

EMMANUEL QUAYE

**RELEVANCE OF A HEALTHY CHANGE PROCESS AND PSYCHOSOCIAL WORK
ENVIRONMENT FACTORS IN PREDICTING STRESS, HEALTH COMPLAINTS,
AND COMMITMENT AMONG EMPLOYEES IN A GHANAIAN BANK.**



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Department of Psychology,

Faculty of Science and Technology Management

Norwegian University of Science and Technology – NTNU

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Dedication

This piece of work is dedicated to my parents, especially to my Mum, who despite her lack of formal education molded my mind and spirit; and instilled in me an insatiable desire for knowledge, hard work and creative excellence. I cannot contain my pride for her.

Acknowledgement

As with any project, this thesis would have remained a mirage except for the support of very important people. First and foremost, the author expresses his profound gratitude to Professor Sturle D. Tvedt, who patiently coached me throughout various stages of the writing to ensure the best possible outcome was achieved, and more especially for the countless occasions he had to read the script. I'm most grateful. I'm also thankful to Prof. Saksvik who was directly involved during the early stages of this project.

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Abstract

This thesis was intended to examine the effect of the healthiness of change process and psychosocial work environment factors in predicting job stress, health complaints and commitment among employees in a Ghanaian bank (N=132), undergoing organizational change. The change process was measured in terms of dimensions from the Healthy Change Process Index (HCPI) and the psychosocial work environment was measured by the Demands-Control-Support (DCS) model. Hierarchical regression analyses revealed that each of the three HCPI dimensions predicted a specific outcome variable. Specifically, early role clarification predicted health complaints; constructive conflicts predicted stress, whereas manager availability predicted commitment. In terms of the DCS factors, demand was salient in predicting both stress, and health complaints, but not commitment. Control and support predicted health complaints, but not stress. Support predicted commitment, and also mediated the effect of manager availability on commitment. Notably, each of the three HCPI dimensions proved relevant in the Ghanaian banking sector but corporate decision makers, change leaders, and HR practitioners ought to concentrate effort on particular HCPI dimensions if they wish to influence stress, health complaints and commitment during workplace changes. Furthermore, the psychosocial work environment ought to be regularly monitored to ensure that these bankers work under reasonable levels of demands, have high control and receive more support if their psychosocial health during change is to be enhanced. In sum, the HCPI and the DCS models proved useful in this case from the Ghanaian banking sector. However, more research within a similar occupational setting will be essential in order to further validate the relevance of these models.

Table of Contents

DEDICATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	v
INTRODUCTION	1
Overview.....	1
The human side of organizational change.....	1
The Content and the Process of Organization Change.....	3
Rationale for the study.....	4
LITERATURE REVIEW	6
Introduction.....	6
Organizational Change.....	6
Why Organizations initiate change: Common compelling needs	7
Why most change efforts fail?.....	8
Models of Organizational Change Management	11
Planned approach to organizational change.....	11
Complexity theory of Change.....	12
System theory of change.....	13
The leadership of Change.....	14
HEALTHY CHANGE PROCESS INDEX (HCPI)	17
<i>Awareness of diversity</i>	17
<i>Constructive conflict</i>	18
<i>Early Role clarification</i>	19
<i>Manager availability</i>	20

Karasek’s Model of the Psychosocial Work environment.....	21
Job Stress and Health Complaints.....	21
Affective commitment.....	23
Review of related studies in terms of HCPI, DCS and	
the outcome variables.....	26
Summary of Literature review.....	31
Aims and Objectives of study.....	32
Hypotheses of the Study.....	33
Operational Definition of terms.....	34
METHODOLOGY.....	36
Design.....	36
Setting.....	36
Population and Sample.....	37
Procedure.....	37
Materials/Instrument.....	38
Measures.....	38
Data analysis.....	40
Ethical issues.....	41
RESULTS.....	42
<i>Descriptive statistics, and Correlations</i>	<i>43</i>
<i>Hierarchical Multiple Regression analysis.....</i>	<i>44</i>
DISCUSSION.....	51
<i>The HCPI dimensions and stress, health complaints and commitment.....</i>	<i>51</i>
<i>The influence of DCS on stress, health complaints and commitment</i>	<i>54</i>
<i>Mediating effect of DCS on HCPI dimensions.....</i>	<i>56</i>

<i>Implications of the study</i>	58
<i>i. Leadership/Management</i>	58
<i>ii. Human Resource practitioners</i>	58
<i>iii. Change leaders/Management teams</i>	59
<i>Limitations of the study</i>	60
<i>Suggestions for future research</i>	61
Summary and Conclusion	62
REFERENCES	64
APPENDIX A: Introductory letter	74
APPENDIX B: Questionnaire	75
LIST OF TABLES	PAGE
Table 1. Means (M), standard deviations (SD), internal consistencies (α) and Pearson correlations of study variables.....	43
Table 2. Summary of Hierarchical Regression Analysis variables predicting Job Stress from DCS and HCPI dimensions	45
Table 3. Summary of Hierarchical Regression Analysis variables predicting Health complaints from DCS and HCPI dimensions	47
Table 4. Summary of Hierarchical Regression Analysis variables predicting Commitment from DCS and HCPI dimensions.....	48
Table 5. Summary of Sobel Test of Mediation.....	50

INTRODUCTION

OVERVIEW

This thesis was intended to examine the relevance of the healthiness of change process, as defined by Saksvik et al (2007), and psychosocial work environment factors in predicting job stress, health complaints and commitment among banking employees in Ghana.

Arguably, the process of implementing organizational change has been noted to assume a critical role in ensuring that change programmes deliver on their stated objectives (Carr, Hard & Trahan, 1995; Cameron & Green, 2004). A major task of change leaders is not deciding on what to change, but getting it right about how the change would be brought about. Most notably, this has effects for the psychosocial work environment. Usually, organizational change comes along with threats, either real or imagined, of personal loss for those involved (Lorenzi & Riley, 2000), which is why organizations need to refocus their attention on how to help employees deal with such reality.

Whereas many organizational change programmes are initially perceived as being successful, long-term success has been elusive (Walinga, 2008). Beer and Nohria (2000) argued that nearly two-thirds of all change efforts fail to achieve their planned goals, and this carry with them huge human and economic tolls. The individual employee is usually caught up in this “profit-and efficiency-oriented” changes and are required to enthusiastically embrace such change (Callan, 1993). Clearly, the overriding objective of most organizational change efforts is the urgent need for economic viability (Beer & Nohria, 2000). Few organizations seem to be aware of the need to equip their staff with the requisite skills, strategies and resources to successfully adjust to, and enthusiastically support change (Callan, 1993).

The human side of organizational change

It is well documented that the psychosocial work environment is greatly affected by organizational change, and this comes in its wake with consequences such as increased job demands, loss of job control, insecurity, lowered role clarity, disruption in work relations etc. Callan (1993) argued that regardless of the type of change, there will be personal loss, and other intended but also unexpected changes to personal relationships, the nature of work teams, and employee morale. Usually, change recipients become stressed as they

grapple with the realities of their changing workplace. Generally, organizational change is a major source of workplace stress which is associated with a wide range of negative behavioural, psychological and physiological outcomes (Martin, Jones, & Callan, 2005).

Consequently, employees may report being anxious, frustrated, confused, uncertain, and in extreme cases frightened about the change (e.g., Ashford, 1988; Bouno & Bowditch, 1989). Martin, Jones, and Callan (2005) also reported that poor adjustment to organizational change may result in feelings of threat, uncertainty, frustration, alienation, and anxiety, especially in terms of issues of job insecurity, status, work tasks, co-worker relations, and reporting relationships. Generally, such feelings may lead to a sense of loss of control, psychological difficulties and health complaints. At the organizational level, however, these feelings typically culminate into lowered commitment and productivity, increased dissatisfaction, disloyalty, high employee turnover, and dysfunctional work-related behaviours (Buono & Bowditch, 1989). Indeed, organizational members have strong influence upon the success of organizational change, since most change starts with the individual (Schein, 1990). Yet the task of coping with the change often seems to be left with the individual. Employees are usually asked to rely on their personal coping resources and on social support networks from within and outside the organization to manage the change; the organization rarely offers support to help the individual employee to cope (Callan, 1993).

