



Leadership & Organization Development Journal

Resistance to organizational change: linking research and practice

Dennis G. Erwin Andrew N. Garman

Article information:

To cite this document:

Dennis G. Erwin Andrew N. Garman, (2010), "Resistance to organizational change: linking research and practice", Leadership & Organization Development Journal, Vol. 31 Iss 1 pp. 39 - 56 Permanent link to this document:

http://dx.doi.org/10.1108/01437731011010371

Downloaded on: 25 November 2015, At: 11:44 (PT)

References: this document contains references to 34 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 15114 times since 2010*

Users who downloaded this article also downloaded:

Wayne H. Bovey, Andy Hede, (2001), "Resistance to organizational change: the role of cognitive and affective processes", Leadership & Development Journal, Vol. 22 Iss 8 pp. 372-382 http://dx.doi.org/10.1108/01437730110410099

Wayne H. Bovey, Andrew Hede, (2001), "Resistance to organisational change: the role of defence mechanisms", Journal of Managerial Psychology, Vol. 16 lss 7 pp. 534-548 http://dx.doi.org/10.1108/EUM000000006166

Dianne Waddell, Amrik S. Sohal, (1998), "Resistance: a constructive tool for change management", Management Decision, Vol. 36 Iss 8 pp. 543-548 http://dx.doi.org/10.1108/00251749810232628

Access to this document was granted through an Emerald subscription provided by emerald-srm:478307 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Resistance to organizational change: linking research and practice

Resistance to organizational change

39

Received February 2009 Revised August 2009 Accepted August 2009

Dennis G. Erwin

E² Consulting, Chicago, Illinois, USA, and
Andrew N. Garman

Department of Health Systems Management, Rush University, Chicago, Illinois, USA

Abstract

Purpose – The purpose of this paper is to study recently published research to identify findings that provide research-based guidance to organizational change agents and managers in addressing individual resistance to organizational change initiatives.

Design/methodology/approach – The paper examines published research appearing in peer-reviewed journals since 1998 that focus on exploring individual resistance to organizational change.

Findings – Recent published research provides considerable practical guidance to organizational change agents and managers in understanding and dealing with resistance to change. Recent research examines the cognitive, affective, and behavioral dimensions of individual resistance and how it is influenced by: individual predispositions towards openness and resistance to change; individuals' considerations of threats and benefits of change; communication, understanding, participation, trust in management, management styles, and the nature of relationships with the change agents.

Research limitations/implications – This paper is limited to research articles involving resistance to organizational change published in peer-reviewed journals from 1998 to 2009. Also, the paper finds that reported research used primarily self-report questionnaires to gather data, which are quantitatively analyzed. Such a lack of diversity of research methodologies provides a limited perspective of resistance to organizational change that might have been broadened by qualitative and practice-based methods (e.g. case studies and action research).

Practical implications – A framework is presented linking organizational change research findings to specific change practitioner recommendations. Limitations of recent research are also discussed.

Originality/value – Most studies provide an examination of a limited number of variables influencing resistance to change, and are not necessary designed to provide practical guidance to change practitioners. This paper provides a comprehensive framework of constructs and variables specifically aimed at linking research-based findings to guidance for change practitioners.

Keywords Organizational change, Change management

Paper type General review

Introduction

The results of a recent survey of 1,536 executives involved in a wide variety of change initiatives indicated that only 38 percent thought these initiatives were successful and only 30 percent thought they contributed to the sustained improvement of their organizations (Isern and Pung, 2007). Resistance to change is often cited as a reason for difficulties in implementing and the failure of change initiatives. For example, Prochaska *et al.* (2001) cite a Deloitte and Touche survey of 400 organizations



Leadership & Organization Development Journal Vol. 31 No. 1, 2010 pp. 39-56 © Emerald Group Publishing Limited 0143-7739 DOI 10.1108/01437731011010371 indicating resistance to change as the number one reason for failures of organizational change initiatives. Bovey and Hede (2001a, b) cited numerous studies including one of 500 Australian organizations indicating resistance as the most common problem faced by management in implementing change.

Researchers and scholarly practitioners have been studying organizational change and resistance to change for many decades. Much of this research is rooted in Lewin and Gold's (1999) unfreezing, moving, and freezing model of organizational change. During the 1990s, efforts seemed primarily focused on the organizational and systemic levels of analysis including several studies that attempted, through quantitative as well as qualitative efforts, to synthesize the work completed thus far (Damanpour, 1991; Robertson *et al.*, 1993). Burke and Litwin (1992), in addition to indicating systemic-level factors (e.g. mission and strategy, policy and procedures, and organizational structure) influencing organizational change, cited pioneering work from authors such as McClelland and Atkinson in arguing for greater attention to the importance of individual behaviors, needs, values, and motivation in understanding and influencing the success of organizational change efforts.

Armenakis and Bedain's (1999) review of work published during the 1990s identified several "themes," or areas in which greater methodological attention was needed: content (the "what"), context (salient environmental factors affecting the organization), and process (the "how," including the phases of change occurring over time). In their consideration of process, they reviewed stage models of organizational change such as Judson's (1991) five phases of organizational change, and Kotter's (1995) proposed eight steps for effective change. Armenakis and Bedain importantly drew attention to the individual reactions to organizational change, or how organizational change is interpreted and responded to by organizational members, in reviewing the work of Isabella (1990), Lowstedt (1993) and Jaffe *et al.* (1994).

Isabella (1990) proposed a four-stage model including: anticipation (information about the change is assembled), conformation (the implications of the change begin to be understood), culmination (pre- and post-change results are compared and assimilated), and aftermath (consequences of the change are evaluated). The Jaffe *et al.* (1994) model suggested four reactions organizational members experience as they move through the change process: denial (refusal to believe the change will be implemented), resistance (not participating or attempting to avoid implementation), exploration (experimentation with new behaviors), and commitment (accepting or embracing the change).

