's normative approach to managing conflict, albeit as a secondary style complementing a predominately collaborative style of conflict management. As a result, expertise and individual perspectives were no longer hidden in the

siloes that were so prominent in the pre-revolutionary period. Expertise and perspectives were actively solicited and integrated into solutions.

The utilization of collaborating, like yielding, was not mentioned members of Team 1 spoke about their pre-revolutionary period. In stark contrast, collaboration was the most frequently coded sub-category of Post-Revolutionary Period Conflict Management, and it was highlighted by all three team members across 56 passages. Collaborating was also similar to yielding in that it emerged as a predominate style early in their revolutionary period. When faced with complex decisions, Team 1 drew on a web of diverse perspectives which were engaged through constant contact and communication. This allowed the team to quickly arrive at pragmatic, iterative solutions to address emergent challenges.

But we still had a choice. We could shut down, wait this thing through, [...] Or, do we take the risk and try to alter our business for the time being. [...] We said ‘listen, bit of a hazard pay here, we know you are sticking your neck out here [...]’. And I think that went a long way with them, and it was something that we just evaluated over time. [...]. And what that also did was open up a lot of lines of communication. [...] and we were spending a lot of time out there with them too to show them that we were out there with them on the front line, and I think it just made us a lot stronger, so that four five six months, when COVID started to ease, at least in this part of the country, then we just hit the button on implementing our growth strategy.

We are getting pushback [...] a lot of our guys are pushing back saying hey, I am used to working 6 – 7 hours a day and now I am being asked to work 8, 9, maybe 10 hours a day. [...] So we really had to do this slowly, build up trust, and focus on the benefits. The benefits we had, and what I leaned on, was from working with the driver when I first got here.

Later, Team 1 faced a second wave of strategic and operational decisions following the initial deluge of emergent challenges. Successfully navigating these decisions was critical to sustaining and increasing the positive momentum that was achieved in the early days of COVID-19 and collaborating featured prominently. In instances where collaboration was applied, members of Team 1 engaged with one another at a low level of intensity and rapidly explored multiple proposed solutions. This was marked by a high level of enthusiasm and openness, bouts

of give-and-take communication where perspectives were solicited and critiqued, and consensus-based decision making that leveraged the knowledge and expertise which was distributed throughout the team. This came with a recognition that the team's collective knowledge and expertise, while extensive, was not exhaustive as it was bounded by the vast unknowns intrinsic to the post pandemic environment. As a result, collaboration was occasionally an exercise in effective satisficing as opposed to optimizing.

You know, that was what is really nice about the organization [...] they were just so open and so enthusiastic, and easy going to work with and, very, you know team-oriented. Everything, we really talked about.

And so, as I was bringing in the business, they were busy trying to figure out how to onboard them and maintain it so that, there was that huge support on how can we make this work for her, how can we continue to grow, we need to do whatever is needed to keep moving forward. And just figuring it out.

Critically, the adoption of collaborating did not come at the expense of expedience in decision-making. Speed of execution was at a premium in a rapidly changing competitive and operational landscape, and Team 1 placed constraints on the time allotted to collaboration and instituted a compact, time-boxed process. This contributed to the restoration of shared mental models through the dissemination of information as well as the efficient selection and implementation of potential solutions to challenges. While these solutions were frequently revised as time passed, this iterative approach enabled continuous transformation and reorientation.

It seemed like every time we would take a step forward, there was just a new set of challenges we had not thought about, [...] we just started brainstorming and collaborating. And we started doing something that we called the daily huddle. [...] What issue are you facing today, what new news do you have to share with the group. So it is a quick 15 to 20 minute call, but we can all get together and say hey, who has a problem, how can we all jump on that and support it and solve it, or here is some new information that has come to light that we need the whole group to know.

When the researcher asked a probing question about how the collaboration process unfolded during this period, and probed to determine if it was a relatively protracted or quick process, one member of Team 1 emphatically responded: “No, it was quick.”

Collaborating was retained as a mode of conflict management in the months that followed, but there were qualitative changes to the way that the team engaged in this process. As the competitive and operational landscape regained a semblance of stability, collaboration became more comprehensive. In contrast to the pre-revolutionary period when materially significant decisions were made in strict isolation, post-revolutionary period decisions of this type were addressed through extensive collaboration with an exhaustive analysis of the situation, comprehensive review of potential solutions, and ultimately concluded with the selection and implementation of a perceived optimal solution.

That is how I have been kind of positioning them to the team is that, we are past the pain stuff, we are not worrying about where the next sale is going to come from [...] no the fun stuff is like, “ok we are taped for growth”, we are finding new space, we are buying new trucks, we are now getting calls like hey my day is 10, 11, 12 hours, so now that whole mindset in the past, where it was ‘hey, if your route is growing too much I’m going to take it away from you. Now it is collaboration where WG are bringing the driver in for a day and saying, “ok, lets white sheet your entire route.”

A clear juxtaposition between the pre- and post-revolutionary period styles of conflict management came when the team was faced with another warehouse redesign. This process, which was previously executed by a single member of the team and foisted upon the organization during its pre-revolutionary period, was conducted in an open and collaborative manner during its post-revolutionary period.

It’s just so foreign to a very similar exercise that we went through in the last six months here . [...] I set up time for GF, my boss, me, [...] . The warehouse manager and the two clerks. So we sat in the conference room, and we, I got a big map of the whole thing printed up, and we sat there with post it notes and decided what was going to go where. It was a pain in the butt, it took much longer than it would have if I had just done it myself [...] It was just, that, in a nutshell, is for me, how different things are now, versus the way things were before.”

The antecedent to this redesign, obtaining new warehouse space, also depended upon the intricate collaboration of the entire team to present a well-orchestrated pitch to the organization's senior leadership.

Then we make the pitch, and say we know this is a completely different direction [...] initially we were hit with a ton of pushback, [...] so we all kind of crafted this story together as opposed to Dale just hearing it from me, it would have been very easy, and easier, to just say no, but because we had the whole group in there, I think he saw how we were working together, and how we were all bought in to his vision, that he said ok let's do it.

Collaborating followed a similar arc to yielding in terms of its role in conflict management. While it was initiated in response to emergent challenges that were presented by the trigger for their revolutionary period, it was later integrated as a predominant style of conflict management as they transitioned into a period of renewed equilibrium. When reactive management of a dynamic environment gave way to the operationalization and scaling of their new strategy, the team continued to lean on collaboration, albeit in a qualitatively different way, as urgency was attenuated.

Post-Revolutionary Period Attributed Effects

The attributed effects of Team 1's post-revolutionary period conflict management mirrored those of the pre-revolutionary period, with the polarity of effects reversed. Where the pre-revolutionary period saw team members attribute negative effects of both productive and affective outputs, the post-revolutionary period saw positive attributed effects in both of these sub-categories.

Collaborative conflict management was said to improve productive outputs by improving decision quality through an enhanced capacity for identifying the root cause of problems. This stands in contrast to the pre-revolutionary period when symptoms were suppressed through avoidance, or ignored in instances of dominating, and left to fester.

And that, that gives us an opportunity to uncover what the real problem is. [...] . You know, so like it helps you get to the root of the problem better, and having more people see it and be able to think about it. Has been really helpful.

This newfound capacity for root cause analysis was complimented by an increase in the cumulative expertise that was brought to bear on individual challenge. Team 1 was able to more effectively allocate attention and more effectively marshal cognitive resources and expertise in the face of complex challenges.

I tried to do it myself because I just wanted to see. In case this meeting here in these meetings were a flaming disaster [...] I have compared the one I did myself with the one that we came up with collaboratively, and it, the collaborative one is so much better, and we haven't had to make very many changes to it.

It has been really useful. It has been very easy to implement, the guys are happy with it day in day out with the picking and the putting away, and, and it, I'm just, so happy about that.

These two effects coalesced and were said to have contributed to tangible improvements and growth in year-over-year revenue, which is their ultimate metric for performance.

Obviously, our business was up over 40% and it continues this year, so clearly, you know we are making it work.

We, so we went in 2019, 2018 to 2019 was kind of stagnant [...] and in 2020 we had our first real uptick, we hit [...] million in revenue. 2021 we hit [...] million. So we grew by like 40 something percent.

Team 1 was able to go beyond securing the requisite resources for survival, take steps beyond subsistence, and progress into a period of continuous improvement which further capitalized on their success. The incremental erosion of revenue during the pre-revolutionary period was replaced with stable growth.

Members of Team 1 also linked the shift in conflict management styles to improved affective outputs in the form of engagement and interpersonal relationship quality among those who were party to that process. The trust engendered by yielding and collaborating was

highlighted by all three participants. This trust extended beyond the team and included peripheral members in the broader organizational sub-unit. This, in turn, provided the foundation for new channels of communication to open. Within these channels, transparent communication flowed between team members and across the broader organization.

It helped me build a connection and more of a relationship with that individual and that trust and rapport.

Really it's the collaboration and involving everyone and asking for everyone's input, and that's the company's policy too, the whole company. Is, is valuing everyone's input, anyone who is sort of involved and touches it, has an important and valuable, part of making our business work. And so, that is what we continue to do.

The process of collaborating, as well as the improved quality of decisions that it produced along with the improvements to interpersonal relationship quality, was also said to have elevated the team's efficacy, potency, and willingness to assume risks in pursuit of improved performance. In contrast to the period that preceded COVID-19, when team members were reticent to assume risks and expressed trepidation and uncertainty when faced with new challenges, members of Team 1 reported that they felt confident in the face of emergent challenges. As a result, they were willing to demonstrate an agile, iterative approach to solving problems in the hyper ambiguous environment.

I think what we realized is that there is no problem that is insurmountable. We didn't know where we were going with COVID. [...] You know, we believed in ourselves, we knew we could turn this around through this adversity. We had, as I said, a really nimble, really gritty group, who would say 'we are going to try anything, because we've got nothing to lose, so I think we've tried to approach everything that way, you know.

The apathy endemic to the organization also dissipated over time and was replaced by a commitment to organizational citizenship. This commitment manifested itself in a willingness to extend beyond the standard bounds of one's role as they were individually empowered to make unique, valuable contributions to the team and organization.

We are making more money not because we had a great warehouse layout, but because everyone is engaged and involved, and if something goes wrong and we need to stay another and fix it, everyone is there for it.

We have a lot of people on our team that have been here for 10 or 15 years and those are the ones that even more than I do highlight the difference between the way things were before and the way things are now, and how much they like it now. [...] We had a piece of equipment in the warehouse breakdown, and it as a really important piece of equipment. The dock door, and the service provider could only, we wanted to get them here as early as possible to fix it, and so, my warehouse manager said no problem. I can come in at 7, it's only two hours earlier than I am usually in, but I will come in. I've got it. I'll meet them and I'll get it fixed. Actually wait no that was over the weekend. He came in on the weekend. So that they could fix the door. I mean who does that?

Of, you know, changing one little thing, changing an attitude, changing an approach, and it trickles into every aspect of the business. You know we do, I don't know, everyone feels a little bit more empowered, everyone feels like we're part of this important thing we are doing, even though we're just selling fricken' snacks, it's not like solving climate change or anything. I don't know, it's so, I am really gratified to be a part of this change, and everybody top to bottom feels it.

Collaboration and yielding were not positioned as the univariate cause of these outcomes, but members of Team 1 acknowledged that those specific process changes were integral to the outcomes they achieved. Recognition of the co-occurrence and mutual causality of trust and performance was consistent across participants, and affective and productive outputs were frequently discussed in tandem.

Individual Case – Team 2

Pre-Revolutionary Period Conflict Management

Team 2 predominately displayed a collaborating process when they faced conflicts prior to their revolutionary period. Each member of Team 2 highlighted collaborating styles of conflict management in descriptions of individual conflict episodes as well as descriptions of normative patterns of behavior. This comprised 43 of 48 passages coded for pre-revolutionary period conflict management. The only alternative style that was put forward by members of the team was dominating, but this was sparse and accounted for five passages.

All members of Team 2 indicated that they saw collaborating as the normative, predominant style of conflict management in the period preceding their acquisition and integration. One distinctive feature of this style was individual team member's high concern for the opposite party. This concern encompassed both the counterpart's professional views as well as the makeup of their personality. For the latter, this high concern manifested as an acute awareness of, and a respect for, the individual idiosyncrasies or personal proclivities of others.

The ability to work well with others is an imperative skill, and certainly what you get with mature individuals is that we are respectful of the idiosyncrasies of all of the different team members.

So I think to me it is more about knowing the work style of other people [...] I think the leadership team at TechNow had distinct styles. They all might be somewhat intellectual and analytical, but at an emotional level people react to different stimuli.

It was a very diverse workforce but at the same time the one thing they all had in common was highly competent, high integrity, higher purpose in that they thought more of the other person, and the company and the client than they did of themselves.

For other team members, a high concern for others was demonstrated through direct acknowledgement of their perspective and an affirmation of the value of that perspective. Team members highlighted intrinsic tensions in the delivery of scaled software development programs, namely the desire to manage cost, time, client satisfaction, and product quality. These tensions, rather than causing team members to retract to defensive or adversarial positions, were brought to the fore. This tension then served to drive collaboration between parties as they sought a durable solution which integrated one another's perspectives. This went so far that team members recalled occasionally advocating for the traditional concerns of their counterparts.