While there seem to be little information about the potential disastrous human consequences associated with organizational change, particularly transformational change; researchers seem to know even less about which approaches might work better to manage the human side of the change process. According to Saksvik et al. (2007) different participative approaches and employee empowerment strategies will prove useful during change implementation process. This view is supported by Lines (2004) who emphasized that involvement of those affected by organizational change reduces resistance, and create high level of psychological commitment toward change goals. Such an approach is termed *healthy change process*, which is construed as a process mechanism designed to empower employees through participation; as a way to help them cope with planned change. Importantly, this process approach promotes the psychosocial health of employees through

concrete participative practices including awareness of diversity, early role clarification, manager availability, and constructive conflict (Saksvik et al., 2007). It is assumed that when employees have access to a visible manager and are able to feed their views into change decision processes their wellbeing will be enhanced. Thus, in a changing workplace, when attention is placed on early clarification of roles, and the acceptance of several representations of change employees will perceive a sense of control and empowerment considered to be associated with positive behavioral and attitudinal outcomes (Saksvik et al., 2007; Tvedt et al., 2009).

The Content and the Process of Organization Change

Too often, attention has been paid exclusively to the content or “what to change” with little regard for the skills and strategies needed to effectively enact a process or “how to change” strategy. Burke (2008) explained that the *content* of change represents one thing and the *process* of change another. He maintains the content or what to change provides the vision and overall direction for the change; while the process or the how, indicates implementation and adoption. Change process concerns how the change is planned, launched, rolled out or sustained. And each of these tasks requires particular behaviour and skills set. When change processes require fundamental shifts in the way organizational members think and act, the change can test to the utmost of the organizations capabilities and resources (Woodward, & Hendry, 2004). It is therefore important for the process of implementing changes to be well initiated to enable employees feel confident about the change, in order to earn their support and buy-in (Lines, 2004). A healthy change process implementation, therefore, places greater value on the “how to change” through engagement with employees for change effectiveness.

The external impetus for developing the Healthy Change Process Index (HCPI) was from the Norwegian Labour Inspectorate (NLC) which sought to promote strategies for improving the psychosocial work environment during change. The NLC refocused its attention on new legislations of the labour law in 2006 on the requirements of a healthy organization change process in section 4.2: Arbeidstilsynet (Labour laws); which states that “during reorganization processes that involve changes of significance for employees’ working situation, the employer shall ensure the necessary information, participation and

competence development to meet the requirements of this Act regarding a fully satisfactory working environment” (Arbeidstilsynet, 2006, Saksvik et al. 2007, p. 244). Consequently, the HCPI was designed to address the core requirements of information sharing, participation and competence development during change implementation.

Rationale for the study

The underlying principle for this study was to apply the HCPI to another cultural context to assess its relevance in relation to the outcome variables among employees in this study. Most notably, Ghana’s financial sector has seen phenomenal growth over the last few years. Competition is increasing every passing moment. What is making matters worse is the increasing influx of foreign banks, both from overseas and from the neighboring sub-region. Customers have become very sophisticated and have the option to choose among many financial service providers. This situation is putting enormous pressure on banks to be very innovative if they wish to survive and continue operation. Additionally, with the recent financial meltdown, which saw the demise of many financial key players in Europe and North America, local banks are also faced with similar threats of discontinuity. The result is that corporate leaders are introducing various forms of organizational changes to enhance their fortunes.

And these have consequences for the psychosocial work environment, which affect levels of stress and the quality of employees’ life (Callan, 1993; de Jonge & Kompier, 1997; Tvedt et al., 2009). Little research attention has been paid to the development and testing of theory-based models of the psychological experience and coping strategies of employees during organizational change (Martin, Jones, & Callan, 2005). Such knowledge will have considerable implications for improved or healthy change management. Thus, the adoption of healthy change processes may resolve key employee concerns during planned change, thereby enhancing employee’s wellbeing. The usability of HCPI framework will inform corporate advisers, human resource practitioners, change leaders and external consultants of best practices for reducing perceived levels of stress and other dysfunctional work related outcomes characteristic of change (Ashford, 1988). Moreover, it is the intention of the researcher to fill a cultural gap as far as change research is concerned. Literature on

change management has come from researches conducted with Western samples. Very little information, if any at all, is available from emerging economies such as Africa.

Therefore, the present study seeks to explore the relevance of the HCPI (measured by early role clarification, constructive conflict and manager availability) and the psychosocial work factors defined by the demand-control-support model (Karasek & Theorell, 1990) to explain the job stress process and health complaints for Ghanaian bankers in this study. Similarly, employees' level psychological commitment will be examined in terms of its association with, for example, manager availability and perceived social support. It is believed that when the change process is deemed healthy employee's level of stress and health complaints; which are considered to be the effects of poor psychosocial work conditions will reduce. Moreover, as employees perceive themselves as being supported by their nearest managers or supervisors during the change process their level of commitment is likely to improve considerably. The general belief has been that commitment to change implementation tends to be affected by how much employees perceive themselves to have a voice in one or more areas of organizational performance (Lines, 2004).

LITERATURE REVIEW

Introduction

The literature on change management is considerably large (Armenakis & Bedeian, 1999). In order to understand the context and character of change, it is necessary to define and distinguish among those factors that have been cited as forces that are driving the agenda for organizational change (Carr, Hard, & Trahant, 1996). In general, this review will detail out various conflicting models of organizational change management. Importantly, key themes such as reasons for failure of change efforts (e.g. Beer & Nohria; Kotter, 1996), the role of leadership in the change process (Higgs & Rowland, 2005), change implementation approaches (Kotter, 1996) etc. are discussed. The limitations inherent in these perspectives are also highlighted.

Moreover, there is considerable deficit of literature when it comes to organizational change process assessment based on the psychosocial work environment (Tvedt et al., 2009). In this review, therefore, an attempt will be made to discuss the relevance of change process healthiness and psychosocial work environment factors in understanding stress, health complaints, and commitment during organizational change. Similarly, the social exchange theory underpinning the concept of perceived organizational support (Eisenberger, Huntington, Hutchison & Sowa, 1986) is also adopted to explain employees' affective commitment vis-a-vis available supervisors or managers helpful support during organizational change. It is well recognized that much of the emphasis on change research has been dominated by organizational level accounts, rather than from employees' standpoint (Carr, Hard & Trahant, 1996). The literature would therefore benefit from more concentration on employees' perspectives.

Organizational Change

Change is a constant feature of organizational life and the ability to manage change has long been recognized as a core competence of successful organizations (Burnes, 2004). Yet the failure rate of organizational change efforts is remarkably high. According to Beer and Nohria (2000) nearly two thirds of all planned change programmes fail to achieve their

stated objectives. It is therefore not surprising that a great deal of work has been done in this area, producing a vast body of literature (e.g. Higgs and Rowland, 2005)

Why Organizations initiate change: Common compelling needs

Various reasons have been cited by different authors as compelling evidence for the surge in efforts by organizations to implement major changes in order to respond to the business landscape that is continuously becoming volatile and complex (e.g. Beer and Nohria, 2000; Burns, 2004; Carr, Hard & Trahan, 1996; Kotter, 1996; Higgs & Rowland, 2005).

Following this assessment, Burke and Trahan (2000) argue that organizations stand the risk of being defunct if they fail to respond quickly to the dictates of the market. They stress that “today’s smartest and most resilient companies are those ... that are “environmentally vigilant” “(p. xii). These organizations have developed competency for organizational change, periodically restructuring or realigning themselves to face the changing markets or business contexts. And this according to them, reveals the leadership posture of the organization of creating a powerful internal competency (e.g. Higgs and Rowland, 2005) to support the achievement of change goals.

De Jonge and Kompier (1997) provided the following as forces driving changes in modern work environments: the globalization of economies, the rapid growth in the service sector, changing nature in the workforce structure (more women, less younger, and highly educated employees), flexibilization of work (e.g., more job insecurity), the increased application of information and communication technology, modified legislation on the psychosocial work environment and changes in industrial relations. These trends impact the psychosocial work environment, employee behavior outcomes and how organizations respond as a whole. De Jonge and Kompier (1997) further stressed that in today’s workplace, work poses an enormous mental and emotional challenge for most employees instead of physical demands. Thus, the long-term implication of this psychosocial overload is primarily expressed in psychological dysfunctional behaviour (de Jonge, & Kompier, 1997).

Therefore, in responding to the business and modern work environment, several organizations adopt one of the following change programmes: change in mission, restructuring operations (e.g. restricting to self-managed teams, layoffs, virtual employees etc), new technologies, mergers, major collaborations, “rightsizing”, new programmes such as total quality management (TQM), re-engineering etc. (Burke and Trahan, 2000). Carr, Hard and Trahan (1996) argue that these drivers of change have altered psychological contracts that exist between employers and employees and transformed the very nature of work.