Although writings have focused additional attention on resistance, there remains substantial variability in how the phenomena associated with resistance are perceived and ultimately operationalized. Several authors have offered definitions broad enough that they could include almost any unfavorable reaction, opposition, or force that prevents or inhibits change. Such definitions have also implied that resistance to change is a problem that needs to be overcome or eliminated (Mabin *et al.*, 2001; Piderit, 2000). However, others have challenged this perspective of resistance to change because it precludes some of the more positive aspects and intentions of resistance. For example, it has been proposed that resistance may be useful, and that it can be productively "harnessed" to help challenge and refine strategic and action plans (Mabin *et al.*, 2001) and to improve the quality of decision making (Lines, 2004). In other cases, resistance may be a productive response to perceived unethical actions as well as changes that may not be in the best interest of the organization (Oreg, 2006; Piderit, 2000). Still others have characterized resistance to change as a positive process that fosters learning among organization participants

(Msweli-Mbanga and Potwana, 2006). The complex dimensions illustrated by these definitions suggest that a dichotomous view of individual reactions to change (i.e. compliance is positive and resistance is negative) is probably too narrow.

This study is limited to examining published research involving resistance to organizational change appearing in peer-reviewed articles since the Armenakis and Bedain's (1999) review. It is our goal to provide change agents and managers with practice guidance based on current research in dealing with resistance to change within the context of the organizational change process. A secondary aim of the paper is to identify emerging trends and themes in recent resistance to change research for those with academic interests.

Resistance to organizational change

41

Study question and method

In support of organizational change practice, our study attempted to answer the question: What practice guidance do the findings of recent research provide to organizational change agents and managers in addressing individual resistance to organizational change? Our goal of providing current research-based guidance to change practitioners limited our examination to articles reporting the results of research studies. We further limited our scope to the examination of articles published since the Armenakis and Bedains (1999) review and specifically addressing individual resistance to change in the context of organizations.

The search for recent published research articles was conducted by the first author in July 2009, utilizing three online databases: PsychInfo, Academic Source Premiere, and Business Source Elite. In each database, the key phrases used were: organizational change and resistance to change. The scope of the search was limited to articles published from 1998 through the search date. This search yielded a total of 123 articles. To be included in this study, the articles were required to meet the following criteria:

- published in a peer-reviewed journal;
- reported the results of a research study or studies, which involved at least some process of statistical inference, or, if the study was qualitative, it followed a recognized methodology (e.g. grounded theory); and
- the context of the study did not appear to be overly specialized i.e. it had to contain elements generalizable to settings other than the one under study.

Most articles were eliminated because they did not report study results – they were opinions or discussions or simply mentioned the topic of resistance to organizational change. A more comprehensive examination of resistance to organizational change literature, which included these articles would certainly have provided additional insights and a greater diversity of thinking – but examining those articles was simply beyond the scope of this study of research-based articles.

Results

These steps eliminated 105 of the 123 original articles, leaving 18 remaining research articles. The findings reported in these 18 articles were based in a diversity of organization types, including governmental, non-profit, and private sectors, as well as regions, including Europe, Africa, Australia, and North America. The studies also covered change in a diversity of circumstances including privatizations, mergers, a move to new facilities, implementation of new technology, and cultural changes.

Interestingly, all but two of the reported studies were self-report surveys – these two studies involved direct observation and interviews with research participants. A greater diversity of research methodologies would have allowed an examination of resistance from more perspectives. We would also characterize the research of the past decade as more divergent than convergent. There does not appear to be a universally or even widely accepted operational definition of resistance to change, or other important variables (e.g. participation, communication, and trust). Any type of meta-analysis or synthesis of results across studies, therefore, seems tenuous. This divergence also suggests the complexity of studying resistance, individuals, and in relationship to each other. Despite these limitations, the research does provide promising practical guidance to change agents and managers in their efforts to understand and deal with individual resistance to organizational change.

The 18 research articles examined seemed to fall into categories addressing the following questions: What is resistance to organizational change? How do individual personality differences influence resistance to organizational change? What are key concerns of individuals upon the announcement of change that influence resistance? How does the organizational change process influence resistance to change? How do change agent/employee relationships and management interaction styles influence resistance to change? The findings of our study are organized to correspond to these questions. The Appendix lists the research articles and references the questions addressed and categories examined in each study.

What is resistance to organizational change?

The studies discussed in this section suggest a divergent and evolving definition of resistance to change. Giangreeco and Peccei (2005) found that anti-change behaviors were both passive and overt, while Bovey and Hede (2001a, b) found that behaviors in response to change included supportive versus resistant, active versus passive, and covert versus overt. Lines' (2005) study found that a range of behaviors could be identified including strong or weak behaviors.

Beyond the behavioral dimension of resistance, Oreg (2006) and Piderit (2000) clarify the cognitive and affective dimensions of resistance. That is, resistance is viewed as multi-dimensional involving how individuals behave in response to change (behavioral dimension), what they think about the change (cognitive dimension), and how they feel about the change (affective dimension). Capturing the complexity of resistance, Piderit (2000) suggested that individuals operate in all of these dimensions simultaneously, and that they may even be ambivalent about the change in each of these dimensions. Further, rather than a value-laden perspective of resistance, it is proposed that thoughts, feelings, and behaviors towards change are not necessarily good or bad, but rather positive or negative (Lines, 2005) or pro- versus anti-change (Giangrecco and Peccei, 2005).

Behavioral dimension of resistance. Examining the behavioral dimension of resistance, Giangreco and Peccei (2005, p. 1816), in their study of the privatization of an Italian electric company, defined resistance to change as a "form of dissent." They recommend thinking about both "pro- and anti-change behaviors." Using self-report survey data from 359 mid-level managers, they found that anti-change behaviors were frequently expressed in passive rather than overt ways – for example, not actively supporting change initiatives, or behaving in ways that more covertly impeded the

Resistance to

organizational

effectiveness or rate of change. Examples of such behaviors included doing the minimum required, not actively cooperating and promoting the change initiative, and not making an effort to ensure subordinates understood the change effort.

Lines (2004), in a study of a large European telecommunications company undergoing deregulation, indicated that resistance to change involved behaviors that "slow down" or "terminate" (p. 4) a change effort. In a subsequent article, Lines (2005) proposed that a range of behaviors could be identified in response to attitudes toward organizational change. Such behaviors were categorized as being either positive or negative toward the change, as well as either strong or weak behaviors. Bovey and Hede (2001a, b), in their study of nine Australian organizations facing major changes, developed a framework with similar attributes, proposing that reactions to change include supportive versus resistant behaviors, active versus passive behaviors, and covert versus overt behaviors.