Does his best to set me up for success [...] we feel that in how we communicate, [...] that's what we're always trying to get to. Like are you helping me sell, and are you helping me deliver.

Out for the team, out for the client, trying to take care of the business, trying to make good business decisions. I mean we are all trying to make good business decisions.

Yeah there were times when sometimes roles flipped and we started, I started to talk more like [them] and [they] started to talk more like I did [...] the more that we use all these instances to talk through these things, we started to preemptively take on each other's viewpoints and set up that expectation from the beginning.

The collaborative process that followed was described as highly transparent and marked by a rich exchange of information. This transparency became instantiated within the culture as well as the standard management methodologies. Communication and group level meetings centered on building a shared understanding or restoring common mental models through the open and proactive sharing of information.

We were much more used to a lot of openness, a lot of collaboration, a lot of transparency on all of the details of the business.

Just there to make sure everyone on the team is aware of everyone's perceptions of the projects and their resource needs, and it would be an exchange of understanding.

This, in turn, influenced both the initiation and ultimate resolution of conflict within the team. In the early phases of a conflict episode, an expectation of transparency led to rapid error surfacing. This error surfacing then served as a means of triggering collaboration in order to address that error.

Honestly we have got each other's backs and you know if one of us makes a mistake its like ah shoot I forgot, and you know no one is going to ream you for it. You're working on too many things at once, you know we all know we are trying to do the best that we can, and it comes with having worked together for 25 years.

The only time as a team we had an issue was if that wasn't fully communicated amongst the whole management team. So as long as everybody knew what was going on and there as a heads up, it would give everyone on the management team the opportunity to discuss ways to approach the issue, how to handle the issue, you know so as long as everybody was in the loop as to what was going on, that was, you know then we were all going through it together.

In the latter phases of a conflict episode, when the collaborative process had run its course and a final decision was made, the transparency demonstrated by leadership led to the acceptance and alignment following rare instances of authoritative decisions. This kind of

authoritative decision making definitively closed conflict episodes in a way that was satisfactory to all parties as it accounted for the full spectrum of perspectives within the team. Further, it prevented the conflict from extending or festering for an undue period of time.

And so when the leadership decided to make a decision, you know, most people were very comfortable with that decision, we never surprised people, we never did things that were weird or in our best interest and we always operated and wanted everybody to succeed.

Ultimately senior leadership would be responsible you know, would generally make the decision. With input and feedback and perspective from other members of the team. So, I mean it is kind of like the buck stops here, where the buck stops. [...] I absolutely trust their decision making process and I trust that you know they've got the best interests of both the employees and the client that hired them. So I trust that then as long as they are well informed and I felt like I was heard, then you know I was comfortable with them making the decision from the business standpoint.

The process that transpired between the initiation of a conflict episode and the final resolution was described as low intensity, low emotionality, direct, systematic, and comprehensive. Multiple team members stated that conflict was devoid of intense outbursts or outward emotionality. This, in turn, mitigated against the risk of task conflict spilling over into relationship conflict or spiraling to greater levels of intensity.

I cannot recall that group ever having to raise my voice, and for the most part they're computer, software type people who tend to be lowkey anyway."

And it takes the emotion out of it, right [...] and so the respect prevents us from making it personal, we understand that we're all just trying to do our jobs and help the company.

Low intensity was not, however, associated with low directness as the lack of emotionality was not indicative of a lack of engagement or apathy about the quality of the outcome. Team members indicated that conflicts surfaced promptly, were engaged with almost immediately, and closed expeditiously. This directness was demonstrated through frank dyadic and team wide dialog.

You could see conflict arise there [...] we would just encourage people to talk to each other, and we might talk to the parties individually and try to help them to come to some

level of forgiveness [...] try to seek understanding and eventually individuals would work their differences out and eventually we would be back to fully productive relationships.”

And I think that is an accurate statement that there was very little conflict that was not resolved in the same day, or in the worst case over a couple of days. They were just used to working together and as a result they had developed a lot of skills in communication and conflict resolution as a team.

The structure of these conversations was often systematic. Effective collaborating was not, however, an explicit step-by-step process that team members were formally trained in. It was a tacit process that the team abided by and disseminated through social learning. This tacit process included both active listening and conscious effort to incorporate the other party’s ideas and insights into a proposed solution. These scripts were enacted as loose guidelines rather than rigid mandates, and this flexibility allowed for a high-level of consistency in conflict management without wholly eliminating the adjustments that are required to tailor their approach to the unique, dynamic context of a specific conflict.

So, it just, not to say that the world was without conflict pre-merger, but they were just acts of conflicts that would run a range of definition, one through ten, and we always had a playbook for that particular conflict.

Yeah I mean there wasn’t a lot of formality of it, like I would love to point to a resolution you know work flow or something that we used to resolve. Every situation is different obviously. It is very dynamic when people have conflict. [...] I think for most people it is just the ability to communicate that they are unhappy or they have a difference of opinion, then if you can absorb that, and incorporate some of their feedback into the process, then eventually I think you can get to resolution.

These dialogs extended beyond a transactional exchange of information. Team members sought to engage in a comprehensive approach to collaboration where an array of feasible solutions was considered, critiqued, combined, and updated as additional information or insights were incorporated into them. This relatively exhaustive process safeguarded against chronic sub-optimal satisficing and the associated degradation in decision quality. The team frequently

sought out optimum decisions that were both durable in isolation and capable of providing scaffolding for future conflicts with similar features.

We schedule a meeting, talk about it, get the issue on the table, brainstorm different strategies for dealing with it. [...] so as we kind of get the team to flip from embarrassment that there is a problem, to problem solving mode, the team had lots of tools to go tackle that kind of problem.

Yeah, and I will tell you sometimes I was like why are we talking about this again, but it was helpful because it did become more engrained in us and it became more preemptive as each you know situation came up again.

To avoid excessive complexity in the management of a conflict, collaboration was also occasionally contained within individual sub-units of the team who possessed the requisite technical or professional expertise to intelligently debate the merits of alternative solutions. Through this, the team avoided erroneous interjections in the process and limited the total cost of collaboration in the form of both cumulative working hours that were expended on the problem and cognitive resources that it exhausted. When subunits recognized that there were ramifications to a decision which required additional perspectives, they would actively solicit them, expand the boundaries of the group involved in the conflict, and incorporate these perspectives into the solution.

I think it did come down to areas of expertise. You know, if it was a technical problem, I would collaborate with the engineering team and we would you know think our way through the possibilities and permutations and different ways to approach the problem, [...] You know obviously anything that did happen with negative financial implications would be the thing that you would raise up and it would be more collaborative, so even if it might be, the technical solution might be technical options, with financial and business implications.

This systematic and comprehensive approach to collaborating, marked by low intensity and emotionality, persisted over time, and was acknowledged as a core facet of the team's predominant, normative style of managing conflict.

Exceptions to the predominant, collaborative style of conflict management during this period were rare. These exceptions did, however, demonstrate some consistency. In instances when conflicts arose where one party's position was antithetical to the core strategy of the organization, senior members leveraged a dominating style of conflict management. This generally consisted of direct, unambiguous assertion that a contrary position was not tenable.

This strategic stability maintained a long period of equilibrium where the team was able to achieve incremental improvements while making appropriate adjustments to meet market needs. Multiple team members linked the homogeneity in conflict management during this period, coupled with the application of dominating as a secondary style, to the voluntary or involuntary turnover that occurred when there were discordant views on the organization's fundamental strategic priorities or failures to manage conflict in a way that aligned to the normative, predominate conflict management process.

You can imagine that in a small group, the individuals that weren't able to resolve that conflict effectively may have moved on to greener pastures. So the group was already well established and they had mechanisms for managing conflict.

Typically we would be successful in convincing them, otherwise we would vote them off the island. I mean, we have a strategy that is approved. We have a way of doing things. We hire people telling them that that's the way it is.

Paradoxically, the use of this alternative style served to reinforce the stability of the team's normative style of collaborating as well as their strategy. It served as a countermeasure against complete and total tolerance within the system which can jeopardize its stability and acted to further communicate behaviors that were normative by underscoring the perceived deviance of these behaviors.

Pre-Revolutionary Period Attributed Effects

The turnover that occurred as a result of discordant views on a fundamental strategy or foundational processes belies the stability of group membership. This stability of group

membership was the most frequently cited effect of the conflict management process, and it was intertwined with both the productive and affective outputs that the team experienced in the period prior to the acquisition.

The team at TechNow enjoyed a level of membership stability that stood in stark contrast to many other large providers where chronic turnover is the norm. Members of Team 2 indicated that it is considered standard practice at many competitors to cycle through two to three project or program managers over the lifetime of an extended engagement. TechNow, on the other hand, saw little to no turnover across multiple years.

We have a team that prior to the merging with FullSpeed, we hadn't had a turnover in 3 years, there was no unplanned turnover that had occurred in the business, or planned turnover, that had occurred in the business.

I think, that that like conflict management by consensus created a team with very low turnover, right, I mean we had, I was the newby on the team right having been there three years.

Collaborating for conflict management, in the eyes of Team 2's members, also played a role in developing the antecedent conditions for stable membership. The widely held perception that the conflict management process was both open and fair elicited feelings of equitability and mutual respect. This, in turn, reified team member's beliefs that TechNow offered a working environment that they wanted to continue to be a part of: "So I would say it created an environment where you know people felt heard, and validated."

Furthermore, those that remained at TechNow were seen as more likely to display organizational citizenship behaviors as they extended beyond the explicit bounds of their role. This was essential in a relatively small organization where the volatility of business cycles can lead to acute demands for increased effort and productive output on the part of the team and its members. Rather than shirking this, team members routinely rose to meet and successfully overcome these challenges.

One of the artifacts of having such a collaborative relationship is that there was a volunteer style of ascent to any request. So, you're not dictating to a workforce of that nature. [...] a lot of the people would worry how am I supposed to get things done without an authoritative, more authority and demanding of a workforce, on the other hand our force was, our team was of such that no matter what we asked of them, they would stand up and try to find a way to work that into their schedule.

This low level of turnover and high level of organizational citizenship behaviors among members who were retained indicated that the team was functioning in fairly close proximity to its optimal level of engagement in the period of equilibrium prior to their acquisition and integration. These affective outcomes were not positioned as a univariate outcome of their conflict management process, as other inputs and processes including member ability and demographic characteristics including age were highlighted, but conflict management was presented as a critical element.

The predominate, normative style of collaborative conflict management also contributed to improved productive outcomes and enhanced decision quality through the maintenance of domain knowledge within the team. Domain knowledge, which represents a deep understanding of solution architecture and delivery, is cultivated over time. It is comprised of both tacit and explicit forms of knowledge which are critical to the expedient and effective sale, design, and development of software and other IT solutions. As Team 2 accrued greater cumulative tenure, they aggregated domain knowledge which benefited decision quality and financial outcomes. This benefit constituted a kind of second order benefit of collaborative conflict management with regards to decision quality, as retention, which was stimulated by the affective outputs of collaboration, produced the domain knowledge that served as an input for high-quality future decisions.

They, we had a very low turnover rate, continue to have a low turnover rate. Which is essential in a business where it is of domain knowledge is critical to success [...] when you are in consulting for systems, is helpful to securing the next opportunity and being able to execute at a comfortable level.

It was a very stable workforce and it pays to have a stable workforce. [...] there's an element called domain knowledge and that is that the more understanding that you get of a client and the underlying details of the technology that we have implemented, the more productive you become. And so, hence, it is an important element of the business to limit turnover, and so we work very hard to create stability and retention.

The high level of decision quality, and the consequent financial returns, eventually led to the emergence of a suitor who sought to acquire TechNow. In effect, the productivity of this period of equilibrium precipitated the team's revolutionary period as it led to the financial outcomes that generated acquisition interest.

Post-Revolutionary Period Conflict Management

Following the acquisition and integration of TechNow into FullSpeed, there was a qualitative shift in conflict management style in Team 2 which was highlighted by all participants in the sample. In the same passage at the close of the previous section extolling TechNow's ability to create stability and retention, a leader of the team indicated that: "And so, we had very little conflict, it, though it changes very quickly where you do a sale of the business."

Other members of the team indicated that the acquisition and integration process produced an increase in the volume of conflict as well as qualitative changes to the way that conflict was managed. These changes, however, did not represent a wholesale abandonment of the pre-existing predominate style of managing conflict. Changes were more frequently described as qualitative adaptations to the process of collaboration with the expanded integration of additional alternative styles. The relative consistency of the team's conflict management style, from the pre-acquisition period to the present day, was emphasized by multiple members of the team.

Well, I mean, generally we would talk about it. You know from the standpoint of pre, during, and after, I mean I think really things haven't changed that much. You know we still talk about things, we sometimes vent with each other.

I would say early on there wasn't a lot of change if there was any change it was more how they were getting to know the culture and the artifacts of this new organization.

I don't know that anything really changed that much.

The expression of negative emotionality and the provision of interpersonal support represented one of the most prominent qualitative changes highlighted by members of Team 2. Members indicated that the collaborative process of conflict management offered stability in an otherwise turbulent environment by creating a holding space within conflict episodes where team members were able to express negative emotions and receive peer-to-peer support.