Thus, managers’ familiarity with the business climate can help them and their organizations to deal more effectively with the challenges of intentional organizational change as they will better understand the factors that stimulate organizational change, and design strategic approaches for managing the behavioral, motivational, and performance dynamics that arise during the change process (Branch, 2002). Carr, Hard and Trahan (1996) again indicate that organizations need to become aware of and develop best practices in the area of leadership, customer focus, employee involvement, continuous process improvement, innovation, improvement measurement and change management, if they want to survive and remain competitive.

Why most change efforts fail?

In the preceding section, a critical look at why organization change fails is presented. Particularly, resistance to change is identified as the overriding reason for most change failure.

It is estimated that up to 70 of change efforts fail (e.g. Beer and Nohria, 2000; Kotter, 1996). One common reason cited by some authors is that people – employees, middle managers, and even senior managers may resist change (Washington and Hacker, 2005). Yu (2009) believes that when change has the potential to lower a person’s position or change the person’s job description, or reduce autonomy on the job, the likely reaction will be to resist the change: the greater the perceived threat, the greater the perception of job insecurity, which, in turn, creates resistance. This claim is supported by Kanter (1985) by

noting that employees experiencing anxiety or high uncertainty in areas of personal relevance may attribute bad intentions to management and hence resist change.

Gill (2003) noted that people resist change due to purely emotional factors, and cites dislike of imposed change, dislike of surprises, reluctance of management in dealing with difficult issues, and lack of trust for the people leading the change, and skepticism arising from failure of previous change initiatives as some of the factors. Backer (1997) also contend that the wisdom that 'systems don't change; people change' is widely received, yet scarcely applied. Kotter and Schlesinger (2008) also explained that four common reasons account for resistance to change. These include: a desire not to lose something of value, a misunderstanding of the change and its implications, a belief that the change does not make sense for the organization, and a low level of tolerance (p.42). In general terms, Judson (1991) pointed out that six factors influence resistance to change: negative feelings about change in general; conflict between the existing culture and what is to be changed; the number of unanswered questions; historical events; the extent that change threatens basic needs; and the extent that the change impacts feelings of self-worth or self-importance (cited in Washington and Hacker, 2005, p.403). This clearly shows that management's attempt to succeed with change should consider understanding how employees needs are met and assuring them that management is interested in their wellbeing and concerned about how the change affects them.

Furthermore, other studies have suggested a link between lack of knowledge or information and resistance to change. For example, Washington and Hacker (2005) reported that the quality of information employees received significantly impacted their willingness to change. On the contrary, employees' desire for great amounts of information and more frequent communication in times of change is likely to assuage the negative effects of uncertainty, and hence reduce resistance (Bordia, Hobman, Jones, Gallois, & Callan, 2004)). Uncertainty reduction theory (as discussed in Clampitt and Williams, 2005) maintains that people seek information when they are uncertain, and that communication reduces uncertainty, and with this occurring more positive feelings about the change results. Bordia et al. (2004) reported that management communication was effective in reducing uncertainty, particularly when it is participative. They stress that employee involvement and participation in decision making on issues of personal relevance,

particularly over their job performance and future within the organization, serve to create a sense of control and hence reduce uncertainty.

Kotter and Schlesinger (1979) have documented that to deal effectively with resistance to change the following factors will prove helpful: communicating the desired changes and reasons for them; involving potential resisters in designing and implementing the change; providing skills training and emotional support; incentivizing those who will make change happen, promoting, firing or relocating those who would not make change happen. Thus, it is obvious that communicating very clearly to employees' expectations of change and also involving them to identify best practices and solutions for change will prove very essential as revealed by Kotter and Schlesinger (1979) and Bordia et al. (2004). But what is problematic is the fact that when planned changes are met with challenges organizations usually cite human factors, whereas in the design and implementation of planned change, little or no mention is made at all of the human elements of change.

In sum, several authors have suggested that purely emotional factors could be implicated in why employees resist change, and hence contributing to its failure (e.g. Gill, 2003; Judi, 1991). Others have also hinted that the lack of attention to employees' psychological coping needs during organizational change could be implicated in the failure rate of change programmes, and other critical organizational outcomes such as impaired productivity, and increased levels of absenteeism, industrial dispute, and turnover (Martin, Jones, & Callan, 2005). As a remedy, the literature has outlined the importance of tackling employees emotional needs (e.g. Judi, 1991) and also reducing uncertainty as a way to reducing resistance and making change successful. Schweigner and DeNisi (1991) reported that uncertainty during merger and acquisition programmes is associated with dysfunctional outcomes such as increase in job stress, decrease in commitment, withdrawal intentions, and poor perception of organization's trustworthiness, honesty and caring. It is crucial that change initiatives are communicated in ways that will create a sense of personal relevance for employees – "what is in the change for me," and also involve them through various participative mechanisms which are geared towards increasing their sense of control and stability as suggested by Bordia et al (2004). Until employees are empowered psychologically through various participative interventions strategies as suggested by Saksvik et al. 2007, as contained in the healthy process approach, they will continually

resist change. Hence, the need to refocus attention on appropriate measures that will build trust among employees with regards to the organizations commitment to their psychosocial wellbeing.

Models of Organizational Change Management

In the following sections, various conceptual models on the character and process of change are reviewed. These theoretical accounts are guided by the planned approach to change, complexity theory and systems theory of change.

Planned approach to organizational change

Kurt Lewin's (1947) planned approach to change based on the force field theory has revolutionized change research since it was first reported (Woodward, and Hendry, 2004). Lewin (1947) was convinced that a successful change effort involved three steps - unfreezing, moving or changing, and refreezing. Lewin (1947) asserted that, the first thing organizations needed to do was to destabilize the "status quo" in order to be ready for change. He termed this step, unfreezing, where normative behaviours are done away with to make room for subsequent changes. The second phase was the implementation stage of the changing – Lewin termed it moving or change. The final phase was institutionalizing or embedding the new set of behaviours into the organization-wide culture. Lewin called this stage refreezing. This model permeates the length and breadth of the change literature, and is further extended by other authors (see Armenakis and Bedeian, 1999).

Another model, though deeply oriented in practice, yet draws points of consensus among researchers and experts is that of Kotter's (1996) eight-stage process of transformational change. This model addresses the critical issues associated with making change, particularly major transformational efforts successful. Though this model has eight stages, they can be assessed in light of Lewin's three-phased model. The first five stages which include: establishing a sense of urgency, creating a guiding coalition, developing a vision and strategy, and communicating the change vision, and empowering broad-based action is assumed to represent the unfreezing stage. The subsequent two stages, creating short term wins and consolidating improvements and producing more change, are regarded to be part

of the moving process. And finally, institutionalizing new approaches and behavior – represents Lewin’s refreezing phase. Kotter’s staged approach is criticized as being too linear and for not regarding the change process as a continuous cycle (Burke, 2008). However, Cameron and Green (2004) maintain that it is necessary to establish phases of change so that plans can be made and achievement recognized, and also for leaders to maintain flexibility in their leadership style, as one phase moves into another.

Despite its widespread application, some authors contend that Lewin’s three-phase model is too simplistic, as Kanter, Stein and Jick (1992) termed it as “quaintly linear and static conception” (p. 10), which on the face value, appear rather too simplistic reflection of complex change processes. Later models have emphasized the fluidity of change, in the sense that stages will sometimes overlay each other (Burnes, 2004). Notwithstanding, Lewin’s legacy to the field of change research is hinged on the assumption that change tend to occur in stages, all of which need to be undertaken in order to produce successful change. However, it is obvious that both Lewin (1947) and Kotter (1996) are more interested in how change could be made more successful without addressing the effect of organizational change on the quality of life and wellbeing of change recipients. This gap, among other things, is what this study seeks to address.

Complexity theory of Change

Other authors have also conceptualized the process of change in radically different ways, as in the case with complexity theory (Burnes, 2004; Hayes, & Strauss, 1998). These authors tend to share the view that complex phenomenon do not lend themselves to linear and predictive fashion (Higgs and Rowland, 2005). The overriding assumption of this theory of change is that “change is a complex process and that it cannot be implemented on a ‘top-down’ or uniform basis” (Higgs and Rowland, 2005, p. 125). Any change intervention following this view point tend to emphasize that change is a ‘messy’ rather than a planned activity (Hayes, & Strauss, 1998), which is in sharp contravention to assumptions underpinning planned or intentional change (Burke, 2008; Kotter, 1996; Lewin, 1947).

