JOB SATISFACTION AND SUPPORTIVE LEADERSHIP DURING ORGANIZATIONAL MERGER – A LONGITUDINAL, ORGANIZATIONAL LEVEL STUDY

A key component of leadership is leading change, and yet theoretical and empirical research has overlooked the dynamic role of leadership during organizational mergers. Because the integration of companies often decreases job satisfaction within the workforce, we argue that supportive leadership of line managers becomes especially important in reducing the negative impact of the change process. Importantly, we predict that dynamic changes in supportive leadership levels are key to employee adjustment. We test our prediction in the context of multiple National Health Service (NHS) primary care trust mergers, which took place in 2006. We analyzed the annual staff surveys of employees and compared merging organizations with non-merging organizations longitudinally (years 2005 and 2007). As expected, employees of organizations experiencing (vs. not experiencing) a merger showed lower job satisfaction in the period of the merger. Furthermore, increases in supportive leadership levels during the merger period were associated with less decrease in workforce job satisfaction. Thus, results indicate that dynamic changes in leadership rather than static levels of leadership buffer against decreases in job satisfaction.

Keywords: Organizational merger; supportive leadership; buffering; adjustment; longitudinal analysis
Merger and acquisition (M&A) activities are a key strategic tool for many organizations to achieve economies of scale, diversification, and economic growth (Ellis, Reus, & Lamont, 2009). While economic and strategic goals are primary in mergers, M&A activities often result in rather low levels of employee job satisfaction (Amiot, Terry, Jimmieson, & Callan, 2006; Raffety & Restubog, 2010; Schweiger & DeNisi, 1989) – jeopardizing the strategic goals of the organization (Giessner, Ullrich, & van Dick, 2012). While this human side of the merger may explain why M&A activities often do not meet the strategic objectives (Marks & Mirvis, 2001), low job satisfaction within the organization is an organizational problem in itself deserving research attention (Spector, 1997). While a lot of research has provided important insights in understanding employee reactions toward M&A (Cartwright, 2005; 2016; Hogan & Overmyer-Day, 1994), previous research has largely neglected both the longitudinal aspect of this change process (Amiot et al., 2006) and the impact leadership has on such a severe change process (Giessner, Horton, & Humborstad, 2016; Sitkin & Pablo, 2005). This is surprising given that time both are essential variables within organizational change. Consequently, the current research fills this gap and offers a dynamic perspective of leadership during organizational mergers.

Given the uncertainties and stress of M&A for the workforce (Giessner et al., 2016; Schweiger & DeNisi, 1991; Terry, Callan, & Sartori, 1996), it seems obvious that leaders have a pivotal role to manage and lead their employees especially during the M&A process. Providing support during stressful events is an effective way to increase well-being and job satisfaction in
organizational contexts (Cohen & Wills, 1985; Rhodes & Eisenberger, 2002). Indeed, supportive leadership (i.e., showing consideration, acceptance, guidance and concern for the feelings of others) has been shown to be a positive antecedent of employee job satisfaction (Eisenberger et al., 2002; Rafferty & Griffin, 2006b). Consequently, supportive leadership should be of central importance during M&A integration – a time in which employees feel generally less support from their organization due to the stress and uncertainties associated with these dramatic organizational changes (Maguire & Phillips, 2008; Schweiger & DeNisi, 1991). As organizational mergers are dynamic in nature, leadership has to be understood as a dynamic process in which the amount of leadership support can vary over time. While managing the change is often defined as the core responsibility of leaders (Yukl, 2010), current approaches to leadership to change, and M&A more specifically, have not yet addressed such a dynamic leadership perspective. Is it better to receive high levels of supportive leadership before the merger in order to cope with changes due to the merger? Or does leadership need to adjust over time to compensate for the uncertainty experienced? Consequently, the current paper conceptualizes leadership as both (a) a pre-merger buffer for the dynamic change adjustment and (b) a dynamic leadership adjustment over time that may compensate for the uncertainties and stress experienced due to the merger. We aim to contrast these different leadership processes on employees adjustments to the changes implied in the merger.

To date, researchers have not paid attention to both the dynamic role of leadership and the dynamic nature of organizational mergers. The current research fills this gap by first providing a new dynamic perspective of leadership during organizational merger. In doing so, we integrate literature on the human side of mergers (Cartwright, 2005; Giessner et al., 2016; Hogan & Overmyer-Day, 1994; Schweiger & DeNisi, 1991) and literature on perceived
supervisor support (Cohen & Wills, 1985; Eisenberger et al., 2002; Rhodes & Eisenberger, 2002; Sitkin & Pablo, 2005) and extend previous literature by considering dynamic changes in leadership over time. Second, we extend previous research on leadership during organizational mergers by not only focusing on employees within merging organizations, but contrasting them with employees from non-merging organizations within the same organizational context and time period. This enables us to test how far supportive leadership is of central importance in times of severe organizational change due to a merger. To our knowledge, this is the first study providing such data and thus enabling us to understand the importance of leadership during mergers (vs. non-merging situations). Finally, the comparison of merger versus non-merger context allows us to answer an additional central question about the human side of the merger – are declines in job satisfaction due to the merger itself or due to the environmental condition (e.g., market deregulation or industry shocks; Andrade, Mitchell, & Stafford, 2001). Previous research on the human side did not provide evidence that changes in job satisfaction are due to the specific organizational change. Our study addresses this gap and provides first empirical data for this question. Finally, we outline the important theoretical and practical implications for human resource management of organizational mergers and leadership in more general.