Yea I mean that didn't go away in fact it probably made the transition for all of us easier because we had each other. We knew what to expect from each other, so we didn't have to worry about that as a do we really have to do this.

So I think people were able in that situation to rally around the individual and leverage positive feedback on what they are doing well to keep them on the right emotional beam.

Apart from these qualitative changes, which subsided as the team transitioned out of the initial stages of the revolutionary period, collaborating persisted as the predominant form of conflict management, and this was consistent and stable across time.

Team 2 continued to deploy a predominant style of collaborating, but there was an increase in the use of secondary approaches. Whereas the majority of conflicts in the pre-revolutionary period originated from client requests or external competitive pressures, the acquisition and integration process created a new source of conflict: peripheral team members introduced by the acquiring organization. This new source of conflict was primarily managed through two modes: dominating and avoiding.

After their acquisition and integration, the structural composition of Team 2 transitioned from a tightly bounded, relatively closed system to a loosely bounded, more open system. Team members who previously worked closely with one another in the day-to-day execution of their roles were incumbered with other duties that reduced their degree of interdependence. Further,

additional team members from the acquiring organization were introduced at the periphery of the team. These peripheral team members flowed in and out of the permeable temporal and psychological boundaries of the team, and they shared many of the same fundamental goals that Team 2 pursued.

The introduction of these peripheral members caused fresh forms of conflict within the first week of the integration process. A peripheral member, who was positioned above Team 2 in the formal FullSpeed hierarchy, violated protocol in an annual performance evaluation in the early days of the team's revolutionary period, and they persisted in this transgression despite objections. As a result, Team 2 began insulating themselves from the influence of this new team member by avoiding contact and thereby avoiding conflict.

It was like tying a red flag to this manager that we were now being subsumed into this service group within this service line with this individual. [...] We want to not only have a relationship with that individual, we don't want that individual to have any ability to have an influence on our team, our approach, our decisions. It was quite impactful.

In the months that followed, FullSpeed attempted to facilitate the integration process through a teambuilding offsite which intended to mutually ingratiate the members of Team 2 and peripheral team members from FullSpeed. This objective, however, was not accomplished. Instead, domineering behavior on the part of the incumbents further alienated the former members of TechNow and led to the accelerated adoption of avoiding and dominating as a means of conflict management.

And so that wasn't a very effective team building session, and our team walked out of there wanting to know [...] everyone's talking and yet when they're bringing up a subject, my employees are looking at me like "save me from what I'm about to say."

Thereon, members of Team 2 leveraged the formal structure of FullSpeed which emphasized bureaucratic decision making and a rigid hierarchical structure as they sought to avoid conflict when possible. When conflict was unavoidable, they utilized this structure to limit

contact and thereby contain conflict to a subset of their members. Three members of Team 2, including the team lead and two other senior members, then bore the responsibility of managing the majority of these conflict episodes. This conflict asymmetry was facilitated by both the formal structure of the organization as well as the personal disposition of the members who assumed this role.

So that set up a, a mechanism or suggested a mechanism where, now I am getting in to post merger here. The simple way to go address problems would be to escalate them, to the guy that had the authority, or at least the perceived authority to go address them.

And we typically escalated through the partner that was the partner at TechNow prior to the acquisition. And that was very natural for us because his leadership style was one that was conflict-philic, as opposed to conflict phobic, so it was fairly easy to hand it off and let him go to war and let him try to solve it.

This subgroup managed the emergent conflicts that originated from peripheral team members while also advocating on the team's behalf. In matters of internal company policy or procedure, there was a perfunctory acquiescence by Team 2. In matters of strategy, however, Team 2 redefined how they engaged with the external market and secured resources within the internal organization, and this subgroup within Team 2 promoted and protected these changes through dominating and avoiding.

Dominating was frequently described as either convincing or asserting. Convincing was described as a process of education and persuasion. In instances of dominating by convincing, members of Team 2 constructed comprehensive cases in support of new services, markets, and delivery strategies. These cases represented a shift in the strategy and operations that were in place at TechNow prior to the acquisition. When these cases were in place, members of Team 2 set about persuading relevant parties that their assertions were merited and warranted support in spite of the fact that ran counter to the status quo at FullSpeed. In the first phases of this process, this process centered on protecting this strategy in its fledgling state. In later phases, it centered

on accelerating the execution of this strategy as Team 2 aggregated and promoted concrete demonstrations of the validity of their arguments.

A hundred percent, and I still think FullSpeed is like yeah we get it, but then it's like no you don't. It is an ongoing education process.

Now post, it was more as I said about politics more about lobbying and there is a lot of conflicting opinions, and some people with very strong opinions [...] So, again, that is a special skillset, to go and convince a bunch of [...] partners about changing a direction of the company. [...] So yeah so it is a lot of, you know education. [...] We would go out and do presentations on what we do and who we are and how we do business. [...] the good news is that that business has grown like tenfold at this point [...]. So if you are able to produce the revenues and show the growth, then people become very tolerant very quickly.

There was a degree of intrinsic conflict as the alternative perspective contended with the organizational inertia behind standard practices. This produced active, direct resistance from a set of peripheral members of Team 2. These peripheral members vigorously opposed the alternative perspectives offered by Team 2 and attempted to impede the dissemination or adoption of these strategies. Rather than directly engaging with these peripheral team members, members of Team 2 utilized avoiding. They circumvented the conflict, through legitimate formal channels, and engaging with audiences that were more amenable to their positions. In doing so, Team 2 was able to reduce the total volume of conflict by engaging in direct forms of conflict management with more senior stakeholders. They prevailed in these attempts and enlisted these stakeholders in a broader coalition that possessed the requisite internal political capital to quell the resistance of the peripheral members of Team 2.

You build processes to go around that person. That is probably not a long-term solution, but that is a practical solution if that person is high enough above you that you really can't control anything. [...] reduce dependencies on problematic nodes in the decision-making machine, is one approach that the team has used.

So to get there and all of a sudden OL is dug in and has basically made it a AB versus OL decision and wanted the company to decide either you're going to support me or support

team but there is no place where the two should meet. [...] I had already been making my arguments and had made my presentations before OL even knew that there was a battle.

Then he fought every hire, every, and so there's this list I'm giving you that started with three, [...] there was six more decisions that had to do with hiring personnel and he fought every one of those within an inch of his life, and in some cases he successfully delayed decisions but in all eleven cases to FullSpeed's great credit we succeeded in getting things done.

When peripheral members imposed themselves upon Team 2 through unilateral decisions, thus making avoiding proved impossible, members of Team 2 reciprocated with a dominating style of conflict management. One demonstration of this kind of dominating conflict management occurred in the first months of the integration process. This conflict episode began with a brief instance of collaborative dialog which was followed by a unilateral decision which was orthogonal to the advice offered by members of Team 2. The response from members of Team 2 was direct, high in oppositional intensity, and marked by stern assertions and an appeal to authority which explicitly called out the unspoken avoidance via circumvention that was already occurring. Similar to the avoiding strategy, members of Team 2 saw this as an effective approach because it both resolved the conflict in a way that was in the best interests of Team 2, and it facilitated future avoidance.

So I said Ok, we're going to have a different conversation that what I called you for. I thought it was a mistake, but let me just tell you [...] you're going to change the meeting or I am going to escalate to VR, then I'm going to escalate to VR's boss FR, then I'm going to go to AR [...] he got my temper up, and I hadn't gotten my temper up like that in years, but I just couldn't believe it, [...] the next thing you know she is scheduled at the end and it all got back to the way it should have been. [...] we didn't actually have a conversation for nine months after that.

In addition to facilitating avoidance of that peripheral team member, the utilization of these secondary approaches and the incremental expansion of interpersonal networks was followed by one instance of avoiding within Team 2. This approach, which was explicitly identified as non-grata prior to the acquisition and integration, was highlighted by multiple

members of Team 2 as they recalled a single episode that occurred after the initial flurry of conflict with peripheral team members.

In this conflict episode, two members of Team 2 experienced a conflict regarding roles and responsibilities. This particular point of friction was not uncommon in the pre-acquisition period, but the subsequent avoiding response was antithetical to the team's norms. Rather than engaging with the conflict through collaboration, one of the parties opted to pursue alternative avenues by circumventing the opposing party.

I would say, at first it influenced me a little bit, and there was a team member that I had a conflict with initially because I was like this is your job right and if you're not going to do it were going to find someone else to do it. I had like this extra maybe bravado that I wouldn't have had or I would have had to been more nuanced, you know what I mean. And it did trickle down to me a little bit.

[they] had choices [...] But [they] made a couple of mistakes there and the next thing you know I am hearing about it around the horn from leadership and I am talking to [them] and saying geez [...] there is a communication dynamic here that we are going to have to work on.

This incident, however, proved to be exceptional and the amelioration of this aberrant behavior served to reinforce the normative approach to conflict management within the team. After reflecting on the incident, the team member who engaged in avoiding stated: "I would definitely say that I did not see that amongst the other team members."

In the months that followed, the team reverted to their collaborative patterns of conflict management, with some minor qualitative changes. Collaboration was no longer conducted via complete group consensus. Instead, it increasingly occurred within subunits of Team 2 as their structure continued to transition from a closely bound top management team in a small organization to a loosely bound team embedded in a larger organizational. The informal communication channels that Team 2 brought into the organization served as the conduit for continued collaboration. These channels were retained in spite of the changes in the formal

organizational structure and maintained a constant exchange of information among relevant parties which was seen as advantageous for Team 2. As individuals' networks grew, so did their capacity to draw upon a broader collection of expertise and perspectives from the wider organization. This then enabled them to address conflicts without escalation and the consequent conflict asymmetry that marked the first few months of the integration process.

And those relationship networks provide alternative ways of resolving conflict. And by alternative, I mean they don't have to escalate within the TechNow hierarchy anymore, you can start to use your web of relationships in the now larger, greater organization as a way of solving problems and resolving conflict.

The insularity that existed in the earliest days of the integration process gave way to a proliferation of collaboration as Team 2 settled into their new roles. The new formal links in their networks enabled each member of Team 2 to serve as a collaborative nexus between Team 2, and the broader organization. The avoiding approach to conflict management for conflict episodes involving peripheral members proved transitory, and its application within the boundaries of the team was met with opprobrium. Over time, the collaborating style, which was retained as the predominate process, was restored to near exclusive preeminence over secondary these styles.

Post-Revolutionary Period Attributed Effects

Team 2's predominant style of collaborating, as well as the dominating and avoiding approaches that they leveraged in the early stages of the integration process, were seen as directly related to productive outputs and high decision quality. Team members posited that their unyielding commitment to their strategy, and their resistance to modifying course, quickly bore fruit in the form of revenue. This outcome then served as an input to future interactions as the financial results stymied dissent. Over time, this created a positive feedback loop which

promoted the further promulgation of their strategy and escalating levels of commitment both within the team and among members of the broader organization.

But we went on this for three years, like this, and while our revenue exploded, all the things LO fought, [...] turned out to be of great benefit to the company. Now the company is turning all of their resources and all of their efforts towards [...] and really doubling and tripling down on the bet.”

the good news is that that business has grown like tenfold at this point and everybody talks about [...] it’s the greatest thing since sliced bread, and so like I said, success, my joke is revenue solves all problems.

The retention of collaboration also ensured that Team 2 was able to retain the high level of decision quality that the team experienced prior to their revolutionary period. The team, however, did not hold delusions of grandeur or assumptions of infallibility. Team members acknowledged that actions may have fallen short of an absolute optimum, but this was not reflective of flaws in their conflict management processes. Instead, it was attributed to the natural limitations of individuals and teams operating with bounded rationality in complex environments.

I think we were able to effectively solve everything we set out to solve . Now if you change the language to did we hit all the goals that we wanted to hit, or did we achieve all of the results we wanted to hit, I think we actually got really good results. But could we get better results, could we make more money, could we increase the percentages and reach an even higher revenue threshold? Absolutely, but to me that is not the same as an intractable conflict. We just have not optimized our process in order to take it to another level of performance if that makes sense.

Team 2’s collaborative approach to conflict management was developed in the pre-revolutionary period, retained during the revolutionary period, and reinforced through the sparing utilization of secondary approaches to conflict management during that period. This stability created a foundation for sound decision making which team members believed would remain in the future.

In the domain of affective outputs, team members indicated that interpersonal affinity increased throughout their revolutionary period, and their esprit de corps was elevated despite the reorganization and consequent reduction of formal interdependencies and opportunities for interpersonal contact. This interpersonal closeness was attributed to the galvanizing effect of external threats and the empathetic, collaborative behaviors displayed in the conflict management process during this period. As the acquisition process exerted pressure, either through active intervention by peripheral team members or through the intrinsic challenges of adjusting to new processes, Team 2 drew closer to one another and utilized their interactions as a respite from this pressure. one team member stated, “So definitely the team began to circle the wagons a little bit. And that combined with the tendency to escalate actually created higher levels of group cohesion.”