Pettigrew (1985, 1987) also proposed a processual-contextual perspective of organizational change, as a revolt against the more simplistic, practitioner-based approaches to change. This perspective which is also developed in the tradition of complexity theory holds the

view that 'change is a complex and dynamic process which should not be solidified or treated as a series of linear events ... (as cited in Burnes, 2004, p.989). Pettigrew further argued that:

Change needs to be studied across different levels of analysis and different times of periods, and that it cuts across function, spans hierarchical divisions, and has no neat starting point or finishing point. Instead, it is a complex analytical, political and cultural process of challenging and changing the core beliefs, structure and strategies of the firm (Pettigrew, 1987, p. 650).

Building on this assumption, Litchenstein (1996) maintained that much of the failure arising from most change initiatives stem from the fact managers view change as a problem that can be analyzed and solved in a linear and sequential way. He argued that complex problems require managers to cope with the complex dilemmas in the systems, instead of working towards a definitive solution. Though complexity theorists have emphasized the multifaceted challenge of managing change (see Burnes, 2004; Hayes, & Strauss, 1998) they do not explain, for example, the process of empowering employees during change implementation.

System theory of change

This theory emphasizes the interrelatedness of parts of an organization (Burke, 2008). Improving or changing one part requires that consideration is given to other parts of the system. Burke-Litwin causal model of organization performance and change follows this tradition. It deals with organizations as systems and categorizes key behavioural factors that influence performance in an organization. These factors are divided into two: transformational (leadership, organizational culture, mission, and strategy, etc.) and transactional (management practices, systems, individual needs and values, etc.). Carr, Hard, and Trahan (1996) noted that in a changing situation, a systems theory approach will be useful for determining the sequence in which key factors should be tackled. The model focuses on providing a guide for both organizational diagnosis and planned, managed organizational change, one that clearly shows cause-and-effect relationships (Burke, 2008; Burke and Litwin, 1992).

The Burke-Litwin framework revolves around 12 organizational dimensions: external environment, mission and strategy, leadership, organizational culture, structure, management practices, systems, work unit climate, task and individual skills, individual needs and values, motivation, individual and organizational performance. These elements are grouped into transformational and transactional factors. Transformational factors include – external environment, mission and strategy, leadership and culture (Burke, 2008, Burke and Litwin, 1992). They maintain that change in any of these dimensions will invariably affect the entire organization or system. Such changes are regarded as discontinuous or revolutionary in nature (Weick and Quinn, 1999). Conversely, transactional factors are those that concern more of the day-to-day operations (transactions) of the organization. Changes in this category will imply continuous improvements, evolutionary and selective, rather than sweeping, organization wide change (Burke, 2008). In sum, the model attempts to show the primary factors that need to be considered and the interactions among them in order to achieve success in organization change (Burke and Litwin, 1992).

The models reviewed above clearly demonstrate that change management has been conceptualized in different ways. Planned approaches to change seem to have pervaded the literature for several years, yet gaps still exist. The crucial question is how models can address the wellbeing of change recipients. One may argue that these models have particular focus; that is, to highlight factors necessary for effective change assessment and implementation. However, until employees' perspectives of change are accorded the importance they demand change failure will continue (Backer, 1997). No matter how sophisticated a change programme is crafted, the basis of success is the level of effort employees would give change goals (e.g., Bouno & Bowditch, 1989; Lines, 2004).

The Leadership of Change

It is beyond the scope of this review to summarize or explore the vast literature on leadership. However, there is growing evidence that the role of leaders in the change process significantly contribute to the success of such initiatives (see Burke, 2002; Kotter, 1996; Higgs and Rowland, 2005). Branch (2002), for example, notes that executive

sponsorship and participation are critical to the success of change initiatives (Burke, 2008; Burke & Litwin, 1992; Gill, 2003). Various authors cite top management's participation as the single most important contributor of success in change management interventions (Goodstein and Burke, 1991; Kanter et al., 1992; Kotter, 1996). Others have also stressed that change leadership must be spread throughout the organization and a strong leadership network created to overcome resistance and inertia within the changing organization (Branch, 2002). Generally, leaders are needed to provide vision, inspiration, and conviction, and to demonstrate integrity, provide meaning, generate trust, and communicate values (Burke & Litwin, 1992; Fernandez & Rainey, 2006). Goleman (2000) maintains that the key to a leaders' effectiveness during change lie in their ability to apply different styles of leadership to different circumstances, within limited time frame. This is because different leadership styles (coercive, authoritative, affiliative, democratic, pacesetter, coaching) generate different outcomes on aspects of organizational climate, which in turn affects the success of planned organizational change in different circumstances.

Consequently, a leader's behaviour and personality may influence their approach to change and its implementation. Higgs and Rowland (2005) have stressed that the role and behaviour of leaders in a change context is considered as an area that lacks empirical support. However, Bass's (1995) transformational leadership model has continually served as a framework for conceptualizing the overarching role of leadership in creating successful change (Higgs, and Roland, 2005; Woodward and Hendry, 2004). In his extensive work on leadership of change, Bass (1998) outlined four basic leader activities for effective transformational leadership: (a) Idealized influence: the leader assumes the important function of a role model; (b) inspiring motivation: emphasis is placed on team workgroups that is motivated, inspired and operate with enthusiasm and optimism; (c) the leader encourages and provide context for workers to think independently and find creative ways of solving problems; and (d) individualized attention: the leader attends to the individual needs and shows concern for their well-being. These factors symbolize the interpersonal relations between the leader and the followers, which are considered to play a key role in the change process (Saksvik & Tvedt, 2008).

In their framework on *Leading and Coping with change*, Woodward and Hendry (2004) considers the centrality of developing change leaders capability in supporting employees to

adjust and cope with change. They argue that the most workable approach to adopt is to develop organizational member's capabilities to deal with problems as and when they arise. Leadership, according to them, should be based on a learning strategy. They further point out that building a learning capacity within the organization can be recognized as key to change success. Hence, they propose that leadership should be re-conceptualized in terms of "managers who foster communities of practice" (Woodward and Hendry, 2004, p.157). Thus, leadership should be viewed as a process in which the key defining criterion is 'united agency' (Woodward & Hendry, 2004). In a similar vein, Lipman-Blumen (2002, in Cameron and Green, 2004) suggests that vision may no longer serve as answer to the leadership plight in a changing environment. Instead the search for meaning and connectedness is fundamental. She proposes the concept of "connective leaders" who perceive connections among diverse people, ideas and institutions. Lipman-Blumen (2002) suggests that the leadership requirement is to help others make good connections, and develop a sense of common purpose across boundaries, thus building commitment across a wide domain.

Lastly, Bennis and O'Toole (2000) explain real leadership as a combination of personal behaviours that allow an individual to enlist followers and create other leaders in the process. Woodward & Hendry 2004 also cautions that poor managerial leadership can bring about additional burden; hence, being sensitive to the coping problems of both managers and employees is an important consideration during change implementation. Overall, effective leadership behaviour during change is dependent on relationships. Weymes (2003) posit that a winning organization understand that its success is attributable to the efficacy of relationships. A good relational behaviour in different forms is essential to promoting healthy change process. Generally, leadership behaviour expressed by change leaders or unit heads is considered very cardinal in achieving better change process. In many ways, leaders who seek employees wellbeing through such ways clarification of roles through constructive conflicts, and interpersonal relations, and ensuring that the views of change recipients are fed into the decision making process will invariably help empower employees and promote their wellbeing (Saksvik et al., 2007). This form of individualized attention to employee's needs and wellbeing forms the basis of the leadership function of change (Bass, 1998).

HEALTHY CHANGE PROCESS INDEX (HCPI)

The preceding section discusses the various dimensions of the HCPI, and most importantly demonstrates how they influence change process. Saksvik et al. (2007) proposed the concept of healthy change process as an intervention framework geared towards employee empowerment during change. Tvedt and his colleagues (2009) emphasized that a healthy change process enhances “the psychological health of the employees of an organization through concrete participative practices” (p.82). This is assumed to enhance perceived control and job security, which has far reaching benefits for both employees and the organization. The potential benefits of participation is supported by Lines (2004), who explains that people’s desire for increased participation during change demonstrates that individuals, in most cases seek, for control. Thus, the more control they perceive to have, the better their level of wellbeing.