JOB SATISFACTION AND SUPPORTIVE LEADERSHIP DURING M&A

Job satisfaction and the dynamics of M&A

While most of the previous research on mergers has focused on financial and strategic aspects (Datta, 1991; King et al., 2004), an increasing number of researchers acknowledge the softer side of the merger as a key to success (Cartwright, 2005; Hogan & Overmyer-Day, 1994). Organizational mergers often create significant uncertainty (Marks & Mirvis, 2001; Rafferty & Restubog, 2010), increase the feeling of a loss of identity (Elstak, Bhatt, Van Riel, Pratt, &
Berens, 2014; Giessner et al., 2016; Ullrich, Wieseke, & van Dick, 2005), may lead to degradation of power and status (Hambrick & Cannella, 1993; Hogg & Terry, 2000), and heighten conflict within the workforce (Buono & Bowditch, 1989; Weber & Camerer, 2003). This is due to the often complex integration processes (Marks & Mirvis, 2004; Shrivastava, 1986) which are challenging employees ability to adapt to the changing job characteristics (Newman & Krzystofik, 1993), changing organizational identity (Giessner, 2011; Terry, 2001) and the cultural clashes involved in the merger situation (Nahavandi & Malekzadeh, 1988; Stahl et al., 2005). As a result, large-scale organizational changes such as organizational mergers seem to reduce job satisfaction of the workforce (Buono & Bowditch, 1989; Rafferty & Griffin, 2006a; Rafferty & Restubog, 2010; Schweiger & DeNisi, 1991).

Job satisfaction is the degree to which employees like their jobs (Spector, 1997). It is an indicator of emotional well-being or psychological health. Hence, job satisfaction is a central indicator of employees’ adjustment to organizational change processes evoked by the merger (cf. Amiot et al., 2006; Schweiger & DeNisi, 1991). Further, job satisfaction is one of the most reliable predictors for individual and organizational level performance (Judge et al., 2001; Ostroff, 1992) and employee health (Fischer & Sousa-Poza, 2009). Beside this, for pragmatic and humanitarian reasons, attaining high levels of job satisfaction is an important goal for organizations in itself (Locke, 1969; Spector, 1997). Therefore, proper management of employees’ levels of job satisfaction during organizational mergers is a central part of a successful integration management (Larsson & Finkelstein, 1999; Schweiger & DeNisi, 1991; Shrivastava, 1986).

Previous research on the psychological adjustments of employees during organizational mergers focused predominately on cross-sectional research designs that do not address the
dynamic nature involved in the merger process. Only a few studies addressed the longitudinal, dynamic nature of organizational mergers (Amiot et al., 2006; Amiot, Terry, & Callan, 2007; Gleibs, Mummendey & Noack, 2008; Kavanagh & Ashkanasy, 2006; Rafferty & Restubog, 2010; Schweiger & DeNisi, 1991). These studies show that employees work attitudes and feelings are indeed changing over time. However, most of these studies looked at changes only after the official announcement of the merger itself (Amiot et al., 2006, 2007; Gleibs et al., 2008; Kavanagh & Ashkanasy, 2006; Rafferty & Restubog, 2010). An exception is Schweiger & DeNisi (1991) who conducted a longitudinal study in a merger of Fortune 500 companies within the light manufacturing industry. Questionnaires were distributed to the employees 4 weeks before the official announcement of the merger, two weeks after the merger, 25 days after the merger, and circa 4 month after the merger. Overall, results indicate a significant drop in job satisfaction over time. In contrast, however, a study of an airline merger by Amiot and colleagues (2007) measured job satisfaction 3 month after the major changes have been implemented and 2 years later. The data did not show any changes in the level of job satisfaction over time.

Consequently, while there are strong theoretical reasons to assume that organizational mergers might decrease job satisfaction over time, the longitudinal empirical data available indicate rather mixed findings. This might be due to other environmental factors influencing job satisfaction over time in organizations. Furthermore, decreases in job satisfaction might be explained not necessarily by the merger itself as a cause, but rather by the circumstances of the merger. More precisely, as mergers may be the result of more general changes in the markets (e.g., deregulations or industry shocks, Andrade et al., 2001), drops in job satisfaction might just be a reflection of market conditions. Previous research on organizational mergers did actually not
compare changes in psychological adjustment within a merging workforce with a non-merging workforce (Amiot et al., 2006; Schweiger & DeNisi, 1989). This, however, would be necessary to provide strong evidence for the disruptive nature of organizational mergers on the workforce. Further, considering a non-merging control group may also help to address the previous inconsistent findings, because no change on job satisfaction (as found by Amiot et al., 2006) might be actually represent a worse adjustment if levels of job satisfaction increase over time for a comparable non-merging workforce. We aim to address this gap and provide longitudinal field data that enable a comparison of changes in job satisfaction between organizations that merge with organization that do not merge in the same organizational context. In this way, we provide unique empirical evidence enabling us to draw the conclusion that organizational mergers indeed produce a decrease in job satisfaction within the workforce.

Hypothesis 1: Merging organizations will experience a decrease in job satisfaction relative to non-merging organizations within the same organizational context.

The dynamics of leadership during organizational merger – buffering and adjustment

Previous behavioral M&A research has investigated specific management strategies that can increase psychological adjustment of the workforce during the organizational merger. For instance, clear communication processes (Rafferty & Restubog, 2009; Schweiger & DeNisi, 1991), employee participation (Amiot et al., 2006), providing employees with a sense of continuity (Giessner, 2011; Ullrich, Wieseke, & van Dick 2005; van Knippenberg et al., 2001), fair treatment and fair outcomes (Amiot, Terry, & Callan, 2007; Citera & Rentsch, 1993; Citera & Stuhlmacher, 2001; Gleibs et al., 2008; Lipponen, Olkkonen, & Moilanen, 2004; Tyler & De Cremer, 2005; Monin et al., 2013), and positive employees’ change history (Rafferty &
Restubog, 2009) reduce stress and ambiguity during M&A and can, thus, increase job satisfaction.

Unfortunately, only a few scholarly or practitioner-focused research has focused on the actual role of leadership during M&A (Giessner et al., 2016; Sitkin & Pablo, 2005). This is surprising, given that “leading change is one of the most important and difficult leadership responsibilities” (Yukl, 2010, p. 296). Leading change is the essence of leadership (cf. Hollander, 1964) and significant organizational changes need leaders to mobilize the workforce (Kouzes & Posner, 1987). Therefore, it seems logical to ask for the role of leadership during organizational merger integration. The current paper addresses this exact research gap.