The dominating style of conflict management in some instances provided a sense of integrity within the team where they unified in their support of a single strategy which indicated that the team retained a shared mental model of the internal and competitive landscapes. Similarly, they remained bound to one another and retained a feeling of continuity amidst the tumult as they continued to engage in their normative process of collaborative conflict management. The retention of these processes, and the steadfast commitment to retaining their identity, assured team members that their identity as a member of the team would not dissolve. Instead, the team could continue to grow in an environment that could, thanks to their steadfast commitment in the early phases of the integration process, provide the resources it needed.

Like that is an amazing thing to have, as a culture, and a lot of it has to do with, you know how, how we resolve conflict [...] so I would say that post-merger it's given them the ability to bring themselves into the fold quicker. Right, and allowed them to merge into the FullSpeed culture quicker because they have this great foundation of support that they are not losing, right.

And there's lots of great things FullSpeed has brought to us, right, and most importantly a place to continue you know, what we built at TechNow.

All of these factors combined to perpetuate the long-standing lack of attrition within the team. Throughout the acquisition and integration process, the team experienced no unwanted or unexpected attrition. The only turnover occurred due to unregretted attrition among those who underperformed, those who proved they were a poor fit, and those who were planning to retire after long tenures within the team. This, as the team described when discussing the pre-revolutionary period, led to the retention of critical domain knowledge that then served as a critical input for decision-making. Through this, the team satisfied every criterion for performance: they met and exceeded expectations, their desire to work was high, and they maintained member satisfaction despite the changes and challenges that they faced.

Cross Case

Pre-Revolutionary Period

The predominant, normative modes of conflict management utilized by each team during their pre-revolutionary periods were widely divergent. Whereas collaboration was virtually non-existent within Team 1 as they engaged in avoiding and dominating forms of conflict management, collaboration was the predominate and nearly exclusive conflict management approach utilized by Team 2. In spite of the significant qualitative differences in their conflict management styles, their approaches were similar with respect to complexity.

Team 1 defaulted to a complex pattern of avoiding, including the novel process of pseudo-collaborative avoidance, which prolonged conflict episodes and impeded their ultimate resolution while simultaneously instigating later episodes that were either directly or tangentially related to the initial point of conflict. Team 2 defaulted to a complex pattern of collaboration where they directly engaged with, and comprehensively examined, diverse perspectives from the

broader team. This led to protracted dialog, but it ultimately truncated conflict episodes by bringing about a definitive conclusion that was agreed to and acted upon by members of the team. In effect, the normative process of conflict management within Team 1 was marked by increasing complexity across time, while the conflict management process deployed by Team 2 was marked by a high degree of complexity in its initial stages with a prompt resolution which brought conflict episodes to a close.

The alternative styles of conflict management utilized by each team during the pre-revolutionary period, and the contexts that they were used in, were also discrepant. Senior members of Team 1 leveraged dominating approaches in the infrequent instances when the team faced materially significant decision points and when siloes were breeched. Senior members of Team 2, on the other hand, constrained the use of dominating approaches to instances when team norms, namely those that pertained to the team's strategy or its internal processes, were threatened or violated.

Much like the conflict management processes that were utilized by each group, the origin of conflict varied. Team 1 predominately confronted conflicts that were instigated by internal changes in process or strategy which led to misaligned mental models or expectations among team members. Team 2, on the other hand, predominately managed conflicts that were instigated by external changes in the competitive landscape or in the delivery environment as they engaged with clients thus causing misaligned perspectives on how to manage these changes.

Finally, the affective and productive outputs and outcomes that were produced by these conflict management processes stand in stark contrast. Members of Team 1 exclusively identified adverse consequences and negative impacts on both performance and team member affective states, while members of Team 2 exclusively identified positive effects on both

performance and team member affect with the most frequently cited outcome being member retention and the consequent accumulation of domain knowledge which engendered second order performance impacts.

Post-Revolutionary Period

At the dawn of their respective revolutionary periods, both teams experienced qualitative changes in their conflict management processes as well as changes in the origin of conflicts. Team 1, most prominently the team's leader, ceased employing avoiding behaviors as a default mode of conflict management and replaced that approach with a mix of yielding, collaborating, and the sporadic utilization of dominating to counteract avoiding behaviors that emerged during conflict episodes. As the team transitioned from managing internal strife and began addressing conflicts born of external tumult, members engaged in yielding to members who were closest to emergent challenges. After an initial period where yielding was predominant, collaboration took root as a common style of conflict management as the team increased both the frequency and richness of communication between members. This was preceded by the cultivation of interpersonal trust and reciprocal transparent communication, and it helped to restore common mental models as the team moved from a reactive state to a proactive state where they were able to execute their new strategy.

Team 2 retained collaborating as the predominant approach to conflict management throughout the revolutionary period, but they reduced the complexity of this process by abbreviating or constraining it to a subset of members, and they increased proportion of conflicts where alternative approaches was applied. Dominating, which was a scarcely used secondary approach prior to the revolutionary period, rose in frequency and so too did avoiding. This shift coincided with a change in the locus of conflict, from external forces including market changes

and client demands to internal forces comprised of adversarial peripheral team members. Both of these styles were adopted as temporary adaptations in response to the conflicts brought about by these new, peripheral team members.

The changes in conflict management processes that each of these teams experienced differed in three ways. First, Team 1 changed their predominant style of conflict management, while Team 2 changed their secondary approaches and reduced the portion of conflicts that were handled through their predominant style of collaborating. Second, Team 1 moved to yielding, collaborating, and dominating, while Team 2 moved to dominating and avoiding, which was an approach that was abandoned by Team 1 at this period. Third, Team 1 adapted their conflict management processes in parallel to a transition in the origins of conflict from internal to external, while Team 2 adapted their processes in parallel to a transition in the origin of conflict from external to internal.

There was, however, one similarity in the change that both teams experienced. Both moved towards lower complexity processes for conflict management in the earliest phases of their revolutionary periods. Team 1 reduced complexity by adopting approaches that involved direct, prompt management of conflict through yielding which led to expedient resolutions of conflict and the generation of satisfactory solutions and improved interpersonal relationship quality. In instances where collaborating was used, it was conducted in a time-boxed fashion and only involved a subset of members whose perspectives and expertise were most germane to the topic at hand.

Team 2 reduced complexity in three ways. First, they adopted avoiding as a style of conflict management which allowed them to circumvent protracted conflicts with peripheral team members and continue activating against their strategy while concurrently persuading more

senior stakeholders. Second, they streamlined their approach to collaboration by reducing the number of parties who were involved and by engaging in less exhaustive and comprehensive analysis of perspectives in a manner similar to Team 1. Third, they intentionally generated a large degree of conflict asymmetry by consolidating responsibility for the management of conflict with peripheral team members and placing it in the hands of a subset of more senior members. These more senior members then utilized a blend of avoiding and dominating to gain a temporary stay against conflict, gain a swift termination of a conflict, or to advocate through education and persuasion for the strategic changes that they felt were critical to the team's success.

Both teams experienced galvanizing effects from these changes which produced an increase in engagement and member satisfaction. Yielding elevated the esprit de corps among members of Team 1 who now felt that they were a part of something greater than themselves, rather than subjected by someone greater than themselves. The collaboration that ensued reified this feeling by reducing power distance and instilling a sense of common ownership of outcomes which translated to improved affective states, elevated engagement, and an increase in the rate of organizational citizenship behaviors. Team 2's retention of collaborating as a primary approach to conflict management Team 2 served to reassure members that central features of their team level identity would be retained, and it provided a psychologically safe space for the provision of interpersonal support when negative emotionality was expressed. In addition, collaboration helped maintain shared mental models despite rapid changes in the environment. This facilitated the adoption of asymmetric conflict management and the utilization of dominating approaches to advance the team's strategy.

Both teams also attributed positive productive outputs and performance effects from

these changes which included both short- and long-term financial performance. Team 1 leveraged the revolutionary period to reverse a multi-year decline in organizational performance and enter a new period of growth driven by the initiatives born from revolutionary period which spanned operational changes and strategic adaptations. Team 2 utilized the revolutionary process to capitalize on the newly available resources within the larger acquiring organization, through both dominating and avoiding, as they expanded their service offerings and captured new revenue streams. Some strategic and operational norms which emerged during their respective revolutionary periods were retained by both teams as they transitioned into renewed periods of equilibrium. Team 1 preserved its growth strategy and perpetuated many of the operational changes that they made to enable the day-to-day delivery of that strategy while Team 2 preserved its updated growth strategy and moved forward with an array of updated processes that were either willingly adopted by the team or imposed upon them by the parent organization.

Both teams, however, only retained a subset of the *mélange* of conflict management process adaptations that they deployed during their revolutionary periods. Team 1 held on to yielding as an approach to conflict management, but the proportion of challenges addressed through yielding was reduced over time and the proportion addressed by collaborating consequently increased. Similarly, Team 2 did not fully abandon avoiding and dominating, but there was a marked decrease in their frequency as collaborating was restored as the predominant approach. Further, the intentional conflict asymmetry and the associated use of avoiding and dominating styles faded as individual team members were empowered to engage directly with peripheral team members and other stakeholders within the organization. This was necessitated, in part, by the retirement of the team's leader and the requisite reconstitution of responsibilities within the team.

Findings

The findings produced from this multi-case study, as they relate to each of the study's sub-questions, are summarized below. These findings, and the conclusions they accrue to, are expounded upon in Chapter 5.

- SQ1: (F1) The predominant style of conflict management varied between teams prior to and during revolutionary periods, but predominant styles converged to collaborating following the revolutionary period.
- SQ2: (F2) Predominant approaches to conflict management represent a smaller portion of team's conflict management processes in the initial phases of a revolutionary period, and the secondary approaches applied during these initial phases incrementally occupy a lower proportion of the team's conflict management profile as they transition into periods of equilibrium.
- SQ3: (F3) Conflict management complexity is reduced in the initial phases of revolutionary periods, and it incrementally increases as teams transition into a period of equilibrium.
- SQ4: (F4) During revolutionary periods, team members adapt conflict management processes to address urgent, significant threats to the group's ability to secure resources.
- SQ5: (F5) Team members attribute both productive and affective outputs to conflict management processes.

Chapter Summary

Chapter 4 began with an overview of the purpose of this study as well as the process of data collection and analysis. Then, detailed findings were presented for Team 1 and Team 2 as individual cases. This was followed by a cross-case analysis of the two cases comprising the

quintain. Cross-case analysis closed with a series of five conclusions which will be explored further in Chapter 5.

Chapter 5: Conclusion

Chapter Overview

This chapter begins with an introduction which summarizes the purpose of the study, the methods that were used, and the research questions that the study sought to address. Then, major findings and conclusions are discussed in the context of the extant body of research as well as their implications for scholarship and practice. The chapter closes with a discussion of the study's limitations, recommendations for future research, and a brief chapter summary and study conclusion.

Introduction

Increasingly, for-profit organizations rely on teams as the fundamental unit of organization and work execution (Mathieu et al., 2019). These for-profit organizations are facing a turbulent, VUCA operating environment that imposes constant pressures to adapt in order to secure the resources they need, monetary or otherwise. Periodically, acute shocks imperil the ability of individual teams or organizations to secure these requisite resources, thus instigating revolutionary periods wherein teams and organizations have an opportunity to improve their performance by making substantive modifications to their normative processes and underlying beliefs (Gersick, 1988).

These windows of time offer a unique opportunity to reconsider the fundamental assumptions regarding how teams deliver against their objectives as well as the transition, action, and interpersonal processes that make up their day-to-day work. Nevertheless, these periods can be squandered as teams perpetuate unproductive processes or retain previously productive processes that are maladaptive in the team's new context. Worse yet, these periods can lead to the dissolution of teams if they are not capable of effectively responding to the changes in their

environment. As such, the way that teams manage these periods is critical to their long-term viability and success as well as the long-term viability and success of the organizations that they operate in. Previous research has examined the effects of specific conflict management processes in relatively short, bounded periods, but research to date has neither adequately examined how conflict management processes change within teams when they are faced with revolutionary periods nor considered how this influences team performance.

The purpose of this qualitative study was to explore how successful teams modify the interpersonal process of conflict management over an extended period of time. More specifically, it sought to understand how, if at all, teams adapted their conflict management processes over the course of a period of equilibrium, a revolutionary period, and a subsequent return to equilibrium. It also sought to improve understanding of what outputs and effects members attribute to these processes.

A multiple case design was utilized to construct a rich, thick description of longitudinal changes in conflict management processes. Multiple cases were considered independently, then in concert with one another, to determine how this process may vary across contexts.

The central research question for this study was:

- RQ: How, if at all, do high performing teams modify their conflict management processes over the course of a revolutionary period?

Within that central research question, there were five sub questions:

- SQ1: What was the predominate style of conflict management before the onset of the revolutionary period, and during each phase of the revolutionary period?

- SQ2: What was the proportion of each of the five conflict management styles before the onset of the revolutionary period, and during each phase of the revolutionary period?
- SQ3: How did the qualitative features of conflict management processes change during the revolutionary period?
- SQ4: Why did team members modify the way they managed conflict?
- SQ5: What changes to conflict management processes, if any, do team members ascribe their success to?