In the HCPI framework, factors including awareness of diversity, constructive conflict, role clarification and manager availability are considered vital process approaches (Tvedt et al., 2009). Other researchers have suggested that the most important action in healthy organizational change is a serious and sustained commitment to reducing stress (Cahill, Landsbergis, & Schnall, 1995; Lowe, 2004). As such any attempt to achieve healthy change process must highlight employee wellbeing and satisfaction as key outcomes. According to Cahill, Landsbergis, and Schnall, (1995) a healthy organizational change should focus on a change that: increases employees’ autonomy and control, increases their skill level, increases social support, improve physical working conditions, provide reasonable levels of job demands, job security and career development opportunities, and improves their personal coping capabilities . The dimensions constituting the HCPI are expanded below

Awareness of diversity:

This concerns the differences of experience and response to change portrayed by change recipients. Awareness of diversity rest on the assumption that differences in reaction may exist among employees regarding the change effort, and such reaction are necessary to ensure complete understanding of the change by all stakeholders. Thus, there is the

tendency for individuals or work groups to hold divergent views of the change (Saksvik et al. 2007; Tvedt, Saksvik & Nytro, 2009), a situation which must be entertained.

More importantly, change leaders with awareness of diversity are able to better understand various accounts of the change effort, and how to incorporate these accounts into the content and process of change. Change leaders with such awareness create a healthy climate where every voice is heard, and are receptive to several accounts of the change. They do this by creating an open, trusting environment, and by facilitating manager understanding of employees experiences. This lies at the heart of a participative culture (Lines, 2004), since all change recipients are given the opportunity to contribute to crafting the content and process of change.

Constructive conflict

Resistance to change, as noted before, remains number one reason for the failure of many change initiatives (Lawrence, 1954). It has long been conceptualized as the basis of conflict that is undesirable and detrimental to organizational health (Waddall & Sohal, 1998). Dent and Goldberg (1999), however, stressed that people do not resist change per se. Rather it is the loss accompanying change, such as loss of status, loss of pay, or loss of comfort, that they resist. And this is a natural human response. Organizational members may resist the unknown, or management objectives they perceive are in sharp contrast to what employees consider as critical for change success (Dent & Goldberg, 1999). Thus, Waddall and Sohall (1998) suggested that management may benefit considerably from strategies that carefully utilize resistance rather than overcoming or managing it away. Tvedt et al. (2009) suggests that constructive approach to conflict should be the preferred strategy for dealing with resistance and conflict during change. They explain constructive conflict as “the acceptance of resistance as a natural, potentially rational, human response to change” (p. 83).

Thus, a constructive conflict approach to a healthy change process occurs when employees feel safe to contribute to discussions on change issues, and have their voice heard in all decision making processes without being victimized. Saksvik et al. (2007) argued that inviting active participation and welcoming the views of employees during change implementation indicates a feeling of control and influence for them, a situation which could minimize the sense of being sidelined or victimized. During this process, motives for

the change and the urgency of change can be made explicit, and contrary opinions held by employees can be voiced, discussed and integrated into the content and process of change (Lines, 2004). Constructive conflict is geared toward mutual understanding. Thus, organizational leaders should be able to find a common ground in order to achieve a consensus and arrive at shared decision. Leaders can help create this safe and favorable environment where conflict is viewed as potentially useful exercise in change effort (Dent & Goldberg, 1999).

Early Role clarification

Role stress and role ambiguity have been cited as common denominators of change implementation (Saksvik et al., 2007). Le Blanc, de Jonge, and Schaufeli (2005) argued that role uncertainty; role ambiguity and role pressure induces stress at workplace. Broadly speaking, employees are likely to experience uncertainty over many aspects of their job as the nature of their work changes. Shaw, Fields, Thacker, and Fisher (1993) argued that role stress is likely to result from uncertainty associated with organizational change. To effectively deal with uncertainty common with many change initiatives, management must communicate the extent to which individual workers or work teams will be impacted early enough in the planning and implementation stages (Schweiger, & DeNisi, 1991). Indeed, the provision of realistic and actionable information is crucial for early role clarification. In the context of organizational change, different studies have established the moderating effects of a variety of different information-related actions on employee adjustment behaviour. For example, Miller and Monge (1985) reported that the provision of information was significantly related to lower levels of anxiety for a sample of 146 employees who were faced with relocation into new buildings. Brockner, DeWitt, Grover, and Reed (1990) observed that employees responded positively to job redundancies efforts when information about why resources were allocated in particular ways was provided to employees. Schweiger and DeNisi (1991) also observed that providing employees with series of realistic communications through various communication channels about an impending merger reduced the dysfunctional outcomes associated with change initiatives.

Jimmieson, Deborah and Callan (2004), however, noted that providing detailed information during the early phase of change implementation may be difficult and sometimes

impossible since not all information may be available to management. In line with this, Difonzo and Bordia (1998) suggested that in order to reduce rampant rumors and anxiety associated with uncertainty during change implementation; managers should indicate when information is incomplete and also indicate the timeline for when information would become available. This makes the role of the leader very crucial, who must from time to time explain “the why and how” of changing roles to avoid job stress (see Shaw, Fields, Thacker, and Fisher 1993).

Manager availability

Generally, organizations are able to enhance the effectiveness and success of change programmes by recognizing the pivotal role played by managers who serve as a link between senior executives and employees. Indeed, access to a knowledgeable manager who feeds employees with information about the direction and implications of change is very crucial for the process implementation (Saksvik et al., 2007). Thus, adequate availability of a manager is likely to reduce the negative effects of uncertainty and enhance open communication in a changing workplace. Saksvik et al. (2007) posits that it is imperative for employees to have ready access to somebody they can talk to and discuss how the change might affect their job performance and work conditions. Such individual should be someone with “organizational insight and knowledgeable regarding the change and one who is able to influence the process” (p. 253).

Beckhard and Harris (1987) recommended the creation of a transition management team (TMT) composed of leaders who wield respect with the organization members, and have wisdom, objectivity and effective interpersonal skills. This team must also have the resources and clout to manage the change process. Kotter (1996) calls this team a “guiding coalition”. Developing a trusting relationship between managers and subordinates will reinforce managerial commitment to the change, and create the perception that management takes the change serious (Taplin, 2006). Thus, the value of an available manager to employees is enshrined in the notion that he facilitates face-to-face communication. In this respect, s/he ensures timely response to questions and clarifies issues which would otherwise remain unanswered (Tvedt et al., 2009). Thus, a nearest manager who provides individualized attention to employees concerns, needs and

demonstrates commitment to employee's wellbeing will contribute enormously to employee's positive perception of the change, thereby invoking their commitment.

It is evident that HCPI significantly affects change process implementation. This is because it seeks to empower and enhance the coping abilities of individuals during change. As divergent opinions are welcomed, roles or expectations are rapidly clarified, employee divergent views considered, and managers or supervisors are made physically available to ensure that the dilemmas of employees during workplace changes are resolved, will greatly benefit all change recipients. Thus, the potential benefits of a healthy change process accrue to both employees and the organization through enhancing individual health and wellbeing, as well as improving the productivity of the organization (Tvedt et al., 2009). On the contrary, in situations where the change process implementation is deemed unhealthy both employee welfare and organizational change effectiveness is likely to suffer greatly. This suggests that organizations should concentrate effort on ensuring that all avenues are explored so that the change implementation enhances employees welfare since this has long term implications for the organization.

Karasek's Model of the Psychosocial Work environment

In the following section, a critical review of the psychosocial work environment and its role in explaining the association between job stress, health complaints and organizational change are undertaken. This review heavily relies on Karasek's (1979) Job Demand and Control model of the psychosocial work environment.

Job Stress and Health Complaints

For nearly every employee, organization change may create negative outcomes, such as unclear role responsibilities, increased workload, risk of redundancy, a lowering of social status, and family and job conflicts (Schabraq & Cooper, 1998; Yu, 2009). There is a general consensus among both theorists and practitioners that organization change remains the greatest source of stress on the job, and perhaps, in employees' life (Callan, 1993). Schabraq and Cooper (1998) argue that employees' stress arises because positions or technical skills may be threatened or altered during organizational change. Yet, there is

limited body of literature linking the antecedents and consequences of job stress and organizational change, and how organizations can help employees cope in a changing work setting (Callan, 1993; Woodward & Hendry, 2004).