Organizational mergers may create job loss, reduce status, question organizational identities, create interpersonal conflicts and injustice perceptions as well as threat to self-esteem and well-being at work (Giessner et al., 2016; Hogan & Overmyer-Day, 1994; Hogg & Terry, 1998; Kavanagh & Ashkanasy, 2006; Marks & Mirvis, 2001; Meyer, 2001; Monin et al., 2013; Newman & Krystofiaq, 1993; Schweiger & Ivancevich, 1985). These significant personal consequences question employees’ global beliefs about their valuation by their organization. One influential framework to understand why and how leadership actually can help in such a situation is Organization Support Theory (OCT; Eisenberger et al., 1986, 1997; Shore & Shore, 1985) which supposes that employees form general beliefs about the degree to which they receive generally positive or negative support by their organization. While such significant organizational changes reduce these beliefs and hence employees’ job satisfaction (Shore & Tetrick, 1991), OCT argues that not only the organization itself is an important source of satisfaction in the workplace, but direct leaders’ (i.e., supervisors’) support as well. This is because direct leaders are perceived as agents of organizations and, as such, have to provide
direction and caring for their employees (Eisenberger et al., 2002; Meindl & Ehrlich, 1987). Furthermore, during organizational merger integration, they play a key role in communicating and supporting employees to integrate into the new organization (Sitkin & Pablo, 2005), because they are structurally close to employees compared to the top management of the organization (Huy, 2002). This proximal contact brings them into the position to react towards personal problems of employees and to spend the time necessary to support those employees during radical change processes (Huy, 2002).

Building on an OCT framework, the current research focuses on direct leaders (i.e., supervisors) and their degree of support (i.e., supportive leadership) during organizational merger. We define supportive leadership as behaviors that address the socio-emotional needs of employees and give directions and information in the work context. Previous studies addressing the role of leaders during organizational mergers or during more general organizational change processes and uncertainty indicate positive effects of leadership actions on employee adjustment during organizational merger. Some of these studies focused on either the role of transformational leadership style (Nemanich & Keller, 2007; Nemanich & Vera, 2009; Waldman & Javidan, 2009; Waldmann et al., 2001) or consideration (Covin et al., 1997). Both of these leadership styles included elements of responding to the socio-emotional needs of employees (cf. Rafferty & Griffin, 2006b). While transformational leadership also involves more visionary, inspirational elements, we focus in the current research purely on the supportive leadership dimension. This is because (a) visionary and inspirational leadership elements seem to be of more importance for top-management communication but to a lesser degree on middle manager level (Waldman & Javidan, 2009), (b) the framework of transformational leadership has recently been criticized with the suggestion to rather focus research on subcomponents of it (van
Knippenberg & Sitkin, 2013), and (c) the supervisors responses to the socio-emotional needs of employees seem to be of essential importance during radical change processes (Huy, 2002). Additionally, previous research also indicates a relationship between supportive leadership and job satisfaction (Terry et al., 1996).

A shortcoming of most previous merger research is that the dynamic, temporal dimension of mergers has been neglected despite calls for a more dynamic perspective on organizational change (Pettigrew, Woodman, & Cameron, 2001; Van de Ven & Huber, 1990) as well as on organizational mergers specifically (Cartwright & Cooper, 1994; Cartwright & Schoenberg, 2006; Seo & Hill, 2005). The few studies applying a longitudinal research methodology (Amiot et al., 2006, 2007; Gleibs et al., 2008; Fugate, Kinicki, & Scheck, 2002; Schweiger & DeNisi, 1991) do not address the dynamic aspects of leadership during organizational mergers. More specifically, previous research on leadership during organizational merger provide only cross-sectional data, which is unable to capture the dynamic changes in leadership and job satisfaction over time. Our current study addresses this limitation and focuses on the dynamic effects of leadership during organizational mergers.

Applying a dynamic perspective on leadership and organizational mergers requires a consideration of time as an essential part of theoretical reasoning and methodological measurement (cf. Pettigrew et al., 2001). While temporal perspectives and change are, often implicitly, included in the study of organizational merger, the factor time has rarely been included as a central theoretical variable (Gleibs et al., 2008). In the current research we argue that studying leadership during dynamic organizational changes offers two different perspectives on the role of leadership: a buffering and a compensation function of leadership.
The buffering function of leadership considers how fixed leadership levels within the organization before the actual merger is executed (i.e., supportive leadership levels at T1) might buffer against potential decreases in job satisfaction (i.e., T2-T1 levels of job satisfaction). Organizations likely differ in their levels of supportive leadership before an organizational merger actually takes place. The stress-buffering hypothesis (Cohen & Wills, 1985; Buunk, 1990) provides an explanation for this assumption. It suggests that social support may lessen the impact of negative consequences of stressors at work because social support will (a) prevent a negative response to a stressful event and (b) reduce negative feelings related to change process by providing a resource to solve problems. In context of organizational mergers, this implies that levels of supportive leadership before the actual change (i.e., T1) may lessen the negative impact of the change on job satisfaction (i.e., change in job satisfaction between T1 and T2). Direct supervisors are a central source of such social support, because they can potentially provide a sense of acceptance, security and efficacy to deal with situational demands such as changes in one’s task or changes in organizational identity (Sitkin & Pablo, 2005; Terry et al., 1996). Consequently, social support in the form of supportive leadership with an organization should be able to buffer against the stressor ‘organizational mergers’. Furthermore, the stress-buffering hypothesis suggests that social support has strongest effects under stressful situations (vs. non-stressful ones).

Based on the stress-buffering hypothesis and previous research we aim to extend these findings by predicting that supportive leadership levels (T1) should especially important for buffering against changes in job satisfaction over time (T2-T1) for employees within merging organizations compared to non-merging organizations, because the workforce of merging organizations experience more dramatic changes than non-merging workforces. Thus, our second
hypothesis relates to the buffering function of supportive leadership on dynamic changes in employees’ job satisfaction.

*Hypothesis 2: The stronger the pre-merger levels of supportive leadership, the less strong will be the decrease in job satisfaction over time. This effect will be especially pronounced for the merging (vs. non-merging) organizations.*

Second, the adjustment function of leadership provides a more dynamic perspective on leadership and implies a change in theoretical thinking about leadership. It should not be considered as a fixed encapsulation of a given situation prior the change but rather as temporal change over time (MacKenzie, 2000; Pettigrew et al., 2001). In other words, while the buffering function considers leadership as a static variable (i.e., whether supportive leadership is high or low prior the merger), the adjustment function considers the role of changes of leadership over time (i.e., whether supportive leadership changes during the merger integration phase). To our knowledge, this perspective has not been considered in previous literature although it reflects a central question for organizational mergers: How important are supportive leadership adjustments over time for actual employee adjustments during organizational mergers?