Study Conclusions

Analysis of the semi-structured interview data produced five findings. Each of which aligns to one of the study's sub-questions:

- SQ1: (F1) The predominant style of conflict management varied between teams prior to and during revolutionary periods, but predominant styles converged to collaborating following the revolutionary period.
- SQ2: (F2) Predominant approaches to conflict management represent a smaller portion of team's conflict management processes in the initial phases of a revolutionary period, and the secondary approaches applied during these initial phases incrementally occupy a lower proportion of the team's conflict management profile as they transition into periods of equilibrium.
- SQ3: (F3) Conflict management complexity is reduced in the initial phases of revolutionary periods, and it incrementally increases as teams transition into a period of equilibrium.
- SQ4: (F4) During revolutionary periods, team members adapt conflict management

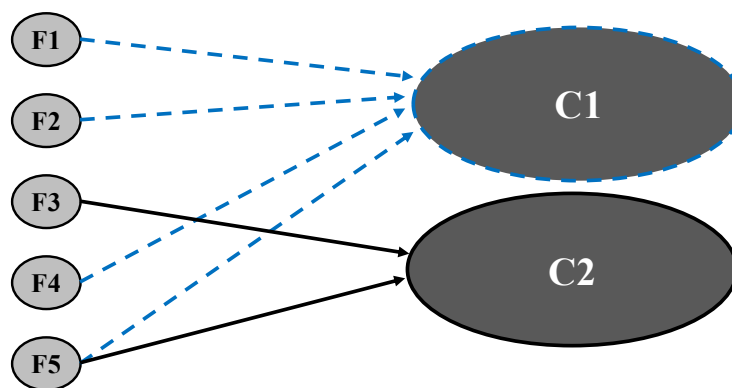
processes to address urgent, significant threats to the group's ability to secure resources.

- SQ5: (F5) Team members attribute both productive and affective outputs to conflict management processes.

These five findings were produced following analysis of participant's responses to the structured questions as well as the probing and interpreting questions that were posed by the researcher over the course of each interview. These findings, their relationship to the study's conclusions, and their relationship to past and future scholarship and practice are discussed in the following sections.

Figure 3

Findings Mapped to Conclusions



Qualitative Changes in Conflict Management During Revolutionary Periods

- Conclusion 1: There is not a universal pattern of qualitative changes in conflict management processes during revolutionary periods. Successful teams engage in transitory subversion of predominant, normative conflict management styles to address urgent or existential threats through alternative approaches. Teams then incrementally transition to a new, stable blend of conflict management in the ensuing

period of equilibrium.

As indicated in Figure 3, this conclusion is drawn from F1, F2, F4, and F5. Given the discrepant levels of performance across Team 1 and Team 2, the first facet of F1 which indicates that the predominate style of conflict management varied between the teams during the period of equilibrium preceding their revolutionary periods, aligns with the existing body of research on conflict management and its impact on team performance.

Team 1, which relied on avoiding and dominating for conflict management prior to their revolutionary period, experienced chronic and compounding poor performance across each of Hackman's (1987) team performance criteria of productive output, member desire to continue working together, and member satisfaction. These outcomes are consistent with the research on avoiding and dominating conflict management. The avoiding pattern displayed by the team's leadership also mirrored Argyris (2012) defensive routines. The leader's assertions that maintaining the status quo was acceptable were clearly incompatible with the organization's financial performance. They then retained that position while behaving as if it was not wholly inconsistent. Then, this leader made that process of denial, and the topic as a whole, undiscussable by maintaining rigid siloes. This led to low performance and low satisfaction, consistent with the findings of Behfar et al. (2008), the behavioral conformity originally found by Darley and Latane (1968) as well as Asch (1951), and the general perception among team members that the habitual avoidant behavior was both ineffective and unsatisfactory which aligns with the findings of Gross et al. (2004).

The outcomes produced when dominating was displayed by more senior members of Team 1 were also consistent with the literature. Conflict episodes where dominating was applied and decisions were imposed upon junior members, like the selection and organization of a new

physical location for the team, were associated with decreased decision quality like that found by Maltarich et al. (2018) as well as a drop in member satisfaction and a contagious reticence to communicate with supervisors which was previously found by Rahim & Buntzman (1989), Richmond et al. (1983), and Tepper et al. (2011). The team's description of disengagement also matches the behaviors of ritualism, originally described Merton (Agnew, 2006), where cultural goals are rejected while institutional means are passively accepted. These effects were poignantly summarized by a team member who described this period by stating:

I think it's, you know, a classic situation where you are told so many times in one way or another either verbally or nonverbally that your opinion doesn't matter. That you stop offering your opinion. Then the entire organization stagnates.

The proposed association between self-censorship, the organization's stagnation, and its eventual decline in performance also receives support in the literature. Self-censorship has been linked to a variety of outcomes that have a negative causal or mediating effect on performance in the literature. This includes the failure to select conspicuously advantageous options when information is suppressed (Hightower & Sayeed, 1995) which occurred within Team 1 on multiple occasions during the period of time preceding their revolutionary period.

Team 2, which relied on collaborating for conflict management, experienced the inverse of Team 1 as they demonstrated the kind of high performance that promotes the maintenance of extended periods of equilibrium. The positive outputs produced through collaborating within Team 2 is in accordance with the body of literature including Tjosvold et al. (2019) which indicates that collaborating confers affective and performance benefits that are not found when more competitive approaches are utilized. Members of Team 2 most frequently cited the rise in affective trust that this process generated, which was also found by Nemeth et al. (2004), and the capacity for collaboration to generate the kinds of joint gains and durable solutions which were also found by Friedman et al. (2000). Further, team members identified cumulative,

compounding gains in performance both through the identification of durable solutions and the retention of domain knowledge. This cumulative effect of collaboration on performance and satisfaction was also found in the longitudinal studies by Behfar et al. (2008). Members of Team 2 indicated that the benefits of collaboration were a byproduct of its ability to simultaneously deliver high levels of directness and low levels of oppositional intensity which parallels the explanation offered by B.H. Bradley et al. (2015). In the words of team members:

I mean, there has never really been anything where it's like shouting matches.

And I think that is an accurate statement that there was very little conflict that was not resolved in the same day, or in the worst case over a couple of days.

The conflict management processes of both Team 1 and Team 2 account for just one of a multitude of factors that influence team level performance, so the significance of this finding is limited in that it only weakly supports the pre-existing body of literature on conflict management styles and the associated outcomes.

Given the body of literature which has identified the broad benefits of collaborating, the second facet of F1, which indicates that teams did not converge on a singular uniform approach of collaborative conflict management during revolutionary periods, is notable due to the teams' convergence in performance. While collaborating was present in both teams' conflict management processes, each team displayed a unique blend of conflict management styles during their respective revolutionary period. In the early phases of their revolutionary periods, Team 1's propensity toward yielding was juxtaposed by the dominating and avoiding approaches frequently displayed by Team 2. Despite this discrepancy, both teams experienced performance benefits. This facet of F1 is better understood in light of F4, which indicates that teams adapted their conflict management processes to address urgent, significant threats to the group's ability to secure resources as these threats varied across teams. It is also better understood in light of F5,

which indicates that teams attribute both productive and affective benefits to conflict management processes.

The avoiding approach used by Team 2 during their revolutionary period, which they deployed to circumvent opposition from peripheral team members and directly appeal to senior-level leadership, produced a temporary stay on conflict which was necessary to achieve more durable, lasting solutions. This benefit was previously found by Tabassi et al. (2019) who proposed that it may be advantageous for cross cultural teams to engage in avoidance to prevent conflict escalation rooted in those cross-cultural differences. Further, more direct conflict with this recalcitrant party was unlikely to yield a satisfactory resolution that was proportionate to the cost of the conflict with regards to the investment of time and cognitive resources that would have been required. As such, it falls into the category of conflicts that Rahim (2002) suggested would benefit from an avoidant approach. Finally, avoiding served to mitigate the effects of the burgeoning relationship conflict occurring between the peripheral team members and members of Team 2. This benefit of avoiding relationship conflict, and thereby temporarily safeguarding against its adverse effects, was also found by Thiel et al. (2019) and De Dreu and Van Vianen (2001).

The consequent effects of leveraging dominating conflict management during this period also differed from findings produced by past research. With regards to decision quality and performance, Team 2 maintained high performance in spite of the finding produced by Maltarich et al. (2018) indicating that competitive styles lead to performance decline. Further, the dominating style neither demonstrated the kind of resistance to change nor the contagious effect which were found by Tepper et al. (2011). Team 2 only adopted dominating temporarily and they did not retain it as a predominant, or even frequently utilized secondary mode of conflict

management over the course of the revolutionary period or in the period of equilibrium which followed. Further, spillover did not occur. Others within the team, and others within the broader organization, did not apparently adopt dominating as a normative process for conflict management. Team 2's ability to compartmentalize the use of dominating, and their ability to leverage it almost exclusively within the specific spatiotemporal domain of early revolutionary period conflicts with peripheral team members, is illustrative of the strength and durability of their interpersonal process norms. This strength was, as described in vignettes discussed in Chapter 4, demonstrated when deviant behavior in the form of improper application of avoiding or dominating in the context of a conflict between two core team members was quickly and unambiguously addressed.

The lack of apparent performance decline due to dominating may also be attributed in part to an asymmetry in analytical ability that existed between members of Team 2 and the peripheral team members who were the opposite party in events where dominating conflict management was applied. This asymmetry was a byproduct of both information asymmetry, as members of the team were privy to relevant market information aggregated during their time operating independent of the acquiring organization, and perceptual asymmetry as members of the team were able to identify and advocate for previously unidentified opportunities that may have been obfuscated by inattentional blindness caused by organizational acculturation (Most et al., 2005). During this period, Team 2 had a window of time when they could deliver differentiated value through dominating conflict management as they acted as insiders from the outside (Klein, 2004) who spotted, selected, and supported the scaling of new ventures which were previously unrecognized or underutilized. As a result, the use of dominating and avoiding by Team 2, and its beneficial outcomes at the team and organizational level, contributed to a

process akin to cladogenesis.

Cladogenesis was described by Gould and Eldridge (1977) in their seminal work on PE in biological evolution which served as the theoretical foundation for Gersick's (1988) theory of PE in team processes. In the biological process of cladogenesis, isolated organisms propagate and rapidly create a new species that demonstrates evolutionary fitness (Gould, 2007). Recent research has supported the notion that this process is the primary mode that certain taxa become established at macroevolutionary time scales (Strotz & Allen, 2013). In the context of Team 2, a kind of ideological cladogenesis occurred in Team 2 and the broader TechNow organization. Dominating conflict management with peripheral team members protected fledgling strategies generated by Team 2 and prevented direct intervention or termination of these strategies. Avoiding then allowed these strategies to prosper in relative isolation from the broader ideological ecology of the organization. When these divergent ideas continued to proliferate and demonstrate fitness in the form of net new revenue generation, they no longer required the protection provided by dominating or the isolation that was maintained through avoiding. At that point, the significant threat to the team posed by the premature or preemptive rejection of these strategies by incumbent members of TechNow had been averted.

At this point, Team 2 had managed to form a kind of new ideological taxon by legitimizing the assertion that it was advantageous to pursue the sale of new service lines within the new industries that were pursued by Team 2. This rapidly replaced the pre-existing ideological taxon in TechNow which held that these service lines and markets were not a fit for the organization. As indicated by F4, Team 2 adapted their conflict management processes when faced with a significant threat during the second and third phases of the revolutionary period as defined by Rosen et al. (2011), plan formulation and plan execution, and they did so in order to

neutralize the threat posed by peripheral team members who had the potential to instigate two of the major failure points for teams in revolutionary periods identified by Frick et al. (2018): failure to develop a plan and failure to act.

As indicated by F2, they proceeded to incrementally restore collaboration as the default mode of conflict management when that threat had been mitigated. The team then segued into the final phase of the revolutionary period, team learning, and into a period of restored equilibrium. The widespread acceptance of this new ideological taxon allowed for open, unfettered collaboration as the team successfully integrated the learnings produced from this process into their operations. In turn, they were able to share those learnings with others throughout the organization.

There is a stark contrast between Team 1 and Team 2 when the use of avoiding and dominating is considered. As previously noted, Team 2 experienced a marked increase in the utilization of avoiding whereas Team 1 experienced a precipitous decline in the rate of avoiding. Further, dominating became a default mode of conflict management within Team 2, whereas Team 1 seldom utilized dominating and predominantly depended on yielding in the early phases of their revolutionary period.

When yielding was deployed by the team's leader at the dawn of the revolutionary period, these behaviors generated positive outputs while avoiding many of the potential negative outputs that have been associated with it in the literature. As noted by Antonioni (1999), yielding is seldom used by managers or those who occupy higher levels in the formal organizational hierarchy. Given this finding, the use of yielding by the leader of Team 2 is atypical in any period, revolutionary or otherwise. The team leader's efforts to yield to other team members, as they did when the team faced decisions regarding return to work, personal protective equipment,

and new sales initiatives, led to the ingratiation and positive sentiment that was found by Yukl and Tracey (1992) with a concurrent increase in subordinate's satisfaction with supervision which parallels the effects of yielding found by Lee (2009). This is diametrically opposed to the expressed levels of satisfaction that were described by participants who previously worked under the dominating prone manager that was in place prior to the team's revolutionary period. This improvement of relationships between the leader and members of the broader team can also be viewed through the lens of leader member exchange, where the quality of dyadic relationships between leader and follower are framed as paramount to leadership effectiveness (Dansereau et al., 1975; Graen & Uhl-Bien, 1991). The improvement of these dyadic relationships produced by yielding also generated an increase in organizational citizenship behaviors, where members stepped beyond their explicit or mandated scope of responsibilities to engage in activities that were in the best interests of the group, in much the same way that was found in research by Ilies et al. (2007).