The general consensus in the workplace health promotion literature is that psychosocial and organizational working conditions such as job demand (e.g. workload, work pressure etc.), decision-making freedom, and helpful social support represent important factors in the occupational stress process (de Jonge & Kompier, 1997; Lawson, Noblet, & Rodwell, 2009). Since Karasek (1979) reported on his Job Demand and Control (DC) model of occupational stress, subsequent studies have been influenced markedly. According to this model, a psychological work environment can be thought of to be characterized by a combination of job demands and job control. And that job demands and control are the two most important job characteristics accounting for employee job strain experience (van der Doef & Maes, 1999). It maintains that high levels of job strain will be experienced when employees are faced with high job demands, and relatively low levels of decision-making control. Based on this model, workers who perceive their job as demanding and yet believe they have some control over their work would be expected to experience improved personal or job satisfaction and favourable job-related outcomes (Daniels & Guppy, (1994). On the other hand, employees who are consistently faced with high levels of job demands and relatively low levels of perceived job control are more likely to experience psychological strain and adverse job-related outcomes. Le Blanc, de Jonge & Schaufeli, (2000) noted that job stress was associated with increased work demands and lack of job resources (including decision making control and skill utilization), affects the psychological and mental health of employees absorbing organizational changes.

Importantly, social support was added to the DC model when Johnson and Hall (1988) reported that support received from supervisors and colleagues often mitigated the effect of demands and control on outcome variables. Hence, they suggested extending the DC model with social support, resulting in the demand-control-support (DCS) model. The DCS model predicts that employees will experience high levels of psychological strain when they are faced with high job demands, and relatively low levels of perceived control and/or social support to counter those demands. In terms of health complaints, the DCS maintains that job demands (workload and other job stressors) and decision latitude (skill discretion and

decision authority) and social support are all together assumed to determine health and wellbeing. So that high job demands may results in high strain reactions such as fatigue, physical illness, and coronary vascular disease in situations where levels of job control and social support are relatively low (Karasek, 1979; Karasek & Theodorell, 1990; Roelen, Schreuder, Petra, Koopmans, & Groothooff, 2008). Specifically, the 'iso-strain' hypothesis (Karasek and Theorell, 1990) posits that workers are more likely to report health problems when they work in isolation; where helpful support from work colleagues and supervisors is absent. Conversely, when employees have high levels of perceived control and high social support, their health complaints will minimize considerably in a high strain work situation where job demands are relatively high (van der Doef & Maes, 1999).

Organizations that intend to improve the health and wellbeing of its workers during change must consider harnessing various supportive social contacts in place.

A large body of literature has tested the strain hypothesis and the results have proven inconsistent. For example, the extensive review carried out by van der Doef and Maes (1999) did indicate that very few of the studies examining the relationship between job characteristics and psychological wellbeing confirmed the strain hypothesis. Moreover, only few studies regarding the iso-strain hypothesis reviewed by Doef and Maes (1999) were confirmed. Much of these studies did not support the association among the three job characteristics and psychological wellbieng (De Lange, Taris, Kompier, Houtman, & Bongers, 2003). Based on the inconsistent support reported for the DCS model in previous models (e.g. de Lange et al., 2003; van der Doef & Maes, 1999), it thus suggests that one ought to be cautious when interpreting results from the model, and also indicate any possible methological limitations that might influence the findings. One limitation cited for the previous reviews was the use of cross-sectional designs, which restricts the testing of causal relationships (de Lange, 2003).

In sum, the potential effect of organizational change on the psychosocial work environment as defined by the DCS model is well recognized. Tvedt e al. (2009) reported that during workplace change job demands are likely to increase, despite attempts to contain it. And this has implications for healthy change processes. On the contrary, control and support may be enhanced by the HCPI through strategies such as clarifying roles employees are to

occupy, promoting a constructive conflict approach, and providing access to a manager with organizational insight to address employees concerns. Such strategies are considered to impact the psychosocial work environment (Tvedt et al., 2009). The most obvious requirement in the change process is, therefore, to make the process much healthier in order to reduce the experience of stress and lessen health complaints. This suggests that when the change implementation process is healthy, there is the tendency that the psychosocial work environment could be affected which will invariably enhance employee's psychological wellbeing, and in the process generate increased commitment.

Affective commitment

This review seeks to apply the concept of perceived organizational support to understand employee commitment, and how it may be achieved during planned change implementation. Gaining employee commitment is considered very critical to the achievement of change goals (Carr et al., 1996, Lines, 2004). Yet not much has been done to understand how commitment occurs and the mechanisms for strengthening it during organizational change.

Organization commitment is a construct which attracts many definitions. It has evolved into a complex concept which is considered to serve as a predictor of employee work attitudes and/or behavioural intention (Bennett & Durkin, 2000). While appreciating that organizational commitment can be approached from a number of different perspectives, affective commitment serves a better purpose when it comes to understanding commitment in a change process. Since the goal is to assess the strength of employee's identification with and involvement in the change process for the achievement of organizational goals.

Eisenberger, Huntington, Hutchison, and Sowa (1986) adopted the concept of Perceived Organizational Support (POS) to account for the development of employee commitment to an organization. They proposed that employees' perceptions of the organization's commitment to them, labeled as perceived organizational support (POS) create feelings of obligation to the employer, which invariably enhances employees' work-related behaviour. In this respect, "employees develop global beliefs concerning the extent to which the

organization values their contributions and cares about their well-being" (1986, p.501); these global beliefs is termed perceived organizational support.

Adopting a social exchange viewpoint, Eisenberger et al. (1986) argued that employees who perceive a high level of organizational support are more likely to feel an obligation to return the employers' commitment in terms of engaging in behaviours that support organizational goals (Shore & Wayne, 1993). Thus, high levels of POS create feelings of obligation, which is met with affective commitment, and other positive work related behaviours by employees. Affective commitment is defined as "an affective or emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership, in the organization" (Allen & Meyer, 1990, p. 2). Consequently, employees will seek a balance in their exchange process with their organizations by having attitudes and behaviors that match the degree of commitment they perceive their organizations give them as individuals.

Since supervisors act as agents of the organization, who are directly held accountable for subordinates' performance, employees would consider their good or bad treatment toward them as revealing of the organization's support (Eisenberger et al., 1986). Hence, if employees hold the belief that supervisors value their contribution and show concern for their wellbeing, it is likely that they will become emotionally attached and physically involved in the organization (Allen & Meyer, 1990; Eisenberger et al., 1986; Eisenberger et al., 2002; Shore & Wayne, 1993). Having the assurance that you are valued and cared for by an employer also enhances employees' trust that the organization will fulfill its exchange obligations of recognizing and rewarding desired employee attitudes and behavior (Eisenberger et al., 1986). And in terms of change process implementation, the perception that the organization is keen on creating a psychologically enabling environment where supervisor support is high and managers are available to address critical employee issues is a strong indicator of the organizations' commitment to employee wellbeing (Brough & Pears, 2004; Saksvik et al., 2007; Tvedt, et al. 2009).

Review of related studies in terms of HCPI, DCS and the outcome variables.

This section will attempt to report on similar studies that provide support for the HCPI, and DCS factors in terms of stress, health complaints, commitment, and other organizational or work-related outcomes. Hence, the initial part of the review will concentrate on similar studies on the HCPI, while the rest of sections deal with the DCS model in relations to the outcome variables.

It is important to indicate that there is limited amount of published work in terms of the HCPI since the model is new and being developed. What is found readily available is the work of Tvedt, Saksvik, and Nytrø (2009). They investigated the negative consequences of organizational change on the psychosocial work environment experienced by employees during change. This study enabled the researchers to test how the 'healthiness of the change process' reduced the negative impact of change due to the poor nature of the psychosocial work environment. The results showed that organizational change contributed to increased demand and stress, and lower support. Moreover, change and control showed no significant associations. Their finding showed that 34% of the reported variance in stress was contributed by the interactions between demand and change. The strongest effect on stress was explained by job demand, whereas support and change produced moderate effects. Control, on the other hand, was very weak. They also reported that change process healthiness had direct negative effect on stress, and direct positive effect on stress through support and control. Importantly, the effect of HCPI was observed to reduce stress and increase both support and control. The researchers concluded that, a healthy change process reduced the experiences of stress through improved coping with demands and improving the psychosocial work environment – enhancing control and social support. Tvedt et al. (2009) were quick to explain that the method of analysis could not explain the causal relationship existing among the study variables, and suggested that future research should give it full attention.