Cognitive/affective dimensions of resistance. Recent work has also focused on clarifying the cognitive and affective dimensions of resistance to change. Oreg (2006, p. 76), in a study of an 800-employee defense industry organization involved in a merger of two key departments, described resistance as a "tridimensional (negative) attitude toward change" involving the interplay among cognitive, affective, and behavioral dimensions. The cognitive dimension involves how an individual conceptualizes or thinks about change – for example, what is the value of the change? Will the change benefit or harm my department, the organization, or me? Cognitive negative reactions or attitudes towards the change include a lack of commitment to the change and negative evaluations of the change. The affective dimension of individual reactions involves how one feels about the change. Affective reactions to the change include experiencing such emotions as elation, anxiety, anger, fear, enthusiasm, and apprehension. Affective negative reactions include stress, anxiety, and anger. The behavioral dimension of individual reactions involves how an individual behaves in response to change – for example: embracing it, complaining about it, and and/or sabotaging it.

Further complicating but, perhaps, better capturing the complexity of this concept of resistance to organizational change, Piderit (2000) suggests that individuals operate in all three dimensions (cognitive, affective, and behavioral) and simultaneously may be ambivalent in all three dimensions. For example, an individual may be both hopeful about the opportunities presented by change, but at the same time fearful about not being able to meet new expectations required by the change. And, the same individual may be enthusiastically agreeing to the change, while not focused on making the necessary changes to implement the initiative.

How do individual personality differences influence resistance to organizational change? Research discussed in this section reported that certain psychological variables influenced how individuals responded to and their ability to cope with change. Oreg (2003) examined personality variables, which predisposed individuals towards resistance to change. Wanberg and Banas (2000) examined the influence of personal resilience on an individual's willingness to accept change, and Judge et al. (1999) found that self-concept and risk tolerance were related to an individual's success in coping with change. Bovey and Hede (2001a, b) identified certain defense mechanisms used by individuals in dealing with change, and explored the relationship of irrational thoughts and the perceived impact of change to resist.

Predisposition towards resistance to change. Oreg (2003) studied personality characteristics that predisposed individuals towards resisting change. He conducted a series of seven self-report survey studies involving students, faculty, and staff at Cornell University and developed a scale to measure dispositional inclinations to resist organizational change. Factors examined which influence a predisposition towards resistance included an inclination to seek routines, negative reactions to announcements of change, a short-term focus, and a rigid or dogmatic point-of-view.

Personal resilience and openness to change. Wanberg and Banas (2000) examined the influence of personal resilience on self-reported openness to organizational change, and its relationship to outcomes such as job satisfaction, work-related irritation, intention to quit, and actual turnover. They surveyed 130 members of two professional associations working in 85 different housing authorities during a major reorganization of the US Department of Housing and Urban Development involving changes to public housing regulations. The researchers reported that personal resilience, which they defined as a combination of self-esteem, optimism, and perceived control, was a predictor of an employees' willingness to accept change; however it was not predictive of a more positive view of change. In other words, employees with personal resilience may accommodate a change whether or not they agree with the change or whether or not they perceive it is beneficial.

Self-concept, risk tolerance, and coping with change. Judge et al. (1999) examined seven dispositional constructs related to coping with organizational change. They surveyed 514 managers in six organizations, located in four different countries and five industries. The companies had experienced recent changes including major reorganization efforts, downsizing, changes in top management, mergers and acquisitions, and business divestments. The dispositional constructs examined were reduced to two factors, which the researchers labeled self-concept and risk tolerance. Self-concept was comprised of internal locus of control, positive affectivity, self-esteem, and self-efficacy. Risk tolerance was comprised of higher openness to experience, lower risk aversion, and higher tolerance for ambiguity. The researchers found that these factors were related to an individual's success in coping with organizational change as well as an individual's job satisfaction, organizational commitment, and career success, including both salary and job performance.

Defense mechanisms, irrational thoughts, and perceived change impact. Bovey and Hede (2001b), in their self-report survey of 615 employees of nine Australian organizations (both governmental and private sector), examined individual's self-reported adaptive and maladaptive defense mechanisms and their relationship to an employee's intention to resist organizational changes. The individuals were based in organizations involved in the restructuring of departments, reorganizations of systems and procedures, or implementation of new process technologies. The researchers found that individuals who tended to use maladaptive defense mechanisms were more likely to resist organizational change, while those who tended to use adaptive defense mechanisms were less likely to resist organizational change. The adaptive defense mechanisms they examined were humor and anticipation. The maladaptive defense mechanisms they examined were denial, dissociation, isolation of affect, projection, and acting out. Projection, in particular, had the strongest association with intention to resist change, and individuals with lower projection were also more supportive of change.

Resistance to

organizational

In this same study, Boyev and Hede (2001a) found that individual's with higher tendencies to blame others, to be inert and passive, to avoid life's difficulties, and to not take control of their own destinies (which the researchers called irrational thoughts), were significantly more likely to resist change. The researchers also found that the higher the individual's perception of or feelings about the change impact, the greater the association between these tendencies (irrational thoughts) and resistance.

What are key concerns of individuals upon the announcement of change that influence resistance?

Studies included in this section examined individuals' reactions to the announcements of change. Giangreco and Peccei (2005) and Oreg (2006) reported that individuals' concerns and perceptions of both the personal and organizational implications and outcomes of the change guide their reactions to the change. Chreim (2006) found that individuals' reactions were also influenced by whether or not they believe they had the skills and competencies to be effective in their new roles.

Potential threats and benefits of change. In the Giangreco and Peccei (2005) study of an Italian electric company, the researchers surveyed 359 mid-level managers to examine the influence of individuals' perceptions of the benefits of change on attitudes towards change, and ultimately on their level of resistance to change. They reported that individuals' perceptions of the actual content and the outcomes of a change initiative and the extent they will personally gain or lose as a result of the change are strong predictors of their attitudes towards change and their level of resistance to the change.

Similarly, in Oreg's (2006) self-reported survey study of 177 defense firm employees, he examined resistance based upon employees' concerns about the impact of the change on their job security, intrinsic rewards (e.g. autonomy, flexibility, and challenge), and how their power and prestige were affected. Oreg found that concerns about job security were strongly related to emotional reactions, changes in intrinsic rewards were related to both emotional and cognitive reactions, and threats to power and prestige were significantly related to cognitive reactions.