Organizational mergers represent radical change processes that potential decrease job satisfaction of the workforce over time (Schweiger & DeNisi, 1989; Terry et al., 1996). As this is a dynamic process, we argue that supportive leadership needs to adapt to this new situation by increases of supportive leadership over time within the organization (i.e., positive changes in levels of supportive leadership between T1 and T2). While OCT does not explicitly address the temporal dimension, our argument is in line with it (Eisenberger et al., 1986, 1997). Organizational mergers are disruptive events that question the in how far organizations will still support employees (Giessner et al., 2016). Direct supervisors represent agents of the organization
and thus can establish a positive belief in the organization (Eisenberger et al, 2002). Applying a dynamic perspective on this logic, we argue that organizational mergers changes perceived support of the organization over time, increases in perceived supportive leadership over time can compensate this effect and, therefore, re-establish levels of job satisfaction. In other words, dynamic changes in supportive leadership over time are one central source that can compensate for the potential drop in job satisfaction over time (i.e., changes between T1 and T2). Especially the direct supervisors of employees might be best able to provide this dynamic compensation, because they can directly react towards the socio-emotional needs of employees within changing organizational contexts (Huy, 2002). They can address the questions of employees, solve practical issues, give support for new tasks and are there to provide social support in uncertain times. Hence, the current research explores how dynamic changes due to organizational mergers can be compensated by dynamic adaptations of direct leaders.

Hypothesis 3: The stronger positive changes in supportive leadership over time (between pre- and post-merger), the less strong will be the decrease in job satisfaction (i.e., changes between pre- and post-merger phase). This effect will be especially pronounced for merging (versus non-merging) organizations.

Organizational Context

The current study was conducted in the UK health care sector in which mergers have become increasingly common during the past 25 years (Fulop et al., 2005). Mergers have been used as a key lever for change processes in this context (Smith, Walshe, & Hunter, 2001). This study is conducted in a public sector organization – a context involving multiple stakeholders and exposed of strong political influences (Denis, Lamothe, & Langley, 1999; Fulop et al., 2005). As the health sector is particularly dominated by professionals used to have autonomy in
their work environment, organizational mergers and its related changes receive rather strong levels of resistance (Pettigrew, Ferlie, & McKee, 1992).

We made use of a merger wave taking place in 2006 within the UK health sector. The data presented here were not specifically designed to study the merger process. Rather, we used the annual employee service data. In order to analyze data in a longitudinal way, we chose the organizational level as level of analysis. There are two reasons why we did so. First, our hypotheses are on organizational level of analysis. Second, job satisfaction on organizational level has been shown to be a reliable predictor of organizational performance (Ostroff, 1992). Finally, on a pragmatic level, as employee surveys are anonymous, organizational level of analysis allowed us to match data for testing temporal relationships.

METHOD

Organizations

The study is set within the National Health Service (NHS) in England. The NHS is a United Kingdom-wide service, funded by central taxation with vast majority of health care provided free at the point of delivery to all UK residents. The four constituent countries of the UK – England, Wales, Scotland and Northern Ireland – all have separately run sections of the NHS, and this study focuses on the English section of it – which is by far the largest, with around 1.1 million of the total 1.4 million NHS employees.

The NHS in England comprises different types of local health care provider organizations, known as NHS trusts, each of which is a separate employer, and is largely autonomous but operates within a central framework (Department of Health, 2010). Since April 2013 a slightly different structure of trusts has been in place due to the Health and Social Care Act of 2012, but before then the main types of employer were acute trusts (hospitals or local
groups of hospitals), mental health/learning disability trusts, ambulance trusts and primary care trusts (PCTs). This study focuses on the PCTs (which in April 2013 were replaced by Clinical Commissioning Groups).

PCTs had dual functions: they operated as local budget holders and commission health care services from other providers on behalf of their patients, and they provided community-based care for a fixed geographical region\(^1\). They did not provide general practitioners (GPs, or family doctors) directly, but were charged with ensuring there is sufficient provision of GPs (who work as independent contractors), and directly employed other health professionals who work alongside GPs or visit patients directly, e.g. community nurses.

**The Mergers**

In 2006 the NHS underwent a significant restructuring, which chiefly affected PCTs. A long-term strategic plan was implemented aimed at reducing local variations in care decisions, and levels of bureaucracy in commissioning. Prior to 2006 there had been 290 PCTs across England; during 2006, however, 209 of these were reconfigured into 66, with groups of between two and seven smaller local PCTs joining to become a single larger PCT – often such that a city or county which previously had multiple PCTs would subsequently have only one. The other 81 PCTs did not change at all, and as such represent a non-randomized control group. This control group is important because a number of factors in the NHS more widely – including the broader effects of restructuring, and redundancies in some acute trusts due to financial difficulties – may have affected the morale of all NHS staff, with these difficulties being widely reported in media in the UK. The mergers were chosen so that the number of new PCTs matched the number of

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\(^1\) In 2009 the provider functions of PCTs began a process whereby they became separate organizations or were merged into a local acute trust, leaving PCTs as primarily commissioning bodies. This was started well after the period of this study, however.
local authorities, and were largely coterminous with these authorities, allowing greater coordination in planning and decision making (NHS Confederation, 2011).

As a result, PCTs within a single city or county generally were all either involved in mergers or not merged at all; however, the cities and counties where mergers happened were spread throughout the country. Exact details of the mergers were determined at a local level, but for the most part the commissioning and management functions would become centralized within the new PCTs, while most healthcare professionals employed by the PCT would remain working in the same roles and localities as they were previously in (HM Government, 2006).

The Survey

Sample. We used data from the NHS national staff survey, an annual survey of employee experiences and attitudes that has been run across the NHS in England since 2003 (Picker Institute Europe, 2011). All NHS trusts are usually obliged to take part; an exception to this was the PCTs which were being reconfigured were not included in the 2006 survey as the survey period coincided with the mergers. Therefore, we use data from the 2005 and 2007 surveys, which occurred several months before any restructuring started (2005) and around a year after the mergers actually took place (2007). In 2005, all 290 PCTs were included; in 2007, all 147 PCTs were included (including the 81 which remained the same and the 66 newly-merged PCTs).