Further, members of Team 2 gave positive appraisals of the team leader's personal conduct and professional efficacy during this period, which matches the findings produced by Korabik et al. (1993). In the later stages of the revolutionary period, direct and explicit efforts by the team's leader to yield to other members of the team, as they did when facing decisions regarding the acquisition of a specific customer segment and the reintroduction of new methods for product marketing, were also well received and contributed to team member's increased feelings of potency and efficacy during this period. These benefits were accomplished without the adverse effects of yielding, including the emergence of the kind of conflict asymmetry found by Weider-Hatfield & Hatfield (1995), taking root within the team.

The possibility that the outcomes produced by yielding were suboptimal, however,

cannot be ruled out as a counterfactual where alternative courses of action were pursued is not readily available. Therefore, Fry et al.' (1983) finding that yielding fails to fully capitalize on potential opportunities for mutual benefit, is not necessarily refuted by the findings of this study. There is a possibility that the potential performance of Team 1 could have surpassed actual returns. Even if the quality of decisions produced by yielding were suboptimal when considered in isolation, yielding was associated with a set of outputs that were essential to the performance improvement that Team 1 produced through their revolutionary period. First and foremost, the affective outputs that were generated through yielding mitigated the possibility that the team would dissolve of their own accord. At the dawn of the revolutionary period, when uncertainty about the pandemic reached a crescendo and morale reached its nadir, the positive affective outcomes produced by the team leader's yielding served to prevent individuals from voluntarily exiting the team.

Second, the team leader's yielding, along with the associated efforts to increase communication, contributed to the team's improved capacity to conduct a thorough situational assessment and develop a plan to effectively navigate the pandemic environment and thus avoiding the Frick et al.'s (2018) failure points of failure to recognize or effectively ascribe meaning to changes in the environment and failure to develop a plan. The increase in information sharing, and critically the increased rate of heedful interrelations where team members encouraged one another to reconsider their assessments of the environment and their assertions regarding appropriate courses of action, led to a reconstruction of the team's mental models and the restoration of the kind of shared mental models which, according to Grote et al. (2010), are essential to team performance in novel environments. Third, yielding contributed to the restoration of psychological safety, or the belief that the team is a safe space for interpersonal

risk taking (Edmondson, 1999), which enabled team members to assume risk and act on their plans without fear of reprisal if they did not produce the anticipated result. Finally, yielding constituted a kind of empowering leadership behavior, as described by Rousseau and Aubé (2020), as team members were encouraged to share their views and empowered to act upon them. These effects in concert stymied the threat of a failure to act (Frick et al., 2018) in the third phase of the revolutionary period.

In both instances, the particular alternative styles of conflict management that were adopted during revolutionary periods were contingent on the threats and potential failure points that were brought about by each team's unique revolutionary period. As such, C1 indicates that the contingency theory of conflict management, which asserts that conflict is quasi-functional and that post-conflict outcomes are dependent on the suitability of the conflict management style used and the unique set of conditions that exist (Behfar & Thompson, 2007; Shaw et al., 2011), appears to hold in revolutionary periods.

The quality of outcomes during the revolutionary period was not a consequence of an objective quality of the conflict management style that each utilized, but rather the appropriateness of that style with regards to the threats that they were facing. For Team 2, those threats were the rejection of a new strategy during the planning phase and premature termination of the strategy during the action phase. These were effectively prevented through the application of dominating and avoiding conflict management until the idea had demonstrated sufficient fitness and proliferated as a new, generally accepted ideological taxon. For Team 1, those threats were voluntary dissolution of the team as well as the perpetuation of poor information sharing during the situation assessment phase as well as low engagement and a failure to act during the action stage, each of which was prevented through yielding on the part of the team's leader.

One may have anticipated that collaboration, with the substantial body of research demonstrating its broad affective and productive benefits, would predominate during revolutionary periods. The findings here, however, suggest that teams in a revolutionary period are indeed in a far from equilibrium state where they move “away from the repetitive and the universal to the specific and unique” (Prigogine et al., 1984, p. 13). Collaboration may be a near universally beneficial approach to conflict management, but the findings here indicate that revolutionary periods call for specific and unique adaptation of conflict management processes as teams index towards styles that confer unique advantages aligned to the threats they face. This is further evidenced by the fact that both teams incrementally reduced the utilization of these styles of conflict management and converged on a predominately collaborative style as they transitioned back to periods of equilibrium. When they reached a point of sufficient stability and the repetitive and the universal were restored, so too was the predominance of collaboration in high-performing teams.

In addition, the findings and conclusions of this study indicate that the benefits of these conflict management styles may be amplified during revolutionary periods while their detrimental effects may be partially attenuated. According to Gersick (1991), revolutionary periods alter the manner in which cognition generates insights, the role of emotion within a system, and the system’s openness and willingness to make external contact. In the cases here, Team 1 was able to generate new insights within the broader organization through dominating, Team 2 was able to restore a positive emotional state through yielding, and both were able to accomplish these ends without the common adverse effects associated with these conflict management styles. While this may also be attributed to the artful application of these conflict management styles by each team, it provides a preliminary indication that Gersick’s (1991)

findings regarding cognition and emotion are acutely relevant when conflict management styles are considered.

There are practical implications in addition to the previously described scholarly and theoretical implications. Teams and team leaders who anticipate a revolutionary period, as well as those currently experiencing one, must attend to the emergent threats presented by those periods and adapt their conflict management styles in accordance with them. Rather than dogmatically applying a collaborative approach to conflict management because of its apparent superiority in addressing and resolving the repetitive conflicts that occur during periods of equilibrium, they must consider the unique, particular affective or productive advantages of alternative styles, whether that is dominating, avoiding, yielding, or compromising. More broadly, it behooves organizations to provide learning and development opportunities for leaders of teams where they can develop their skill in the domain of threat recognition and conflict management style adaptation.

Complexity in Conflict Management During Revolutionary Periods

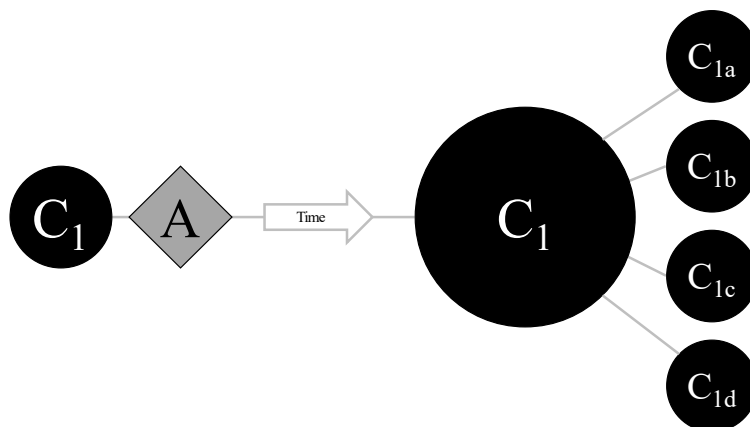
- Conclusion 2: Teams that successfully capitalize on the potential benefits of revolutionary periods reduce the complexity of their conflict management styles and incrementally restore complexity as they transition into periods of equilibrium.

As indicated in Figure 3, this conclusion is based on F3 and F5. Both teams transitioned to less complex conflict management processes in the early phases of their revolutionary periods, albeit in ways that were distinct from one another, and incrementally increased the complexity of their conflict management processes while installing, or restoring, a more complex style of collaboration as a normative style of conflict management when they transitioned into periods of equilibrium. The reduction in complexity encompassed both detail complexity, as the number of parties and the volume and richness of information exchange involved in conflicts decreased, as

well as dynamic complexity, as the volume of linear and non-linear causal relationships were reduced.

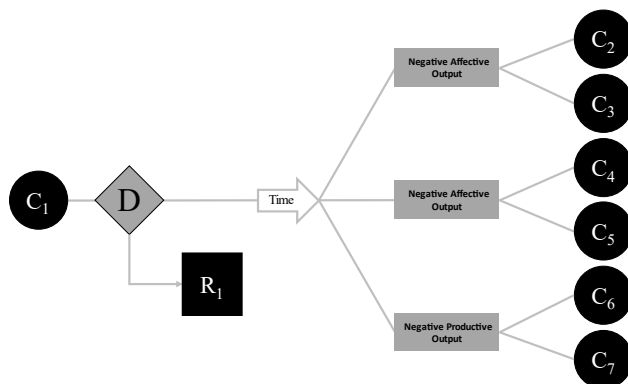
The fact that Team 1 displayed normative styles of avoiding and dominating conflict management prior to their revolutionary period ostensibly indicated that their conflict management process was low in complexity as avoiding allows for the immediate dissolution of a conflict through non-engagement while dominating allows for the immediate conclusion of a conflict through direct, decisive engagement. This, however, belies the complexity that existed. The complexity of Team 1's normative, pre-revolutionary period conflict management style is better understood when the conflict management process is reframed as a mediator in the IMOI model put forward by Ilgen et al. (Ilgen et al., 2005), rather than a discrete and isolated process executed to produce a singular, terminal outcome within the IPO model which served as the foundation for early research on teams (Mathieu et al., 2017).

As noted in Chapter 4, Team 1 operated in a manner that members described as both rigidly hierarchical and siloed prior to their revolutionary period. When misaligned interests or activities occurred within this structure, team members defaulted to avoiding or dominating. Avoiding was low in detail complexity, as information exchange and communication was effectively eliminated, but it was high in dynamic complexity as it allowed the crux of the conflict to compound upon itself over time and grow virtually intractable as it continued to fester. When these conflicts were eventually exposed and avoiding was no longer possible, the team was then thrust into an arduous process of confronting the branches that stemmed from the original crux of the conflict. The proliferation of pricing lists and the protracted process required to address them was archetypal of this process within Team 1. A simplified illustration of this process is presented in Figure 4.

Figure 4*Avoiding in Team 1*

Note. C_1 represents initial point of conflict, A represents application of avoidance, C_{1a} to C_{1d} represent latter conflicts which are associated with or emerged as a consequence of the lack of resolution in C_1 . Circle size is indicative of the magnitude of the conflict's impact.

In addition to avoiding, members occupying higher levels in the organizational hierarchy frequently asserted a dominating style of conflict management which produced negative productive outputs and poor decision quality as well as negative affective outputs including disengagement and self-censorship. While detail complexity was low due to unidirectional communication and refusal of further engagement, the negative externalities produced by individual conflict episodes then increased the dynamic complexity of the conflict management process as they served as inputs for later conflict episodes which were direct or indirect consequences of the aforementioned productive and affective outcomes. An illustration of this process is presented in Figure 5. Further, team members indicated that the dominating style of conflict management also occasionally failed to resolve the misalignment which gave rise to the original conflict. This then produced still more conflict episodes as additional sub-conflicts emerged similar to the consequences associated with avoiding which are illustrated Figure 4.

Figure 5*Dominating in Team 1*

Note. C_1 represents initial point of conflict, D represents application of dominating, R_1 represents the resolution of C_1 , C_2 to C_7 represent later conflicts which emerge as a consequence of the negative affective and productive output produced by dominating.

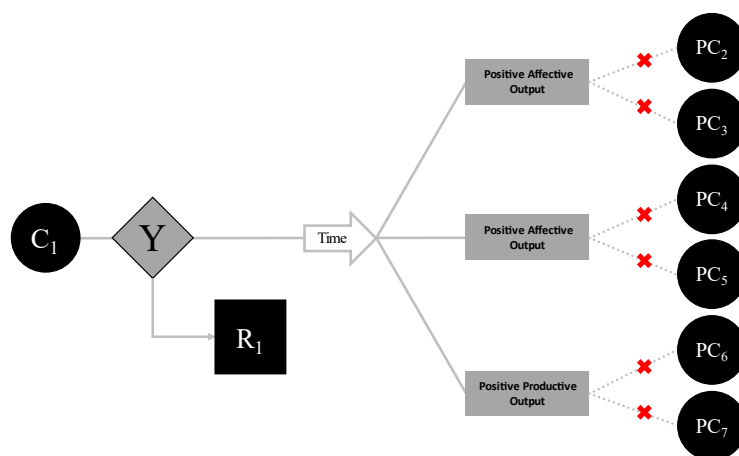
Initial attempts to implement collaboration as a normative style of conflict management prior to the arrival of COVID-19 produced the novel pattern of pseudo-collaborative avoidance. This pattern generated a similarly wide web of externalities. The initial misalignment persisted while the pseudo-collaborative exchange between team members created assumed alignment. This assumed alignment, when it was exposed as a faulty assumption, led to the emergence of negative affective outputs including negative sentiment between team members as well as a cascade of subsequent conflicts which consumed additional time as well as financial and cognitive resources. Pseudo-collaborative avoidance, therefore, constituted a process with high detail complexity, as efforts to collaborate involved a larger number of team members and a richer exchange of communication, as well as a high level of dynamic complexity as the direct and indirect causal relationships were manifold.