Personal capabilities to accomplish change. In addition to the threats and benefits of a change, Chreim (2006) found that individuals consider their own skills and competencies, and make a determination of the likelihood of their success in new roles. Chreim's interview study, using a grounded theory approach, involved 46 senior, mid-level, and non-managerial employees of two large Canadian banks. The banks were pursuing two major change initiatives involving the use of new technology and the implementation of a sales culture. With regard to the technology change, the themes that emerged from the interviews were that employees embraced the change if they believed it would enhance their jobs and improve services to customers; however, they were reluctant to embrace the change and were discouraged if they felt they lacked the personal capabilities for success. In the implementation of the sales culture change, the themes that emerged from the interviews were that individuals embraced the change if they deemed the change consistent with their existing capabilities and the existing culture.

How does the organizational change process influence resistance to change? Studies included in this section identified change process factors that influenced individuals' attitudes and resistances toward change such as communication of the change, the level of understanding of the change, consistency of management actions with the goals of the change initiative, and participation in the change process. Wanberg and Banas (2000), Lewis (2006), and Oreg (2006) found an association between communication and attitudes towards change. Washington and Hacker (2005) found that the level of understanding of a change by managers influenced their feelings towards the initiative. Larson and Tompkins (2005) examined consistency in management actions with the goals of an initiative, and Giangreco and Peccei (2005), Lines (2004), Msweli-Mbanga and Potwana (2006) all found benefits in employee participation on attitudes about and resistance to change.

Communication, understanding, and consistency of policies with change initiative. In the Wanberg and Banas (2000) study of individuals experiencing change in the public housing industry, the researchers found a positive correlation between employees who reported they received information about change and their openness to change. Similarly, Lewis (2006) examined the influence of the communication of the change initiative on perceived resistance. Lewis reported the higher the perceived quality of implementation information received about the change initiative, the less the perceived resistance to change. Lewis' study involved undergraduate students in a new communication technologies class who identified individuals that reported they worked for organizations recently involved in the implementation of some new type of communication or information technology (e.g. e-mail and new software). Students collected 135 questionnaires from participants who reported being from companies in industries including manufacturing, research and development, health and human services, education, and retailing.

In contrast and contrary to his expectations, Oreg (2006) found a positive correlation between individuals who reported receiving information about change and their resistance to change. Oreg suggested that the result might indicate that simply providing information does not result in reduced resistance to change, but rather that employees make decisions of whether or not to resist based upon whether or not they agree or disagree with the change proposed.

An understanding of the change initiative was found to influence individuals' feelings about a change initiative. Washington and Hacker (2005) surveyed 259 secondary school heads and senior level managers involved in the implementation of a performance management system in the Botswana public service. They found a strong relationship between managers' understandings of the change and their feelings about the change. More specifically, managers who reported that they understood the change were more likely to be excited about the change, less likely to think the change would fail, and less likely to wish the change had never occurred. The researchers conceded their study did not directly measure whether or not managers actually resisted or would resist the change, they suggested that managers' stating they were not excited about the change, thinking it would fail, and wishing the change had not been implemented are consistent with a negative attitude, or resistance, towards the change initiative.

Larson and Tompkins' (2005) study examined not only what management said about a change initiative but also their actions, and how they both related to resistance to change. Their qualitative study included observations, document analysis, and interviews of 48 employees and managers of an aerospace company. They identified messages delivered by management, which were perceived as inconsistent with the organization's change initiative. For example, management communicated a push for

Resistance to

organizational

efficiency and cost reduction, but the reward system remained focused on technical excellence. The researchers felt that these contradictions between what management said and what they did reflected management's ambivalence about the change initiative, resulting in opportunities and justification by employees to resist.

Participation in the change effort. Several studies found that participation in change initiatives was associated with more positive views of the change, reduced resistance, and improved goal achievement. The Giangreco and Peccei (2005) study of middle managers in an Italian electric company, reported that employee perceptions of their participation in the development and implementation of the change initiative, was associated with more positive attitudes towards the change and reduced resistance to change.

Lines (2004) found similar results in a self-report survey study of 138 managers of a telecommunication company involved in a major strategic reorientation. Lines reported strong relationships between employee perceptions of their participation and goal achievement, organizational commitment, and reduced resistance. Lines defined participation as involvement in the initial assessment and development of the change plan as well as the right to veto in addition to participating in the process. Goal achievement included the compatibility of the change with the organization's culture, and the goals of those individuals affected. Organizational commitment included the dimensions of attachment, effort, and loyalty. Resistance involved the level of enthusiasm for the change initiative.

In another study examining participation, Msweli-Mbanga and Potwana (2006) reported similar findings. They used self-report surveys of 363 employees in a study of three state-owned South African organizations to examine access to participation, willingness to participate, and resistance to change. They found a positive association between access to participation and willingness to participate, and a negative relationship between willingness to participate and resistance to change. Access to participation involved providing the ability and opportunity to participate in a meaningful way by receiving information, the ability to express their opinions, and involvement in decision making. Willingness to participate involved responding favorably to participation opportunities by attending meetings, providing input, working harder, and accepting possible disruption of relationships with colleagues. Resistance to change included employee perceptions of: the loss of comfort and privileges, the interests of the individual versus the organization, and the loss of jobs.

How do change agent/employee relationships and management interaction styles influence resistance to change?

Researchers also examined how the relationships between employees and managers/change agents, as well as the styles managers employed influenced resistance to organizational change. Oreg (2006) found that a lack of trust in management was significantly associated with resistance to organizational change, and Stanley et al. (2005) explored the concepts of skepticism and cynicism and their relationships to trust in management and resistance to change. Szabala (2007) found that different perceived leadership strategies or styles influenced individuals' reactions to change initiatives, and Furst and Cable (2008) found that the management tactics and their influence on resistance to change depended on the supervisor-employee relationship. In the final article studied, van Dam et al. (2008) examined the role of the manager-employee relationships, the perceived development climate as well as information received about the change, participation in the change process, and trust in management and their relations to resistance to change.

Trust in management and management competence. Oreg's (2006) survey study examined the relationship between trust in management and resistance. Trust in management involved individuals' perceived confidence levels in the ability of management to lead effective change as well as their feelings that they could count on management to do what was best for the organization and its members. In this study, of defense firm employees, Oreg found that a lack of faith or trust in management had a significant association with all types of resistance (cognitive, affective, and behavioral), and particularly with employee's cognitive analysis of the change initiative. Oreg also found that a lack of trust in management was strongly related to reports of anger, frustration, and anxiety, increased action against the change initiative, negative evaluations of the need for and merit of the change and increased questioning of whether or not management was able to make informed decisions.