Within each PCT, a random sample of all employees was invited to participate. The sample size was on a sliding scale, determined by the accuracy of a 60% response when taking the finite population correction into account: organizations with over 3000 employees were required to sample 850 of them, those with 2001-3000 employees sampled 800, those with 1001-2000 employees sampled 750, those with 601-1000 employees sampled 700 employees, and
those with 600 or fewer employees included all of them. Sampling, questionnaire administration and data collection were conducted by external survey contractors, appointed by each PCT separately but operating to standardized guidelines, which included sending out reminder letters (after three weeks) and second copies of the questionnaire (after six weeks) to non-respondents, with data being sent to a national coordination center following this process (Picker Institute Europe, 2011). All questionnaires were paper-based and administered by mail with reply-paid envelopes provided. In 2005, the overall response rate for PCTs was 62% (98,943 individual responses), with this ranging from 35% to 81% within organizations; in 2007, the overall response rate for PCTs was 59% (59,285 responses – far fewer due to the smaller number of organizations), with a range from 32% to 77%. For the 2007, to ensure scores bore comparison with pre-merger data, we used only the responses of employees who had been in post for at least two years (i.e. since the 2005 survey or before), reducing the total number of responses used to 47,039.

Respondents in 2007 included 88% women; 11% aged under 30, 22% aged 31-40, 35% aged 41-50 and 31% aged over 50; 40% were nursing staff, 4% medical or dental, 20% other healthcare professionals (e.g. physiotherapists, pharmacists), 4% public health staff, 3% commissioning staff, 3% general managers, 22% administrative/clerical staff, and 2% maintenance/ancillary staff, with 2% describing themselves as “other”. The response profile in 2005 was very similar, and both years’ profiles are representative of the overall workforce in these organizations.

**Measures.** The questionnaires included a range of topics relating to experiences at work, as determined by stakeholders including the Department of Health and Healthcare Commission (the official regulator of health services), who commissioned the survey. Many of the measures,
including those we use in this study, were adapted from existing validated constructs by a mixture of cognitive interviews with NHS employees and discussion amongst a range of stakeholders. Some questions remained unchanged, some had language altered to fit in with that commonly used by NHS employees, some were shortened to allow more constructs to be included, and some were developed for the survey specifically. In this study we focus on two: job satisfaction and supportive leadership.

Job satisfaction was measured using seven items from Warr, Cook and Wall’s (1979) scale. This included questions asking to what extent respondents were satisfied with different aspects of their job (e.g. support from work colleagues, amount of responsibility given) with a five-point Likert response scale ranging from “Very dissatisfied” to “Very satisfied”. Cronbach’s alpha was 0.86 in both 2005 and 2007.

Supportive leadership reflected support from respondents’ immediate managers, and included five items selected and adapted from other related scales during development of the original survey in 2003 (Healthcare Commission, 2004). The items asked to what extent respondents agreed with the statements “My immediate manager…” (a) “…encourages those who work for her/him to work as a team”, (b) “…can be counted on to help me with a difficult task at work”, (c) “…gives me clear feedback on my work”, (d) “…asks for my opinion before making decisions that affect my work”, and (e) “…is supportive in a personal crisis”. Responses were on a five-point Likert response scale ranging from “Strongly disagree” to “Strongly agree”. Cronbach’s alpha was 0.90 in 2005 and 0.91 in 2007.

Analytic Strategy

The safeguards employed to protect the anonymity of respondents mean that no tracking of individual responses between years is possible. While this may have been an interesting angle
to observe, we believe that a focus on organizational level data is more appropriate in any case, for two reasons. First, it is the overall level of job satisfaction within the PCTs before and after the mergers that is of interest. Second, examination of changes in supportive leadership at individual level may simply reflect different line management arrangements following the mergers. Therefore, we began by aggregating data to the PCT level on both variables (see following section for justification of aggregation). In addition, as we needed to compare data before and after mergers, we aggregated all responses to the 2005 survey of individuals working for PCTs that would subsequently become the same PCT: this meant that the analysis would be conducted at the (post-merger) PCT level, with a sample size of 147 organizations, including 66 which underwent mergers.

Testing of the hypotheses was conducted using repeated measures ANOVA on the outcome job satisfaction. Hypothesis 1 tested a model with the between-subjects factor of whether the PCT merged or not interacting with time and a change in supportive leadership between 2005 and 2007, whereas hypothesis 2 examined whether there was an interaction between merger status, time, and the pre-merger level of supportive leadership. Hypothesis 3 examined a simple interaction between whether or not the PCT merged interacted with time. Post-merger PCT size (recorded as number of employees) was included as a control variable.

Aggregation

In order to test organizational-level effects, it was necessary to aggregate both job satisfaction and supportive leadership to the (post-merger) PCT level. Although there would be good reasons to believe that there may be relatively high agreement between respondents on these measures within a single PCT – due to, for example, organizational culture and climate determining the role played by line managers and the general morale of employees respectively –
there is no reason to assume that there would be comparable responses between employees in separate PCTs that were due to merge. Therefore, in terms of Chan’s (1998) typology of composition models, it would be inappropriate to apply a direct consensus model in this case; rather, an additive model, in which the organizational-level score is “a summation of the lower level units regardless of the variance among these units” (Chan, 1998, p. 236), is appropriate. In this situation, it is necessary only to demonstrate that there is reliability of the average score, which can be done using ICC(2) (Bliese, 2000).

In the 2005 data ICC(2) was 0.81 for job satisfaction and 0.77 for supportive leadership; in the 2007 data these figures were 0.79 and 0.76 respectively. As all of these are clearly above the 0.70 level usually considered acceptable for reliability, this indicates that aggregation produces reliable organizational-level scores even despite the combination of merging PCTs.