Team 1's transition to yielding as a predominate, normative pattern of conflict management in the initial stages of their revolutionary period cut down complexity by both reducing detail complexity in the individual conflict episode while generating positive

externalities which mediated dynamic complexity in the form of the later emergent conflict episodes. When yielding occurred, parties rapidly exchanged perspectives and a satisfactory resolution was reached as one party, usually the subordinate when the team leader was a party in the conflict, was empowered to pursue the ends they proposed through the means that they advocated. Detail complexity was limited as extraneous parties were not drawn into the conflict and the information exchange was relatively lean. In addition to closing the individual conflict episode with a satisfactory resolution through a low level of detail complexity, this produced a positive externality of expanded communication channels while generating the positive affective outputs of trust, perceived competence, mutual ingratiation, and feelings of potency which were discussed previously. Each of these then served to reduce dynamic complexity by pre-empting conflicts that were previously ubiquitous due to insufficient communication, mistrust, self-censorship, and disengagement. A simplified version of this process is illustrated below in Figure 6.

Figure 6

Yielding in Team 1



Note. C_1 represents initial point of conflict, Y represents application of dominating, R_1 represents the resolution of C_1 , PC_2 to PC_7 represent latter potential conflicts were prevented as a consequence of the positive affective and productive outputs produced by yielding.

Concurrent with the emergence of yielding as a normative pattern of conflict management, a low complexity version of collaboration was also implemented during the early phases of Team 1's revolutionary period. These rapid bouts of information exchange and ideation were timebound and focused on the identification and selection of satisfactory solutions, thus limiting the detail complexity that is intrinsic to collaboration. These early efforts to integrate collaborating for conflict management further cultivated positive affective and productive externalities associated with yielding while improving the quality of decisions which resolved conflict episodes. Both of these, in turn, further reduced dynamic complexity by preempting additional associated conflict episodes.

As the revolutionary period transitioned into a renewed period of equilibrium, time pressure became less salient, and urgency receded. In parallel, collaboration grew in complexity as rapid bouts of limited information exchange and analysis of alternatives gave way to more exhaustive exchanges where a wider array of durable, optimal solutions was explored, analyzed, and selected. This style then became entrenched as Team 1's normative process for conflict management during the post-revolutionary period of equilibrium.

Team 2's normative, pre-revolutionary period conflict management mirrored Team 1's normative, post-revolutionary period process. A direct, systematic, and comprehensive process of collaboration was triggered when members of Team 2 surfaced an error or identified a point of conflict. Therein, team members exchanged information, solicited input from members with relevant expertise or perspectives, and critically evaluated alternatives before initiating a course of action. While this process was high in detail complexity, as it often required multiple cycles of divergent and convergent dialog, it was conducted with an explicit intention of improving decision quality and reducing the likelihood of later conflicts, thus reducing dynamic complexity.

Unlike Team 1, who experienced a high level of dynamic complexity in their pre-revolutionary period conflict management process due to negative externalities produced by conflict management styles with low detail complexity, Team 2 willfully embraced a bounded level of detail complexity because of its capacity to reduce the dynamic complexity generated from faulty conflict management processes which produce the kind of negative externalities seen in Team 1 during their pre-revolutionary period.

Changes in the source and substance of conflict during their revolutionary period, as well as changes in the structural composition of the team and its relationship to the broader organization, were associated with a rapid reduction of both the detail and dynamic complexity of conflict management through the adoption of dominating and avoiding. Collaboration was retained as a predominate style of conflict management in the early stages of their revolutionary period, but the level of detail complexity was also reduced in a way that mirrored the early form of collaboration in Team 1, and collaboration no longer stood as a habitual response as defined by Gersick and Hackman (1990). Team 2 also integrated a new approach to conflict management where a small subset of central members circumvented conflicts with peripheral members through avoidance or confronted them through dominating. The consolidation of conflict to central members reduced detail complexity by limiting the parties involved in a conflict episode, while the use of avoiding reduced detail complexity by decreasing the quantity and richness of communication between members of Team 2 and the peripheral team members involved in the conflict. A certain level of detail complexity, however, was unavoidable when dominating took the form of convincing. Repeated bouts of rich communication with senior stakeholders were required to effectively articulate the value of the team's proposed strategies, but this detail complexity was associated with a reduction in dynamic complexity as successfully persuading

these stakeholders pre-empted later conflicts with problematic peripheral team members. Avoiding, which is intrinsically low in detail complexity, was also low in dynamic complexity in this instance because the latter conflict episodes that were potentiated by the application of this style were mitigated by the parallel application of dominating conflict management.

The integration of this new approach, which reduced detail complexity associated with conflicts with peripheral team members by consolidating it to a subset of central members engaged in a mix of dominating and avoiding, was seamless in part because the team's leadership had secured the team's trust prior to the onset of the revolutionary period. Further, team members broadly held stable shared mental models that were developed through extensive collaboration and long-standing relationships. Finally, the team had established rich webs of communication channels between team members that allowed for the rapid restoration of shared mental models if or when they were fractured throughout the revolutionary period. These antecedents empowered the sub-group to act decisively and expeditiously in the face of the urgent threats the team faced and eliminated the need to engage in constant cycles of communication with the broader team. This, in turn, limited the detail complexity associated with this approach. As these threats were resolved, or at a minimum reduced in urgency, the team incrementally restored the complex process of collaboration that served them well in the pre-revolutionary period. When Team 2 reached a renewed period of equilibrium, complex collaborative conflict management was once again entrenched as a normative, habitual process.

Each team's transition to lower complexity processes for conflict management in the early stages of their revolutionary periods provides broad support for SAT (Johnson et al., 2006). Their respective transitions were qualitatively distinct, with Team 1 engaging in yielding and a timebound style of collaboration while Team 2 moved to avoiding and dominating, but the

behavior of both teams was in accordance with a central thesis of SAT which asserts that systems readily transition to states of lower complexity when they confront substantial changes in their environment (Johnson et al., 2006). The findings of the current study also support the conclusion of Hollenbeck et al. (2011) who found that teams readily transition to more loosely coupled decision structures without performance degradation.

In Team 1, decision making became more loosely coupled through yielding and team wide collaboration. This led to a shift in the locus of decision making as it moved toward a flat structure that was in stark contrast to the state of affairs prior to the team's revolutionary period where the locus of decision-making was concentrated at the peak of the hierarchy and occasionally disbursed to decentralized siloes. In Team 2, decisions regarding the appropriate approach to conflict management with peripheral team members were removed from the tight coupling of teamwide collaboration and placed in the remit of a subset of central team members. The success of Team 2's particular form of loose coupling also appears to have been mediated by the pre-existing shared mental models and robust communication patterns within the team. This parallels the study by Johnson et al. (2006) where both information sharing and coordination mediated the relationship between reward structure and decision speed and accuracy. Johnson et al. (2006) found that teams that transitioned from cooperative to competitive reward structures retained their communication patterns after their transition in reward structure which produced this mediator. Similarly, the subset of Team 2 entrusted with managing conflicts with peripheral team members retained the teams previously developed shared mental models, or shared information, as well as the robust communication patterns that allowed for explicit coordination in instances that required it.

The qualitative features of each team's lower complexity styles of conflict management, and the reduction of detail complexity, also align with previous research. This includes Lei et al. (2016), Zijlstra et al. (2012) and Stachowski et al. (2009) who found that teams that are engaged in non-routine tasks exchange more simple, unidirectional communication as opposed to complex, reciprocal patterns that occur in the face of more routine tasks. The results of the present study indicate that these communication patterns are generalizable to communication that occurs in conflict episodes, as exchanges during the early stages of revolutionary periods were described as more succinct than those that occurred in periods of equilibrium.

The incremental emergence of complex forms of collaboration as a normative approach to conflict management in Team 1, and the incremental restoration of collaboration as the normative style in Team 2 following the revolutionary period, once again indicates that collaborative conflict management is a broadly productive team norm. As stated in the review in Chapter 3, it is not a panacea. Further, it is acutely contextually mediated during revolutionary periods, as discussed in the previous section, but the positive affective and decision quality benefits highlighted by members from both teams in the present study indicate that it is likely advantageous for teams to hold complex styles of collaborative conflict management as a normative approach to conflict during periods of equilibrium. Conclusion 2, however, indicates that revolutionary periods may not be the optimal time for teams to adopt complex collaboration as a normative approach to conflict management. Instead, the conflict management styles adopted by both teams helped to create or maintain antecedents of collaborative styles of conflict management including trust, stable and reliable channels for open and reciprocal communication, feelings of affiliation and collegiality, and team level efficacy and potency. Revolutionary periods appear to offer fertile ground for the cultivation of antecedent conditions for processes to

take root which are broadly adaptive during periods of equilibrium. This is an important consideration for future team development research.

Practitioners who are engaged in the leadership of, or participation in, teams experiencing a revolutionary period would likely benefit by adopting two behaviors related to this conclusion. The first is an assessment of the relative complexity of the team's conflict management processes with an audit to determine opportunities to decrease that relative level of complexity during the initial phases of their revolutionary period. This may include the adoption of alternative styles, modifications to the qualitative features of existing styles of conflict management within the team or shifting the locus of decision making to increase the relative degree of consolidation in the conflict management process among a subset of the team's members. The second is an assessment of the effects of these changes with regards to their impact on antecedent conditions for collaborative conflict management. If the team aims to both navigate the revolutionary period effectively and deliver high performance in the ensuing period of equilibrium, it must tend to these antecedent conditions and ensure temporary adaptations in conflict management processes contribute to the adoption of durable and productive norms which include collaborative conflict management.

Gould (2007) cautioned that understanding change requires understanding stasis, and the conclusion put forward by the present study indicates that effective leadership during revolutionary periods requires consideration of the leadership that was present in the preceding period of equilibrium. In instances where a dearth of effective leadership causes the degradation of trust and relationship quality between members and a low level of engagement, as was the case in Team 1, leadership practitioners may be constrained in the qualitative changes that are available to them as they seek to reduce complexity in conflict management processes. Whereas

instances where the presence of highly effective leadership leads to trust, high quality dyadic relationships, and a high level of engagement, as was the case in Team 2, the whole spectrum of qualitative changes are available as the team seeks to reduce complexity in conflict management processes.

To expand the repertoire of qualitative changes available to them, leaders ought to actively cultivate the antecedent conditions that were present in Team 2 prior to the onset of their revolutionary period and those that were rapidly generated within Team 1 at the dawn of their respective revolutionary period. Most acute in the present example, those antecedent conditions include high quality dyadic relationship like those emphasized in Leader Member Exchange Theory (Dansereau et al., 1975), trust engendered by the unambiguous demonstration of values as emphasized by Bennis and Nanus (1986) conceptualization of Transformational Leadership, and a high level of individualized consideration for each team member as emphasized in Burns' (1978) original framework of Transformational Leadership. Further, when faced with a revolutionary period, the leadership in both cases demonstrated the value of Spears' (1998) characteristics of Servant Leadership, most acutely listening, empathy and healing in Team 1 and persuasion, stewardship, and foresight in Team 2. Leadership in each team also demonstrated behaviors consistent with Heifetz' (1998) notion of creating a holding environment within conflict episodes where they were able to regulate the emotional and cognitive pressures intrinsic to adaptive challenges. In sum, practitioners can glean guidance from these cases for leadership both during periods of equilibrium, as well as revolutionary periods.

Limitations

Chapter 3 enumerates the inherent limitations within the studies design, but in the execution of the research and the subsequent analysis of the data that was collected, additional limitations became apparent that warrant acknowledgement.

Term Denotation and Connotation

First and foremost, the most immediately apparent limitation which was not fully recognized prior to the initiation of this study was the volume and diversity of definitions held for the core concepts that were of interest as well as the durability of those definitions. Irrespective of the clarity or precision of the definition of terms for ‘team’ or ‘conflict’, and irrespective of the frequency with which those definitions were relayed to participants, these terms carried durable connotations that participants held throughout the data collection process. Future qualitative studies in this area would benefit from an even greater degree of advanced clarification with participants.

Temporal Proximity

Second, increased temporal proximity to the transformational periods in question may have produced some benefit with regard to the clarity and fidelity of participants’ recollections regarding individual conflict episodes. While participants were capable of quickly and consistently indicating normative patterns of conflict management behavior during different time periods, and many were able to identify individual instances or infrequent patterns of behavior that differed from those normative patterns, they occasionally struggled to recall events in a way that would allow for the kind of rich, thick description that is desired. This limitation, however, is acceptable as the individual conflict episodes were not the central focus of the research.

Rather, they were a mechanism that was used by the participants and the researcher to illustrate or vivify the more abstract normative patterns of behavior.

Video Conferencing as a Medium for Data Collection

Third, the video platform utilized during the research may have had a direct impact on the cognitive processes of participants in a way that was not anticipated prior to the execution of the study. Research by Brucks and Levav (2022) demonstrated that the use of videoconferencing platforms impairs the ability to generate creative ideas. The suppression of creative idea generation was attributed to the physical nature of the communication medium, as the focus on a screen prompts a narrower cognitive focus. This narrowing of cognitive focus may also be linked to the aforementioned limitation of durable connotations for key terms.