Related to trust are the concepts of skepticism and cynicism. Stanley *et al.* (2005) conducted two studies: one involved a self-report survey of 65 individuals from various organizations; the other involved a self-report survey of 701 individuals from an energy company undergoing restructuring and culture transformation. The researchers found that employee skepticism, defined as doubt about the viability of achieving change, was related to employee perceptions of management's abilities to achieve change. The researchers reported that communication seemed to alleviate skepticism, but did not eliminate it. They also found that employees tended to be cynical (which they defined as a disbelief in management motives) about organizational change when they were cynical about management in general. Cynicism was negatively correlated with management trust, and was found to be a predictor of resistance to change. Stanley *et al.* indicated that cynicism seemed to be a reaction to experiences within the organization rather than a pre-disposition of the individual.

Management styles and management-employee relationships. Szabla (2007) studied how employees' perceptions of leadership strategies influence individuals' reactions to organizational change. The survey study involved 241 union employees of a Midwest county government implementing an electronic performance management system. Three categories of perceived leadership strategies were used, and reported as follows:

- 42.7 percent of employees perceived leadership as rational-empirical leaders were experts focusing on facts and logic;
- (2) 6.6 percent of employees perceived leadership as normative-reeducative leaders were collaborative and involved individuals in decisions; and
- (3) 39.4 percent perceived leadership as power-coercive change was justified only by leadership who used their position power to lead the change.

Szabla's (2007) survey questioned what individuals thought about the change, how they felt about the change, and how they intended to behave in response to the change. He reported that members of the rational-empirical group believed the change would improve their job satisfaction and operations, felt optimism and enthusiasm about the change, and intended to support the change. Members of the normative-reeducative group, however, held the most positive beliefs, experienced the most positive emotions,

Resistance to

organizational

and had the highest intentions to support the change. Members of the power-coercive group had both positive and negative beliefs indicating they believed the change would improve operations, but would not satisfy their job-related needs. Members of this group reported feelings of anger and frustration, but indicated they would support the change despite their beliefs and feelings. The researcher suggested the county's social and cultural system may have lead to member support despite their negative beliefs. but did not expand on that theory.

Furst and Cable (2008) examined how resistance to organizational change is related both to a supervisor's managerial tactics and the employee's relationship with that supervisor (leader-member exchange). The researchers conducted two surveys of companies involved in changes to new software programs. One involved a US-based automotive and industrial products company with more than 10,000 employees. For this survey, 115 employee responses were received, which included 25 manager surveys that evaluated at least one of their employees, providing a total of 82 matched pairs of employee-supervisor responses. The other survey involved a US-based financial services company with 350 employees. For this survey, 66 employee responses were received, which included 27 supervisor surveys that evaluated at least one of their employees, providing a total of 55 matched pairs of supervisor-employee surveys. The researchers combined the results for a total n = 137 because they believed the changes within the organizations were comparable. Briefly, managerial behaviors were characterized as sanctions (managers threatened to punish or withhold rewards for non-compliance), legitimization (managers explain change is policy or precedent), ingratiation (managers provide praise for employee efforts), and consultation (managers ask for employee suggestions or assistance in implementing change). The quality of relationships involved the elements of loyalty, emotional support, mutual trust, and liking each other.

Furst and Cable (2008) found the effectiveness of management tactics in influencing resistance to change depended on the strength of supervisor-employee relationships. For those with weaker relationships, sanctions, legitimization, and ingratiation were positively associated with resistance to change. For those with stronger relationships, sanctions, legitimization, and ingratiation were associated with less resistance. The researchers suggested that these findings seemed to indicate that employees interpret managerial tactics in a way that reinforces their existing perceptions of the supervisor-employee relationship. Although the authors did not elaborate, the findings also indicated no significant interaction between consultancy management tactics and supervisor-employee relationships, but that the effect of consultation on resistance was significant. That is, the use of consultation tactics is associated with less resistance to organizational change regardless of the supervisor-employee relationship.

In a similar study, van Dam et al. (2008) examined the role of manager-employee relationships (leader-member exchange), perceived development climate (i.e. supervisor support and opportunities for personal development), and various change process characteristics – i.e. providing information about the change, participation in the change process, and trust in management – and their relation to resistance to change. The study also analyzed the relationship between two individual-level characteristics – openness to job changes and organizational tenure – and resistance to change. The researchers, in their survey study, evaluated 235 responses from employees of a large The Netherlands housing corporation involved in a merger, which was aimed at increasing market share and improving financial performance. The change required staff to alter working procedures and practices, and deal with a different corporate culture.

The researchers (van Dam et al., 2008) found that the three change process characteristics fully mediated the quality of supervisor-employee relationships (leader-member exchange) and perceived development climate with resistance to change. In other words, employees that believed they had high-quality supervisor relationships and that the organization had a strong development climate similarly responded that they had been provided more information about and more opportunities for participation in the change process, experienced more trust in management, and reported less resistance to change. Individual-level characteristics were also found to influence resistance to change: those employees more open to change perceived the organizational change in favorable terms, while those with more tenure were more resistant to change.

Limitations of recent research studies

We would characterize the research of the past decade as more divergent than convergent. There does not appear to be a universally or even widely accepted definition for constructs such as resistance to change, or other important variables (e.g. participation, communication, and trust), nor is there an identified or well-defined set of measurement approaches. Without such definitions, a synthesis of results across studies of this phenomenon is tenuous.

Perhaps most striking is that the studies examined resistance at one point in time rather than in parallel or at different points along the traditional change process models (e.g. unfreezing, moving, refreezing, or an iterative model such as diagnosis, planning, implementation, and evaluation). Moreover, most of the studies (as self-report survey studies across organizations) do not examine resistance as both an individual and social matter that not only challenges an individual's identity but also the norms and values of groups within the organizations. Implementing effective change requires interventions at multiple levels including the individual, group, and organizational levels. Such finer distinctions, such as how resistance to change evolves over time, is influenced by change interventions, the sequence of interventions, and how it operates at an individual, group, and organizational levels, present substantial opportunities for further research.