For those situations where the data aggregated were responses from within a single organization (i.e. non-merging PCTs in 2005, and all PCTs in 2007), it is also appropriate to examine inter-rater agreement. This was done using the $r_{wg(j)}$ index (James, Demaree & Wolf, 1993). The mean $r_{wg(j)}$ scores in 2005 were 0.89 for job satisfaction and 0.83 for supportive leadership (with minimum values of 0.86 and 0.76 respectively); in 2007 they were 0.89 for job satisfaction and 0.81 for supportive leadership (with minima of 0.83 and 0.68). Although there exists some debate about the usefulness of $r_{wg(j)}$ as an absolute measure of agreement, these are clearly amongst the higher values found in the literature (LeBreton & Senter, 2008).

In aggregating the pre-merger data from PCTs that merged, the pre-merger PCT sizes were used to weight the overall pre-merger score, thus ensuring that data from smaller PCTs did not count disproportionally when being merged with larger PCTs (as the sample sizes may have been similar even if the PCT sizes were not).
RESULTS

Table 1 shows the means, standard deviations and intercorrelations of the two survey variables in each year, along with merger status and the control variable, PCT size. The large correlations between job satisfaction and supportive leadership are noteworthy, if not surprising: at the individual level the correlation between these variables, which would be expected to be high, is .66, and this increases when considered at the organizational level due to the well-known ecological effect of data aggregation (e.g. Ostroff, 1992). Nevertheless, with correlations of this size, it is important to be able to distinguish between the constructs, and so a test for discriminant validity was run via multilevel confirmatory factor analysis using Mplus. A two-factor model using the 2007 data yielded a substantially better fit, (CFI = 0.88, RMSEA = 0.09, SRMR = 0.07) than a single factor model (CFI = 0.81, RMSEA = 0.11, SRMR = 0.10); additionally, the standardized factor loadings at the organizational level all exceeded .90, whereas the inter-factor correlation was 0.85, showing discriminant validity according to Fornell and Larcker’s (1981) conditions.

Table 2 shows the results of three repeated measures ANOVA models to test hypotheses 1, 2 and 3 respectively. The first column shows the test of hypothesis 1, which examines whether there was a relative decrease in job satisfaction in PCTs that merged compared with those that did not. Here we see that there is a significant interaction between year and merger status, F(1,144) = 26.91, p < .001. Figure 1 displays this effect graphically; it can clearly be seen that there is a greater decrease in job satisfaction in those PCTs that merged than in those that did not, supporting hypothesis 1. It is clear that there was an overall, national decreasing job satisfaction,
but this decrease was much less in PCTs that did not merge. To further determine whether this
difference was due to the mergers, we also examined equivalent analyses for the pairs of years
before the merger (2004-2005), and after the merger (2007-2008). In neither case was the
interaction significant; for 2004-5: F(1,144) = .14, p = .71; and for 2007-8: F(1,144) = 1.7, p = .20.

The second column shows the test of hypothesis 2, examining whether this difference is
moderated by the extent of supportive leadership in the pre-merger year (2005). Here, the three-
way interaction is not significant, F(1,142) = 1.76, p = .19, suggesting that hypothesis 2 is not
supported.

The third column shows the test of hypothesis 3, which examines the interaction between
change in supportive leadership between 2005 and 2007, whether or not the PCT merged, and
year, predicting job satisfaction. The significant three-way interaction, F(1,142) = 4.54, p = .035
indicates that there is indeed a differential effect of change in supportive leadership on the
change in job satisfaction depending on whether or not the PCT merged. To enable interpretation
of this, it is shown in Figure 2. It can be seen that, overall, there is a drop in job satisfaction,
which can be attributed to general decreases in staff morale across the NHS over this period.
This exacerbates the importance of having a control group, rather a simple pre/post-merger
design. It is also clear that where there is a decrease in supportive leadership in general (lines 2
and 4), there is a sharp drop in job satisfaction; where there is an increase in supportive
leadership (lines 1 and 3) this appears to mitigate the overall trend of decreasing satisfaction. The
nature of the three-way interaction is that where PCTs merged, there was a sharper decrease in
satisfaction under conditions of decreasing supportive leadership than where PCTs did not merge. To make the nature of the three-way interaction effect visually clearer, in Figure 3 we show the nature of this interaction by plotting the interactive effects between changes in supportive leadership and merger status on changes in supportive leadership.

**DISCUSSION**

We explored the impact of organizational mergers and the moderating role of supportive leadership on employee job satisfaction during organizational mergers. Using longitudinal data on an organizational level of analysis, we showed that merging organizations experience a decrease in job satisfaction relative to non-merging organizations within in the same organizational context. More importantly, while pre-merger levels of supportive leadership relate positively to post-merger job satisfaction, the effect is not specific for merging organizations. In other words, supportive leadership in general seems to have positive implications on job satisfaction at later point in time independently of the merger status (i.e., non-merging vs. merging). Most importantly, however, changes in supportive leadership over time influence post-merger job satisfaction – and this effect is especially pronounced for the workforce of the merged organizations. More precisely, merging organizations with supervisors who increased their level of supportive leadership over time reduced the decreases in workforce job satisfaction relative to no-merging organizations. Thus, the present results signify an important step in understanding the dynamic nature of leadership in general and within a context of organizational merger in specific.

**Theoretical and Practical implications**

Several important and new insights can be gained from the current findings. First, while previous longitudinal research showed mixed findings with regard to changes in levels of job
satisfaction over time (Amiot et al., 2007; Schweiger & DeNisi, 1991), our study provides strong evidence for decreases in job satisfaction over time in comparison to a natural control group. Without a control group, it is hard to judge whether changes in job satisfaction are really due to the merger situation itself or due to some general circumstances within the organizational context or sector in which the change takes place (e.g., a financial crisis, a political debate, etc.). The unique data set of the current study allowed, however, comparing employees from merging and non-merging organization. We, thus, provides convincing evidence that organizational mergers decrease the job satisfaction of the workforce relative to more general environmental changes.

It is interesting to notice that the overall levels of job satisfaction decreased for both the merging and non-merging organizations. This might be due to the specific organizational context of the NHS. The health service in the United Kingdom has undergone several change processes over the last decades due to several economic, clinical and political drivers. Further, the organizational mergers took part in the public sector – a context that involves multiple stakeholders and is often politicized (Fulop et al., 2005). Indeed the mergers we focused on in this study have been debated by politicians (BBC News, 05/16/2006) and, as a result, employees for all primary care trusts might have been influenced by this political debate. Consequently, job satisfaction might have dropped for the whole workforce. While we can only speculate on the overall drop of job satisfaction over time, the important finding is that workforces of merging companies experienced a stronger decrease in job satisfaction in comparison to workforces that did not undergo a merger.