Participant Recruiting

Fourth, the researcher was not able to accrue data from every member of either of the two teams. In each case, a single team member declined to participate. In each of these instances, the team members who opted not to participate also opted not to provide specific reasons for their decision. The impact of additional data likely would have been marginal, as the data reached a point of saturation as accrual progressed in each case, but it is possible that these individuals may have offered wholly divergent perspectives that could have had an impact on the findings of the study. These perspectives, however, likely would have been contained to that individual's perceptions of the volume or type of conflict, as the descriptions of normative patterns of behavior pertaining to the conflict management process, as well as individual conflict episodes, were consistent across participants.

Recommendations For Future Research

This study contributed to closing the gap in longitudinal research within the conflict management and team development literature, but a number of gaps persist. The findings and conclusions of this study illuminate multiple potential areas of inquiry across each segment of the overlapping domain framework developed by Mathieu et al. (2017). The opportunities identified in the following sections are by no means exhaustive, but they are indicative of the volume, variety, and value of research that can and ought to emerge in the future as these bodies of literature continue to mature.

Personality Diversities

The role of individual personality or psychometric profile was alluded to, or directly referenced, by the majority of study participants. There is an opportunity to build on the findings from the present study by examining the impact, if any, that individual personality traits or team level aggregates might have on the modification of team conflict management processes over time. Similar to the work of Yu et al. (2023) which examined the impact of group level status acuity using both minimum compositional models and additive compositional models on status conflict within groups, this new vein of research could consider the impact of group level openness as defined by Costa and McCrae (1992) on the degree to which teams adapt their conflict management processes over time, and the performance impact of those adaptations.

Demography Diversities

Similarly, the role of demography was alluded to, or directly referenced, by the majority of participants in Team 2. The effect of demography that was brought to the fore and hypothesized by study participants in this case was the impact of age on conflict management styles. Specifically, it was associated with the generally conciliatory and collaborative approach

that was adopted before, during, and after the revolutionary period. Future research could examine this potential connection, or the role of heterogeneity or homogeneity team member's generations, as well as the role of other team and individual level demographic characteristics ranging from the homogeneity or heterogeneity of national culture as defined by Hofstede (2001) or gender and ethnic diversity.

Functional Diversities

Both team one and team two were comprised of cross-functional resources. This heterogeneity in functional area stands in contrast to individual teams situated within a single function in an organization. Future research may utilize either an embedded case study design or a multi-case study design to analyze functional homogenous teams, for instance, a set of sales teams within a single organization or across multiple organizations within a similar industry, and how they adapted their conflict management processes during revolutionary periods.

Member Ability

Member ability was not empirically evaluated in this study, but participants indicated that high member ability was but an antecedent to interpersonal trust as well as an independent variable that impacted how conflicts were managed before, during, and after revolutionary periods. Both teams, however, indicated that they were comprised of high-performing members. As a consequence, there is an opportunity to examine if there is any discrepancy between the teams in this study and low-performing teams, or those with individual members who are poor performers. Low ability could be examined either empirically via external organizational performance metrics, or strictly based on team members' perceptions.

Team Performance

The two teams in the present study entered their revolutionary periods with widely divergent performance levels. Team 1 was experiencing a turnaround in performance after an extended period of relatively poor returns, while Team 2 was performing well within the markets that they operated in and was in the midst of an extended period of incrementally increasing revenue. Future research may continue to examine the variation in how high-performing and low-performing teams modify their conflict management processes when faced with revolutionary periods. Future research may also explore if there is any variation caused by positive or negative performance trajectories in the period of time leading up to the revolutionary period.

Trigger Type

Temporal triggers initially gave rise to the PE theory, and the two teams that were analyzed in the present study experienced external triggers that were non-temporal external triggers which had the effect of increasing complexity within the system. The model of triggers presented by Rico et al. (2019) demonstrates that there is an opportunity to examine teams that are exposed to triggers that decrease complexity within the system and analyze the subsequent effect, if any, that it has on the conflict management process within the team during the revolutionary a universally generalizable qualitative change in conflict management styles in teams that effectively capitalize on the potential benefit of revolutionary periods, supports one of the core facets of the theory of PE put forward by Gersick (1988, 1989, 1991). The lack of universality in qualitative changes supports both the notion that revolutionary periods constitute far from equilibrium states where things “move away from the repetitive and the universal to the specific and unique” (Prigogine et al., 1984, p. 13) as well as the contingency theory of conflict

management as the outcomes produced by each team were acutely contextual. The second, relating to the reduction of complexity in conflict management in the early phases of a revolutionary period followed by an incremental restoration of complexity as the team segues into a period of renewed equilibrium, supports SAT (Johnson et al., 2006) and the notion that systems readily transition for states of higher complexity to states of lower complexity. Beyond these broad theoretical implications, the conclusions of this study have practical value as those engaged in leadership positions in for profit teams can use them to guide action through acute adaptations to conflict management styles in the face of a revolutionary period, the proactive cultivation of antecedent conditions for these adaptations and the integration of collaborative conflict management, and a continuous analysis of the detail and dynamic complexity of their conflict management processes. All of these conclusions, however, come with the recognition of the inherent limitations of the research methodology and approach as well as the emergent limitations that were identified in the execution of this study. Further research is required to validate or build upon the conclusions produced by this exploration.

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APPENDIX A

INVITATION TO PARTICIPATE

Dear [name],

My name is Cody Thompson, and I am a doctoral candidate in the Graduate School of Education and Psychology at Pepperdine University. I am conducting a research study examining conflict management in teams and you are invited to participate in the study. If you agree, you are invited to participate in a brief interview.

The interview is anticipated to take no more than 1 hour, and it will be conducted via Zoom.

Participation in this study is voluntary. Your identity as a participant will remain confidential during and after the study. All identifiable information will be removed from interview transcripts, and all data will be stored securely in an encrypted, password protected thumb drive.

You can find an Informed Consent form attached to this email which answers common questions and outlines your rights as a participant.

If you have questions or would like to participate, please contact me at cody.thompson@pepperdine.edu.

Thank you for your participation,
Cody Thompson
Pepperdine University
Graduate School of Education and Psychology
Doctoral Candidate

APPENDIX B

INTRODUCTION AND INFORMED CONSENT



Introduction and Informed Consent

IRB#: 21-06-1612

Study Title: Proper Punctuation: An Exploration of Changes in Conflict Management Processes During Revolutionary Periods in Teams

Study Personnel:

Principle Investigator: Cody Thompson, Ph.D Student. Email:

Phone:

Hello,

My name is Cody Thompson, and I am a Ph.D Student at Pepperdine University. I am currently conducting research for my dissertation, and I would like to humbly invite you to consider participating in the study. The study will explore how teams manage conflict during times of dramatic change, and your participation would be invaluable. Participation is completely voluntary, all identifiable information will be removed, and confidentiality will be strictly maintained throughout. Further information is provided in a FAQ format below, and I am available at any time if you have any further questions.

What is the purpose for this study?

Every team experiences conflict, and the way they manage that conflict is critical to both the team's success and the experience of each individual team member. This study will explore how teams modify their conflict management strategies over time, and how, if at all, they change the way they manage conflict when they are confronted with periods of dramatic change.

Why am I being contacted to participate?

Your team recently underwent a period of significant change, and it did so in a way that it continued to accomplish its goals. This study hopes to learn more about how your success was shaped by your collective experience managing conflict.

What will be required of me as a participant?

Participation entails a single interview which will be scheduled at your convenience and conducted via Zoom. The interview will take no longer than 60 minutes to complete.

What are some of the possible negative effects of participation?

Outside of the potential for normal day-to-day feelings like boredom or fatigue, we do not foresee any negative effects.

What are some of the possible benefits for me?

The process of participation may be cathartic and offer you an opportunity to talk with an interested, and unbiased interviewer about your experiences during a time of significant change within your team. Further, participation may afford some benefits to your ability to function as a good team member, as it will provide an opportunity for you to reflect and learn from your experiences. Finally, the researcher will make themselves available after the completion of the study and will provide coaching on effective conflict management, if that is desired by the participant.

How will my information be protected?

Your responses will be anonymized, and all identifying information will be removed. Your identity will only be known to the researcher. Interview recordings, notes, and transcriptions will be stored on a password protected, encrypted external drive which will be stored in a locked cabinet in the researcher's home. This data will be stored for three years, and it will then be permanently destroyed. In the researcher's final report, pseudonyms will be applied for you and your organization, and all potentially identifiable information will be removed.

What are my rights as a participant?

You have the right to be fully informed about the study's purpose and about the involvement and time required for participation, the right to confidentiality and anonymity, the right to ask questions to the investigator, the right to refuse to participate without any negative ramifications, the right to refuse to answer any questions, and the right to withdraw from the study at any time. If you ever have a question or concern that is pertinent to the study, I encourage you to reach out to me directly at any time via email at , or by phone at .

If you have any additional questions concerning your rights as a research participant, you may also contact the Pepperdine Institutional Review Board (IRB) by email at gpsirb@pepperdine.edu, or by phone at .

What if I decide I do not want to participate, or I no longer want to participate after I have started?

You may withdraw as a participation at any point before, during, or after the research. You may withdraw for any reason, and your withdrawal will not have an adverse effect on you, your employment, your relationship with the researcher, or with Pepperdine University. You will retain all of the rights that were outlined above.

Documentation of Informed Consent

You are voluntarily electing to either participate, or not participate, in this study. Scheduling your interview with the researcher will constitute your informed consent to participate. You should print a copy of this page for your records.

APPENDIX C

IRB APPROVAL

Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: August 25, 2021

Protocol Investigator Name: Cody Thompson

Protocol #: 21-06-1612

Project Title: Proper Punctuation: An Exploration of Changes in Conflict Management Processes During Revolutionary Periods in Teams

School: Graduate School of Education and Psychology

Dear Cody Thompson:

Thank you for submitting your application for expedited review to Pepperdine University's Institutional Review Board (IRB). We appreciate the work you have done on your proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

Based upon review, your IRB application has been approved. The IRB approval begins today August 25, 2021, and expires on August 24, 2022.

The consent form included in this protocol is considered final and has been approved by the IRB. You can only use copies of the consent that have been approved by the IRB to obtain consent from your participants.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and will require a submission of a new IRB application or other materials to the IRB. If contact with subjects will extend beyond August 24, 2022, a continuing review must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite the best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete written explanation of the event and your written response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at community.pepperdine.edu/irb.

Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, Ph.D., IRB Chair

cc: Mrs. Katy Carr, Assistant Provost for Research

Pepperdine University
24255 Pacific Coast Highway
Malibu, CA 90263
TEL: 310-506-4000

NOTICE OF APPROVAL FOR HUMAN RESEARCH

Date: September 19, 2022

Protocol Investigator Name: Cody Thompson

Protocol #: 21-06-1612

Project Title: Proper Punctuation: An Exploration of Changes in Conflict Management Processes During Revolutionary Periods in Teams

School: Graduate School of Education and Psychology

Dear Cody Thompson:

Thank you for submitting your application for continuing review to Pepperdine University's Institutional Review Board (IRB). The IRB appreciates the work required for this IRB application. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 (Research Category 7) of the Federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

Based upon review, your IRB application has been approved. The IRB approval begins today September 19, 2022, and expires on September 18, 2023.

The consent form included in this protocol is considered final and has been approved by the IRB. You can only use copies of the consent that have been approved by the IRB to obtain consent from your participants.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit an amendment to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and will require a submission of a new IRB application or other materials to the IRB. If contact with subjects will extend beyond September 18, 2023, a continuing review must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

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Please refer to the protocol number denoted above in all communication or correspondence related to your application and this approval. Should you have additional questions or require clarification of the contents of this letter, please contact the IRB Office. On behalf of the IRB, I wish you success in this scholarly pursuit.

Sincerely,

Judy Ho, IRB Chairperson

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives

Mr. Brett Leach, Regulatory Affairs Specialist

APPENDIX D
INTERVIEW PROTOCOL

Question
<ul style="list-style-type: none"> • <i>Can you tell me a little about your team, anything you think would be useful for me to know?</i>
<ul style="list-style-type: none"> • <i>Conflict is broadly defined as an instance when two or more people have incompatible interests, opinions, or behaviors. Prior to [x], when a conflict occurred, how would the team tend to handle it?</i>
<ul style="list-style-type: none"> • <i>Prior to [x] did the team or individual members ever change the way they handled conflict, and if they did, what changes occurred and why do you think it changed in this way?</i>
<ul style="list-style-type: none"> • <i>What positive or negative impact, if any, do you think your team's conflict management process had on your team's overall performance prior to [x]?</i>
<ul style="list-style-type: none"> • <i>Immediately after [x], or as it was unfolding, how would the team tend to handle it conflicts?</i>
<ul style="list-style-type: none"> • <i>What impact, if any, do you think this had on your team's overall performance immediately following [x]?</i>
<ul style="list-style-type: none"> • <i>In the [days, weeks, or months] that followed [x], did the team or individual members change the way they handled conflict? If they did, what changes occurred, when did these changes occur, and why do you think they changed in this way?</i>
<ul style="list-style-type: none"> • <i>What positive or negative impact, if any, do you think your team's conflict management process had on your team's overall performance in the [days, weeks, or months] that followed [x]?</i>