Lastly, the research tended to be general in nature. The research identified relevant variables and their association with resistance, but did not provide specific actionable steps for implementation. Findings derived from diverse research methodologies (e.g. qualitative studies, case studies, action research, and clinical inquiry) would provide a greater range of perspectives, and perhaps a more actionable knowledge base.

What practice guidance do the findings of recent research provide to organizational change agents and managers in addressing individual resistance to organizational change?

Returning to our original study question, we have culled from these research articles numerous findings along with associated practice guidance. Notwithstanding the general nature of much of the research, we have proposed a framework, presented in Table I, which we believe may be a starting point helpful to practitioners in understanding and addressing resistance to organizational change initiatives.

Resistance to organizational change

Resistance research findings	Practice guidance for change agents and managers
What is resistance? Resistance to change Individuals may have negative thoughts, feelings, and behaviors towards organizational change initiatives How do personality differences influence resistance?	Plan for resistance Anticipate and plan for resistance to change initiatives: it is an integral part of the change process
Predisposition to resist Some individuals are inclined toward negative reactions to change, and tend to be shortsighted, rigid, and dogmatic Those who resist change often deny, dissociate, use projection, act out, blame others, avoid difficulties, and have irrational thoughts about the change	Provide additional support Identify those inclined toward negative reactions and work to gain their trust, and help them understand the need for and requirement to change Engage those more open to change to help encourage those prone to negativity Help those with defensive behaviors such as projection and acting out to understand their behaviors and that they are not acceptable
Openness to change Other individuals are more open to change with greater self-esteem, optimism, more confidence in their abilities to control outcomes of change, and a greater willingness to take risks	Gain support and help Select and involve individuals with higher levels of resilience, risk tolerance, and positive self-concept in leading and implementing change initiatives
What are key concerns and responses to change initiatives? Responses to change Individuals may have concerns about the value of change; how it influences their roles and status, job security, their departments, the organization, and customers; along with how it fits with organizational values and norms Individuals may not support change resulting in disagreements, complaining, a lack of cooperation, undermining, or doing minimum work Individuals may also experience stress, anger, fear, frustration, and anxiety in	Address individuals' concerns Recognize and be prepared to respond to individuals' concerns about change implications Provide meaningful opportunities for staff feedback about change initiatives Respond to valid resistance to change and use it to improve the organization and decision making
response to change Competence Individuals consider their competence and the likelihood of achieving successful change which create anxiety and fear What factors in the change broness influence sessions?	Provide support and training Provide adequate support and training in building employee confidence and their capabilities to accomplish change successfully
Communication Communication The level and perceived quality of communication about the change influences resistance	Communicate, communicate, communicate Provide ample, clear and quality, communications about change initiatives, associated implications, and implementation actions (continued)

Table I. Linking research and practice

LODJ

Practice guidance for change agents and managers Resistance research findings

Individuals' understanding of change initiatives influences resistance along with their confidence in the success and their support of change Understanding

Inconsistencies in change messaging delivered and management behaviors provides justification to individuals for resistance Management consistency

Participation

Individuals' perceptions of their participation in the change process influences their views of change, goal achievement, and resistance

How do management relationships and styles influence resistance?

Contidence and trust

The level of individuals' confidence in management's ability to lead effective change, and their perceptions of whether management is attempting to do what is right for the organization along with management's underlying motivations influences skepticism, cynicism, and resistance to change

Management styles

perceived as focusing only on facts and logic seem less effective, and finally those using power and coercion seem least effective in minimizing resistance Leaders viewed as being collaborative seem most effective, while those Employee relationships

The strength of perceived employee-manager relationships and the interest of employees with positive perceptions also believe they have been provided managers in the personal development of employees influence resistance more information about change initiatives, more opportunities for

participation, and experience more trust, and are less resistant

Ensure understanding of the change Provide clear and appropriate details to ensure individuals understand the change, how it influences them, and what is expected of them Examine policies and behaviors for consistency

Be certain organizational policies, goals, and management actions and behaviors input and opinions, and encourage involvement in the decision making process Provide individuals with the opportunity to participate in the change process Provide meaningful information about the change to individuals, solicit their including identifying the need to change, and developing and implementing Encourage and allow opportunities for participation in the change process are consistent with change initiatives change plans

Develop confidence and trust

Encourage collaboration, facts, and logic in managing while avoiding the use of transparency and clear articulation of the need, benefits, and motivations behind Developing confidence and trust is a long-term endeavor involving gaining buyconstructive criticism and willingness to revise change plans if appropriate; in to the value of change and the probability for success; openness to change and that it is best for the organization Emphasize more effective management styles power and coercion

Develop quality manager-employee relationships

opportunities to determine how they can be improved in a meaningful way; and Assess manager-employee relationships and employee development follow-through with the implementation of those initiatives

Table I.

Resistance to

organizational

Concluding comments

This study of current published research certainly reflects the complexity of individual resistance, the challenges of conducting research in organizational settings over time, and the limitations of traditional research methods in examining such issues and providing actionable practice recommendations. The almost exclusive use and publication of survey studies might suggest a researcher bias towards such traditional designs or a difficulty in getting non-traditional research published in peer-reviewed journals, or both. Despite the discomfort with non-traditional research methods, however, they may provide more perspectives that would be helpful in understanding the messy reality of the practitioner's world, and provide a more meaningful and useful link between research and practice.

The above framework linking research findings with practice guidance, we believe, provides a starting place or beginning checklist useful to practitioners in considering resistance in the planning for change initiatives. Researchers have provided insights into the cognitive, affective, and behavior dimensions of resistance, how various personality differences and individual concerns influence resistance, and what change agents and managers might be able to do to appropriately influence resistance. Each of these areas offers a plethora of opportunities for deeper examination. As indicated in the limitations of research section above, the framework certainly does not touch all aspects of resistance or issues facing practitioners. Lastly, although presented as a framework, we did not intend to suggest there is a connection among the many variables, but rather a guide for working with organizational issues.