While previous research provided evidence that cross-sectional differences in supportive leadership relates positive to employee job satisfaction (Terry et al, 1996), the current findings qualifies this assumption and presents a more complex perspective on how supportive leadership
relates to changes in job satisfaction over time. First, our results indicate that stronger cross-sectional levels of supportive leadership do not have beneficial effects on changes in job satisfaction in comparison to a non-merging context. This indicates that prior cross-level differences of supportive leadership do not buffer for the specific stressor organizational merger. Thus, it seems not enough for organizations to develop high levels of supportive leadership before an organizational merger as a mean to prevent potential drops in job satisfaction.

Second, the most intriguing finding in the current study relates to the effect of temporal changes of supportive leadership during the merger. Organizations can significantly reduce decreases in employee job satisfaction due to organizational mergers if they increase their level of supportive leadership during merger integration. Consequently, the levels of supportive leadership need to adapt to the merger situation independently of the pre-merger levels of supportive leadership. This dynamic perspective on leadership extends previous empirical research on leadership during organizational merger. Organizational mergers represent dynamic changes for the workforce who experiences more stress and uncertainty due to the merger (Cartwright, 2005; Hogan & Overmyer-Day, 1994; Schweiger & DeNisi, 1991; Terry et al., 1996). Therefore, organizations have to ensure that supportive leadership of their mid-level managers can adapt to these increased needs of their employees. The current findings hint to the important leadership role of direct supervisors during organizational mergers and the importance to focus on dynamic changes of leadership in addition to static levels of leadership.

Our research extends findings on organization support theory (Eisenberger et al., 1986, 1997; Rhoades & Eisenberger, 2002; Shore & Shore, 1985). While previous research provided evidence that supportive leadership can increase employees’ positive perceptions of the organization (Eisenberger et al., 2002) which in turn can increase job satisfaction (Rhoades &
Eisenberger, 2002), the current studies extends this idea to stressful organizational situations like organizational mergers. Organizational mergers question employees’ believe in the organization as supportive (van Dick, Ullrich, & Tissington, 2006). Consequently, increases in supportive leadership over time can compensate for the disrupted organizational support and, as a result, reduce potential decreases in job satisfaction due to the merger. While such a dynamic perspective is in line with the organization support theory, it extends it by providing a consideration of time. Our results indicate that supportive leadership has to be considered as a dynamic process than enfolds over time. A more static perspective on leadership, which can also be derived from organization support theory, seems to be inappropriate to understand how leadership can help employee adjustment during organizational change.

Direct supervisors are the most proximal agents of the organization and, as such, seem to be most suited to provide support during times of change (Huy, 2002; Terry et al., 1996). While we have focused on support of direct supervisors only, we might speculate that other types of support (e.g., co-worker support, family support) could also compensate during organizational mergers (Cohen & Wills, 1985; Väänänen et al., 2004). While organization support theory argues that direct leaders might be most suited to represent the organization and, thus, to increase job satisfaction of employees, it might be interesting to focus how various types of support and look for sources of support that are most effective compensatory mechanism in future research.

From a more general leadership perspective, our findings point to the importance of considering leadership as a dynamic process. This is especially the case for organizational change processes (Yukl, 2010). While leadership theories like transformational leadership (Bass, 1985) place a strong emphasis on this dynamic aspect, research on leadership and organizational merger has been so far rather static in nature – looking at how cross-sectional differences in
leadership styles predict employee adjustments during organizational merger (Covin et al., 1997; Kavanagh & Ashkanasy, 2006; Nemanich & Keller, 2006; Nemanich & Vera, 2009; Terry et al., 1996; Waldman & Javidan, 2009). Although previous research provides certainly important insights, we argue and show that dynamic changes in leadership rather than cross-sectional levels of leadership are most important to understand the unique effects leaders can have during organizational change.

**Future research avenues**

Our dynamic view on organizational mergers and leadership is a major step in developing a more sophisticated understanding of change processes and employee adjustment. Therefore, the current study offers a number of future avenues for the study of leadership and change. First, we only focused on one specific leadership style – namely supportive leadership. However, recent research shows that leaders how foster goal clarity and creative thinking are able to increase employee job satisfaction during merger integration (Nemanich & Keller, 2006). This finding is in line with studies showing that employees who understand the purpose and necessity behind the merger are more willing to support and identify with the merged organization (Giessner et al., 2016; Ullrich et al., 2005). Thus, supportive leadership of direct supervisors might be accompanied by such visionary or inspirational leadership style from top-management (Sitkin & Pablo, 2005; Waldman & Javidan, 2007). Importantly, we argue that it is most valuable to study dynamic changes in leadership in the context of organizational merger.

Related to this point, we focused on line managers rather than senior management. Previous research indicates that both line managers (e.g., Nemanich & Keller, 2006) as well as senior management (Kavanagh & Ashkanasy, 2006; Waldman & Javidan, 2009) play a role in the merger integration process. We think that all levels of management can be important sources
of support during merger integration. Line manager normally have more contact with employees and might especially suited to provide direct support (Huy, 2002). This, however, does not imply that senior management is of less importance. Rather, a merger is a collaborative endeavor that should be managed on all levels. Future research might elaborate how the alignment or misalignment between different levels of management might influence employee adjustment to the merger.

A third avenue relates to a closer focus on dynamic changes in supportive leadership and the dynamic changes in perceived organizational support. While our focus has been on how changes in supportive leadership influence changes in job satisfaction, perceived organization support theory (Eisenberger et al., 1986, 2002) would suggest that supportive leadership influence job satisfaction via perceived organizational support. Consequently, we would assume that perceived organizational support is a mediator of the current findings. Importantly, we argue that temporal changes in perceived organization support mediate the effects between changes in supportive leadership and changes in job satisfaction.