In another study, Ashford (1988) examined employee's strategies for coping with stress during major organizational changes. In his study, 180 respondents returned usable questionnaires (response rate of 55%), which sought information on perceived stressors, individuals own stress levels, and coping behaviors. Results from multivariate analysis pointed out that perceived uncertainty and feelings of anxiety about the impact of change

were related to employee stress. However, this relationship was moderately mitigated by coping resources and responses. Feelings of personal control and tolerance for ambiguity both had a significant negative correlation with stress levels. Surprisingly, the researcher noted that information seeking behaviors or feedback failed to improve stress levels. But attempts to share emotional concerns were considered to improve stress levels. This suggests that improving employees coping skills is a very important requirement since it will go a long way to reduce stress and enhance employees' wellbeing.

In terms of demand-control-support model, Dollard and Winefield (1998) tested for the validity of the DCS model among Australian workers pointed out that workers who experienced high job demands also reported high levels of psychological distress, job dissatisfaction, and physical health symptoms. Furthermore, these negative outcomes were worsened when high job demands were experienced in the face of low levels of job control and low levels of perceived social support. Moreover, recent studies have highlighted that the source of social support is equally important and requires consideration. For example, Brough and Pears (2004) using 95 Australian human services workers demonstrated that support received from supervisors positively predicted levels of job satisfaction, whereas support received from work colleagues was not so strongly related to either job satisfaction or work-related psychological well-being. This shows that supervisor support shows more weighting than work colleague in social support ratings. The limitation cited for this study was the relatively low sample size used for the study, which makes generalization to the findings to a larger population very problematic. However, this study has indicated the important role supervisor's play to enhance employees' wellbeing. Dollard, Winefield, Winefield (1998) and Daniels and Guppy (1994) also reported that jobs that involved high demands and high control produced the highest levels of personal accomplishment. However, employees who were faced with high job demand and a low level of control and low social support resulted in the lowest levels of satisfaction. Similarly, Poulin and Walter (1993) in a longitudinal study focusing on burnout in social workers confirmed that when supervisor support increased over a 12-month period burnout decreased significantly. Also, in a cross-lagged study between job characteristics and workers well-being, de Jonge et al. (2001) stressed that both job demands and workplace social support appeared to be the most dominant causal factors influencing job satisfaction.

Importantly, the DC and the DCS have been extensively researched among a wide variety of occupational and industry contexts (for reviews, see van der Doef & Maes, 1999). The models have shed both theoretical and practical insights into the antecedents and consequences of occupational stress (e.g. Dollard, et al., 2000; Poulin and Walter 1993; van de Doef & Maes, 1999). Support for the interactive effect between the levels of job demand and job control have, however, been markedly inconsistent. For example, van der Doef and Maes (1999) found a moderating effect for job control in a limited number of studies that tested this interaction. Also, Pelfrene, Vlerick, Kittel Mak, Kornitzer, and Backer (2001) in their study with 16335 male and 5084 females reported that a lack of evidence for job control in mitigating the effects of high job demands on indicators of psychological wellbeing. Likewise, some research evidence did not provide backing for social support's buffering effect on high psychological strain and indicators of wellbeing. The lack of consistency for evidence for the interactive or mitigating effect of control and support have been attributed to poor construct measurement, overreliance on cross-sectional research designs, low statistical power, and a failure to take account of nonlinear relationships (Brough and Pear, 2004; De Lange et al., 2003). Nevertheless, the DCS model remain popular theories for investigating occupational stress (e.g. Dollard, et al., 2000; Poulin & Walter, 1993).

The effect of the psychosocial work environment on health complaints has also produced varying results. Roelen, Schreuder, Petra, Koopmans, Groothooff (2008) used a cross-sectional study of 867 male workers in manufacturing industry, and with the Self-completed Occupational Health Questionnaire to investigate the relationship between perceived (physical and mental) workload and specific job demands with health complaints. They reported that job demands played a crucial role in health complaints, particularly in the high prevalence of musculoskeletal symptoms. For example, mental workload predicted fatigue and chest pain. They did not demonstrate how this interaction could be mitigated. They, however, stressed that “persistent health complaints result in a feeling of being unhealthy, provoking illness behaviour and loss of work productivity or sickness absence” (Corne et al., 2007, p. 62). This suggests that employee's health complaints could result from long standing health conditions, and may not be based on temporary experiences of the psychosocial work environment as is the case with job stress. Thus, this distinction is necessary in order understand stress and its related outcomes.

Schreuder, Roelen, Koopman, and Groothoff (2008) also studied the effect of job demands (both physical and psychological) on health complaints among white and blue collar employees. They hypothesized that physical and psychological job demands will be differentially distributed among white and blue collar workers – whether their reported health complaints were consistent with their working conditions. Using a cross-sectional study, 323 white and 383 blue collar workers completed the Basic Occupational Health Questionnaire. They found that white collar workers reported higher psychological job demands, whereas blue collar workers reported higher physical demands. In both occupational groups, low back pain, fatigue and upper respiratory complaints were most common. Despite the differences in job demands, white and blue collar workers reported similar health complaints.

Hammer, Saksvik, Nytrø, Torvatn and Bayazti (2004) carried out a cross-sectional survey to examine the interrelationship among organizational level norms, and social relations, work-family conflict, on job stress and subjective health symptoms, while controlling for psychosocial work environmental factors. Hierarchical multiple regressions were used to assess the predictive capacity of the variables, using job stress and health symptoms as outcome variables. The results indicated that demographic variables accounted for very little variance in job stress. Job demands significantly and positively correlated with job stress. Support, on the hand, related negatively with job stress. Job control was not related to job stress. The results also showed that job demands was positively related to health symptoms, while job control, coworker and supervisor support were negatively related to subjective health symptoms. This study has also demonstrated the inconsistent results when comparing all three DCS model (De Lange et al., 2003; Van de Doef & Maes, 1999). Particularly, control is reported not to show strong association with job stress, and most outcome variables it is tested with. Pointing out some limitations of the study, the researchers concluded that the nature of the industry from which the sample was drawn could bias the results since the research setting was typically noted for high demands and low autonomy – an indication of high strain jobs.

Lastly, the studies examined here focuses on the role of perceived organizational support in predicting affective commitment and other employee work-related behaviour. Rhoades, Eisenberger and Armeli (2001) examined the interrelationships among work experiences,

perceived organizational support (POS), affective commitment (AC), and employee turnover. Adopting structural equation modeling (SEM) data analysis technique, they reported that work experiences; measured by organizational rewards, procedural justice, and supervisor support had a unique indirect relationship with AC. And that POS mediated these associations. That is, favorable work conditions operated through POS to increase AC, which, in turn, decreased employee withdrawal behavior. Perceived supervisor support was noted to contribute indirectly to affective commitment through perceived organizational support. These findings suggest that favourable work experiences attributable to organization's discretionary actions (organizational rewards, procedural justice and supervisor support) contributes to POS, which in turn mediates the relationships between work experiences and AC. The findings give support to the assumption that POS reduces turnover partly by strengthening employees' emotional bond to the organization (e.g., Allen and Meyer, 1990)

Eisenberger, Stinghanber, Vandenberghe, and Rhoades (2002) also employed a longitudinal study design in three separate studies to examine whether perceived supervisor support significantly contributed to perceived organizational support and employee retention. Drawing respondents from various industry settings, they observed that perceived supervisor support was positively related to perceived organizational support and negatively related to employee turnover. In this respect, helpful support received from supervisors should increase perceived organizational support, which in turn, reduces turnover by strengthening felt obligation toward the organization (Eisenberger, et al., 2002). The researchers further reported that the supervisor's perceived status within the organization strengthened the association with perceived organizational support. Not only was the supervisors perceived support regarded important, but also his or her perceived influence in important organizational decisions; and the level of autonomy and authority the supervisors exercises in his or her role performance (Eisenberger, et al., 2002). The association could be indicated as inherent in the HCPI dimension of manager availability. Since Saksvik et al. (2007) argued the available manager's influence is considerable if she/he has insight into the change agenda, and also has authority to influence the process.

Allen, Shore, and Griffeth (2003) studied the role of POS in predicting voluntary turnover among 215 salespeople and 197 insurance agents – two independent samples. They found that organizational HR practices perceived as supportive by employees (i.e., participation in decision making, growth opportunities, and fairness of rewards/recognition) enhances POS, which leads to affective commitment, because employees appreciate the fact that the organization support and cares about them. Clearly, supportive organizational practices are viewed as signaling the extent to which the organization values and cares about employees as individuals (Allen, Shore, & Griffeth, 2003; Shore & Wayne, 1993).