References

- Armenakis, A.A. and Bedain, A.G. (1999), "Organizational change: a review of theory and research in the 1990s", Journal of Management, Vol. 25, pp. 293-315.
- Bovey, W. and Hede, A. (2001a), "Resistance to organizational change: the role of cognitive and affective processes", Leadership & Organization Development Journal, Vol. 22 No. 8, pp. 372-82.
- Bovey, W. and Hede, A. (2001b), "Resistance to organisational change: the role of defence mechanisms", Journal of Managerial Psychology, Vol. 16 No. 7, pp. 534-48.
- Burke, W.W. and Litwin, G.H. (1992), "A causal model of organizational performance and change", Journal of Management, Vol. 18, pp. 523-35.
- Chreim, S. (2006), "Managerial frames and institutional discourses of change: employee appropriation and resistance", Organization Studies, Vol. 27 No. 9, pp. 1261-87.
- Damanpour, F. (1991), "Organizational innovation: a meta-analysis of effects of determinants and moderators", Academy of Management Journal, Vol. 34 No. 3, pp. 555-90.
- Furst, S. and Cable, D. (2008), "Employee resistance to organizational change: managerial influence tactics and leader-member exchange", Journal of Applied Psychology, Vol. 93 No. 2, pp. 453-62.
- Giangreco, A. and Peccei, R. (2005), "The nature and antecedents of middle manager resistance to change: evidence from an Italian context", International Journal of Human Resource Management, Vol. 16 No. 10, pp. 1812-29.
- Isabella, L. (1990), "Evolving interpretations as a change model unfolds: how managers construe key organizational events", Academy of Management Journal, Vol. 33, pp. 7-41.
- Isern, J. and Pung, C. (2007), "Harnessing energy to drive organizational change", McKinsey Quarterly, Vol. 1, pp. 1-4.

LODJ 31,1

54

- Jaffe, D., Scott, C. and Tobe, G. (1994), Rekindling Commitment: How to Revitalize Yourself, Your Work, and Your Organization, Jossey-Bass, San Francisco, CA.
- Judge, T.A., Thoresen, C.J., Pucik, V. and Welbourne, T.M. (1999), "Managerial coping with organizational change: a dispositional perspective", *Journal of Applied Psychology*, Vol. 84 No. 1, pp. 107-22.
- Judson, A. (1991), Changing Behavior in Organizations: Minimizing Resistance to Change, Basil Blackwell, Cambridge, MA.
- Kotter, J. (1995), "Leading change: why transformation efforts fail", Harvard Business Review, March/April, pp. 58-67.
- Larson, G. and Tompkins, P. (2005), "Ambivalence and resistance: a study of management in a concertive control system", *Communication Monographs*, Vol. 72 No. 1, pp. 1-21.
- Lewin, K. and Gold, M. (1999), "Group decision and social change", *The Complete Social Scientist:* A Kurt Lewin Reader, American Psychological Association, Washington, DC, pp. 265-84 (reprinted from Newcomb, T.M. and Hartley, E.L. (Eds), 1948, Readings in Social Psychology, pp. 330-41, Henry Holt, New York, NY).
- Lewis, L. (2006), "Employee perspectives on implementation communication as predictors of perceptions of success and resistance", Western Journal of Communication, Vol. 70 No. 1, pp. 23-46.
- Lines, R. (2004), "Influence of participation in strategic change: resistance, organizational commitment, and change goal achievement", *Journal of Change Management*, Vol. 4 No. 3, pp. 193-215.
- Lines, R. (2005), "The structure and function of attitudes toward organizational change", Human Resource Development Review, Vol. 2, pp. 1-25.
- Lowstedt, J. (1993), "Organizing frameworks in emerging organizations: a cognitive approach to the analysis of change", *Human Relations*, Vol. 46, pp. 501-26.
- Mabin, V., Forgeson, S. and Green, L. (2001), "Harnessing resistance: using the theory of constraints to assist change management", *Journal of European Industrial Training*, Vol. 25 Nos 2-4, pp. 168-91.
- Msweli-Mbanga, P. and Potwana, N. (2006), "Modelling participation, resistance to change, and organisational citizenship behaviour: a South African case", South African Journal of Business Management, Vol. 37 No. 1, pp. 21-9.
- Oreg, S. (2003), "Resistance to change: developing an individual differences measure", *Journal of Applied Psychology*, Vol. 88 No. 4, pp. 680-93.
- Oreg, S. (2006), "Personality, context, and resistance to organizational change", *European Journal of Work and Organizational Psychology*, Vol. 15 No. 1, pp. 73-101.
- Piderit, S. (2000), "Rethinking resistance and recognizing ambivalence: a multidimensional view of attitudes toward an organizational change", *Academy of Management Review*, Vol. 25 No. 4, pp. 783-94.
- Prochaska, J., Prochaska, J. and Levesque, D. (2001), "A transtheoretical approach to changing organizations", Administration and Policy in Mental Health, Vol. 28 No. 4, pp. 247-61.
- Robertson, P.J., Roberts, D.R. and Porras, J.I. (1993), "Dynamics of planned organizational change: assessing empirical support for a theoretical model", Academy of Management Journal, Vol. 36, pp. 619-34.
- Stanley, D.J., Meyer, J.P. and Topolnytsky, L. (2005), "Employee cynicism and resistance to organizational change", *Journal of Business and Psychology*, Vol. 19 No. 4, pp. 429-59.

Szabla, D.B. (2007), "A multidimensional view of resistance to organizational change: exploring cognitive, emotional, and intentional responses to planned change across perceived change leadership strategies", *Human Resource Development Quarterly*, Vol. 18 No. 4, pp. 525-58.

van Dam, K., Oreg, S. and Schyns, B. (2008), "Daily work contexts and resistance to organizational change: the role of leader-member exchange, development climate, and change process characteristics", *Applied Psychology: An International Review*, Vol. 57 No. 2, pp. 313-34.

Wanberg, C. and Banas, J. (2000), "Predictors and outcomes of openness to changes in a reorganizing workplace", *Journal of Applied Psychology*, Vol. 85 No. 1, pp. 132-42.

Washington, M. and Hacker, M. (2005), "Why change fails: knowledge counts", *Leadership & Organization Development Journal*, Vol. 26 No. 5, pp. 400-11.

Further reading

Burke, W.W. (2002), Organization Change: Theory and Practice, Sage, Thousand Oaks, CA.
Piderit, S. (1999), "Navigating relationships with coworkers: understanding employees' attitudes toward organizational change", Dissertation Abstracts International, Vol. 60 No. 5, p. 1662 (UMI No. 9929921).

(The Appendix follows overleaf.)