Finally, our research indicates that third variables might exert influence on employee job satisfaction which are not unique to a merger or change context. On the one hand, this might be not considered as a severe problem, because knowing that variables like pre-merger level of supportive leadership has a positive relationships to post-merger job satisfaction is an important finding with practical relevance in itself. On the other hand, there is a danger that research on organizational change replicates research findings from other research fields and misses to focus on the unique processes and variables involved organizational change. One central variable of organizational change is time (Pettigrew et al., 2001). The current study shows that taking into account the temporal changes during mergers, unique advantages of changes in supportive
leadership to situations of organizational merger (vs. non-merging organizations) are present. The data set used in this study offers a unique context in which we have been able to compare merging and non-merging organizations. It is certainly difficult to find contexts and data to conduct studies that enable such comparison of merging and non-merging organizations. One way to deal with this might be an experimental approach to study organizational mergers (e.g., Weber & Camerer, 2003). Although such an experimental approach might be not able to reflect the complexity of organizational mergers, it might help to test key variables for its unique effect to situation of change. Another possibility might be to compare effects of organizational merger literature with literature from non-merging context via meta-analytic procedure. We think it is valuable to explore these processes and variables that have a particular importance to change situation compared to stable situations.

**Strength and Limitations**

The present study has some unique strengths. One strength is the unique context of the study in which is it possible to compare merged to non-merged organizations within the same organizational context. To our knowledge, there are no prior data enabling such a comparison and showing that job satisfaction indeed decreases in merging compared to non-merging contexts. Furthermore, the current dataset enables us as well to test for unique effects that can compensate this drop in job satisfaction due to organizational mergers. A second strength is the longitudinal design of the study allowing including time as a variable. While a few studies on organizational mergers have used longitudinal data (Amiot et al., 2006, 2007; Gleibs et al., 2008; Schweiger & DeNisi, 1991) there still is a scarcity of such studies. Further, previous studies did not focus on temporal changes of the variables as predictors and/or outcomes.
Every research has its weaknesses and ours is no exception. While our theoretical reasoning is on a more psychological level, one might argue that the appropriate level of analysis would be the individual level. However, there are several arguments that would support an analysis on organizational level as more useful. First, individual level effects should accumulate on an organizational level. Second, job satisfaction on organizational level has been shown to be a more reliable predictor of organizational performance than individual level job satisfaction (Ostroff, 1992). Third, as we have been comparing workforces of merging with non-merging organizations, the organizational level of analysis seem to the appropriate one. Finally, due to the nature of the dataset, we were not able to match individuals over time, but rather had to analyze organizational values. As a result, however, we cannot determine what drives the changes in supportive leadership within the organizations over time. It could be due to increases of supportive leadership of leaders or due to changes in leaders within the organization. Thus, future research needs to clarify the micro level mechanisms that produce the overall organizational changes in supportive leadership.

A second limitation may be the question of generalizability. The study has been conducted in a public sector organization that has unique characteristics. As argued above, mergers in such contexts are often politicized (Fulop et al., 2005). Thus, the question remains in how far one might be able to find similar results in private organizational contexts. We believe that similar findings for the differences between merging and non-merging organizations might be found. Nevertheless, the overall drop in job satisfaction for both non-merging and merging organizations could depend on the respective organizational context. As the NHS and its merger of the primary care trusts has been exposed to a political debate (BBC News, 05/16/2006) which might explain the overall drop in job satisfaction, other context might not necessarily imply a
drop in job satisfaction. For example, Amiot and colleagues (2007) did not find changes in job satisfaction over time. To judge, however, whether such stability of job satisfaction is a positive sign or not, one would need to compare it to other organizations at the same time that did not undergo a merger in a similar organizational context. The current study allowed this test and the main findings relate to these differences between merging and non-merging organizations.

**Conclusion**

Organizational mergers are dynamic change processes demanding employees to adapt to the newly merged organization. Such changes are stressful and decrease employees’ levels of job satisfaction. Results of a longitudinal study on organizational level indicate that the direct leaders of employees are able to help employees to adjust by increasing their supportive leadership over time. Consequently, human resource managers need to instruct leaders on all levels of the organization to invest *more* time for their followers during these turbulent times of change. Leadership is indeed crucial for organizational mergers (Sitkin & Pablo, 2005).
REFERENCES


TABLE 1
Means, Standard Deviations and Intercorrelations of Study Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Correlations</th>
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</tr>
<tr>
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<td>2. PCT size(^2)</td>
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<td>4. Supportive leadership 2007</td>
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<td>5. Job satisfaction 2005</td>
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<tr>
<td>6. Job satisfaction 2007</td>
<td>3.48</td>
<td>0.09</td>
<td>-0.17*</td>
</tr>
</tbody>
</table>

Notes
\(^1\) = Merged, 0 = Non-merged
\(^2\) Measured as number of employees in 2007 (i.e. post-merger)
* p < .05; ** p < .01; *** p < .001
### TABLE 2
Repeated Measures ANOVA Results

<table>
<thead>
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<th>H1</th>
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<th>H3</th>
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<td>.03</td>
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<td>.00</td>
<td>.00</td>
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<tr>
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<td>-.11***</td>
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<td>Merger status * Year</td>
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<td>PCT size * Year</td>
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<td>Merger status * Change in supportive leadership</td>
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<tr>
<td>Merger status * Change in supportive leadership * Year</td>
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<td>.19*</td>
<td></td>
</tr>
</tbody>
</table>

Effect size (F) for hypothesized interaction  
26.91***  1.76  4.54*

Notes. Figures in central section of table are unstandardized parameter estimates

<sup>1</sup> 1 = Merged, 0 = Non-merged
<sup>2</sup> Measured as number of employees in 2007 (i.e. post-merger)
<sup>3</sup> 0 = 2005, 1 = 2007

* p < .05; ** p < .01; *** p < .001
FIGURE 1
Change in Job Satisfaction by Merger Status

![Graph showing change in job satisfaction by merger status between 2005 and 2007. The graph compares merged and non-merged categories, with a downward trend indicating decreasing job satisfaction over time.]
FIGURE 2

Interaction between Change in Supportive Leadership and Merger Status

![Graph showing the interaction between change in supportive leadership and job satisfaction, with lines for merged and non-merged situations.](image-url)
FIGURE 3
Interaction between Change in Supportive Leadership and Merger Status