Corresponding author

Dennis G. Erwin can be contacted at: dgerwin@att.net

Resistance to organizational change

55

LODJ 31,1

Appendix

56

Author(s)	Question categories	Topics addressed
Bovey and Hede (2001b)	What is resistance? How do personality differences influence resistance?	Behavioral dimension of resistance Defense mechanisms, irrational thoughts, and
Bovey and Hede (2001a)	What is resistance? How do personality differences influence resistance?	Behavioral dimension of resistance Defense mechanisms, irrational thoughts, and
Chreim (2006) Furst and Cable (2008) Giangreco and Peccei (2005)	What key elements influence resistance? How do relationships and style influence resistance? What is resistance? What key elements influence resistance?	perceived change impact. Personal capabilities to accomplish change. Management styles and relationships. Behavioral dimensions of resistance. Potential threats and benefits of change.
Judge <i>et al.</i> (1999) Larson and Tompkins (2005) Lewis (2006) Lines (2004)	How does the change process influence resistance? How do personality differences influence resistance? How does the change process influence resistance? How does the change process influence resistance? What is resistance? What is resistance?	Participation in the change effort Self-concept, risk tolerance, and coping with change Communication, understanding, and consistency Communication, understanding, and consistency Behavioral dimensions of resistance Darticipation in the change offert
Lines (2005) Msweli-Mbanga and Potwana (2006) Oreg (2003) Oreg (2006)	What is resistance? How does the change process influence resistance? How do personality differences influence resistance? What is resistance? What key elements influence resistance? How does the change process influence resistance?	Behavioral dimension of resistance Participation in the change effort Predisposition towards resistance Cognitive/affective dimensions of resistance Potential threats and benefits of change
Stanley and Topolnytsky (2005) Szabla (2007) van Dam <i>et al.</i> (2008) Wanberg and Banas (2000) Washington and Hacker (2005)	How do relationships and style influence resistance: How do relationships and style influence resistance? How do relationships and style influence resistance? How do personality differences influence resistance? How does the change process influence resistance? How does the change process influence resistance?	Trust in management and competence Trust in management and competence Management styles and relationships Management styles and relationships Personal resilience and openness to change Communication, understanding, and consistency Communication, understanding, and consistency

Table AI.Questions and topics addressed in the research articles

This article has been cited by:

- 1. Gail F. Latta. 2015. Modeling the cultural dynamics of resistance and facilitation. *Journal of Organizational Change Management* 28:6, 1013-1037. [Abstract] [Full Text] [PDF]
- Brian C. Lines, Kenneth T. Sullivan, Avi Wiezel. 2015. Support for Organizational Change: Change-Readiness Outcomes among AEC Project Teams. Journal of Construction Engineering and Management 04015062. [CrossRef]
- 3. Brian C. Lines, Kenneth T. Sullivan, Jake B. Smithwick, Josh Mischung. 2015. Overcoming resistance to change in engineering and construction: Change management factors for owner organizations. *International Journal of Project Management* 33, 1170-1179. [CrossRef]
- 4. Lily Cheng. 2015. Enablers That Positively Impact Implementation of Organizational Change. GSTF Journal on Business Review (GBR) 4. . [CrossRef]
- 5. Bernard Burnes. 2015. Understanding Resistance to Change Building on Coch and French. *Journal of Change Management* 1-25. [CrossRef]
- 6. Donna E. Ellis. 2015. What Discourages Students from Engaging with Innovative Instructional Methods: Creating a Barrier Framework. *Innovative Higher Education* 40, 111-125. [CrossRef]
- 7. Naser Muja, Steven H. Appelbaum, Tara Walker, Said Ramadan, Tolu Sodeyi. 2014. Sustainability and organizational transformation: putting the cart before the horse? (Part Two). *Industrial and Commercial Training* 46:6, 307-314. [Abstract] [Full Text] [PDF]
- 8. Brian Lines, Kenneth Sullivan, Jake SmithwickAn Action Research Approach to Implementation of Alternative Project Delivery Methods within Architectural, Engineering, and Construction Owner Organizations: Overcoming Resistance through Education 2084-2095. [CrossRef]
- 9. ANIL K. JAIN, TOBIAS HALLENSLEBEN, DANIELA MANGER. 2013. REFLEXIVITY AND INNOVATION: CONFLICTING COUNTERPARTS?. International Journal of Innovation and Technology Management 10, 1340026. [CrossRef]
- Sheng-Pao Shih, Ruey-Shiang Shaw, Ta-Yu Fu, Che-Pin Cheng. 2013. A Systematic Study of Change Management During CMMI Implementation: A Modified Activity Theory Perspective. *Project Management Journal* 44:10.1002/pmj.v44.4, 84-100. [CrossRef]
- 11. Valerie Lundy, Pierre-Paul Morin. 2013. Project Leadership Influences Resistance to Change: The Case of the Canadian Public Service. *Project Management Journal* 44:10.1002/pmj.v44.4, 45-64. [CrossRef]
- 12. Sally Rumbles, Gary Rees. 2013. Continuous changes, organizational burnout and the implications for HRD. *Industrial and Commercial Training* 45:4, 236-242. [Abstract] [Full Text] [PDF]
- 13. Janet L. Kottke, Kathie L. Pelletier, Mark D. Agars. 2013. Measuring follower confidence in top leadership direction. *Leadership & Organization Development Journal* 34:4, 292-307. [Abstract] [Full Text] [PDF]
- 14. Dee Gray, Sion Williams. 2012. Facilitating educational leadership: using frames to increase action. Leadership & Organization Development Journal 33:6, 583-593. [Abstract] [Full Text] [PDF]
- 15. Andrew Cruickshank, Dave Collins. 2012. Change Management: The Case of the Elite Sport Performance Team. *Journal of Change Management* 12, 209-229. [CrossRef]
- 16. Sebastian Fuchs. 2011. The impact of manager and top management identification on the relationship between perceived organizational justice and change-oriented behavior. *Leadership & Organization Development Journal* 32:6, 555-583. [Abstract] [Full Text] [PDF]
- 17. Christian L. van TonderWindows on Corporate Ethics: 43-73. [CrossRef]

- 18. Kishor Vaidya, John Campbell, Jeffrey Soar, Scott GardnerAssimilation of Inter-Organizational Information Systems 18-32. [CrossRef]
- 19. Christian L. van TonderWindows on Corporate Ethics: 80-111. [CrossRef]
- 20. Telmo Antonio Henriques, Henrique O'NeillThe Human Side of Information Systems: 187-242. [CrossRef]