Summary of literature review

This review has shown that multitude of forces within both the external and internal environment are forcing organizations to change. In response to these, several authors have provided different frameworks to better understand and to implement effective change programmes. Among such models is Lewin's (1947) planned approach to change, which has served as the foundation for most studies in change management. Other models including the complexity theory and systems framework of change, have all received varying support and criticisms.

Despite their overwhelming influence, these models fail to address the potential challenges of employees who are forced to cope with change, with little or no support from their organizations (Callan, 1993). Moreover, since organizations blame human factors when change initiatives goes bad (Dent & Goldberg, 1999), the urgent need will be to fashion out strategies which addresses employees challenges, such as increasing their participation, improving the psychosocial work environment, enhancing their coping capabilities etc. during change. Moreover, when favourable manager – employee exchanges are promoted during change implementation, employee's sense of commitment is likely to increase, which has benefits for both the individual and the organization. Thus, a healthy change process intervention, measured by HCPI, seeks to enhance employees' wellbeing through factors such as awareness of diversity, early role clarification, constructive conflicts, and manager availability. Finally, though the DCS has proved very useful in understanding the psychosocial work environment in terms of strain and stress related outcomes (e.g., van der

Doef & Maes, 1999). However, it criticized as being too simplistic and fails to consider nonlinear relationships, which is believed to mask the true picture of the model (de Jonge & Kompier, 1997). Notwithstanding, the DCS is among the most widely tested models of occupational stress (De Lange et al., 2003), which implies that it should be considered a relevant model in understanding various outcome variables particularly during change.

Aims and Objectives of study

Thus, the predominant purpose of this study was to examine the relevance of the healthy change process, and perceived psychological work environment in contributing to stress, health complaints and commitment during planned organizational change, particularly at the shop floor level.

Specific objectives that were pursued included:

- To investigate the extent of impact of healthy change processes in reducing stress, and health complaints, and strengthening employee affective commitment.
- To investigate the extent to which the individual HCPI dimensions (early role clarification, constructive conflicts and manager availability) explain stress, health complaints, commitment.
- To examine the effect of the psychosocial work environment factors in predicting stress, health complaints and commitment among banking professionals in Ghana.
- To determine the extent to which DCS mediates the effect of healthy change process on employee commitment.
- To discuss the implications of the findings in terms of intervention strategies.

It is important to stress that this study treated the individual dimensions of the HCPI as compared to considering it as composite framework. This is against the backdrop that doing this will help specify the extent to which each dimension explains a particular variable without camouflaging the effect of any of the dimensions. Moreover, only three of the HCPI dimensions (early role clarification, constructive conflicts and manager availability) were chosen for this study. Specifically, awareness of diversity was not included because its reliability scores was significantly below the acceptable level,

suggesting that the measure was not understood the manner it was meant to be read in the culture of origin. Also, the results indicated that awareness of diversity did not contribute significantly to explaining the observed relationships as compared to the other three. Hence, the decision to exclude the awareness of diversity construct.

Hypotheses of the Study

Based on the literature reviewed and the objectives stated above, this section will highlight the set of hypotheses to guide this work.

To begin with, there is enough evidence to suggest that during times of significant changes, employees experience high levels of stress as their jobs, areas of responsibility and roles are significantly affected (Callan, 1993; Martins, Jones, Callan, 2005; Lowe, 2004). Thus, high levels of stress and health complaints have both been cited as consequences of change (Schreuder et al., 2008). Yet research is scarce on how organizations may help employees to affectively cope with change, especially by promoting healthy change processes. Saksvik et al. (2007) proposed the healthiness of the change process as a change process intervention to empower and help employees cope with change. HCPI is expected to contribute to improvements in employees' wellbeing through practices and values such as constructive conflict, timely clarification of roles, and manager availability (Saksvik et al., 2007; Tvedt et al., 2009). It is expected that such process approach to change will decrease certain dysfunctional outcomes such as stress, health complaints, uncertainty, confusion etc., and also improve attitudinal outcomes such as commitment. For example, Difonzo and Bordia (1994) reported that timely role clarification reduced uncertainty, anxiety and hence stress. Generally, if conflicts are managed in a constructive manner, roles rapidly clarified and managers made available to answer challenges faced by employees during change, a more satisfying and healthy change will be the outcome. It is anticipated that high scores on HCPI dimensions will significantly contribute to improvements in different aspects of the psychosocial work environment, and commitment.

Hence, it is hypothesized that:

- *Hypothesis 1:* HCPI dimensions will predict stress, health complaints and commitment.

- *H1.1:* Early role clarification will have a negative main effect on stress, and health complaints, but a positive main effect on commitment.
- *H1.2:* Constructive conflicts will have a negative main effect on stress, and health complaints, but a positive main effect on commitment.
- *H1.3:* Manager availability will have a negative main effect on stress, and health complaints, but a positive main effect on commitment.

Secondly, the basic argument is that demand-control-support factors will significantly contribute to employee stress and health complaints, such that high levels of stress and health complaints resulting from high job demands, low levels of control and low support (Daniels & Guppy, 1994; Karasek & Theorell, 1990; van de Doef & Maes, 1999). However, the effects of high demands on stress and health complaints are mitigated by high levels of control and support (e.g., Bond & Bunce, 2001; Daniels & Guppy, 1994). Researchers have argued that stress and its related outcomes can be improved by increasing people's control and support at their work (Karasek, & Theorell, 1990; Bond & Bunce, 2001). Dollard and Winefield (1998) found that workers reported high levels of psychological distress, job dissatisfaction, and physical health symptoms when faced with high demands with corresponding low levels of control and perceived support. Other studies have also reported positive relationship between perceived social support and affective commitment (Eisenberger et al., 1986; Eisenberger et al., 2002). It is assumed that when employees perceive their organizations to value their contribution, and is concerned about their wellbeing (by the support they receive), they are more likely to identify with and commit to organizational goals. Thus, the DCS model is assumed to contribute favourably to other organizational outcomes such as job satisfaction, commitment, intention to leave, personal accomplishment, whenever employees perceive high levels of control, and support in the face of increased demands (Dollard et al., 2000; Poulin & Walter, 1993). In accordance with the above, it is hypothesized that:

- *Hypothesis 2:* DCS will significantly predict stress, health complaints and commitment.

- *H2.1:* Demands will have a positive main effect on job stress whereas social support and control will have negative main effects on stress.
- *H2:2* Demands will have a positive main effect on health complaints, whereas control and support will have a negative main effect on health complaints.
- *H2:3* Control and social support will have positive main effect on commitment whereas demands will have negative main effect on commitment

Finally, it is expected that social support will mediate the effect of manager availability on commitment. According to the social exchange theory (e.g., Eisenberger et al., 1986) employees are likely to exhibit increased commitment when they perceive their organizations, or supervisors to show concern and care for their wellbeing. Thus, the perception that employees are treated favourably is repaid with increased involvement in, or support for organizational goals (Eisenberger et al., 1986; Shore & Wayne, 2002). Therefore, within a changing environment if managers are made available to encourage dialogue on issues of critical importance to employees, and also facilitate communication in order to clarify roles and expectations, such behaviour may be construed as concern for how employees fare under the change. In this sense, the expression of support by managers or supervisors will be positively related to employees' level of commitment (Eisenberger et al., 2002; Shore & Wayne, 2002). Therefore, it is hypothesized that:

- *H3.1:* Social support will mediate the effects of manager availability on commitment. It is expected that manager availability will work through social support to predict commitment.

METHODOLOGY

This section outlines the various methodological approaches that were utilized for the study. Most notably, methodological considerations such as design of study, sample and sampling strategy, procedure for selecting sample, instrument for study and data analysis procedure are outlined.

Design

The main aim of the study was to investigate the relevance of change process healthiness and the psychosocial work factors on employees' perceived job stress, health complaints and affective commitment. The study adopted a cross-sectional research design (non-experimental fixed design). Specifically, a case study method was employed in this study.

Setting

This study was conducted within a financial institution (bank) in Ghana. Specifically, the setting was selected based on two major reasons. First, within the large frame of things, it had become obvious that the Ghanaian banking sector was undergoing fundamental changes, considerably affecting how employees do their job and the state of their psychosocial health. These conditions are assumed to influence whether or not employees would be emotionally attached to their organizations. Second, the bank which was chosen for this study had witnessed the appointment of a new CEO who was championing new forms of changes – from cultural to structural changes e.g., opening and relocating employees to new branches, refurbishment of the headquarters, operational risk reduction strategies, new reward systems, job and work setting redesign etc (Burke & Litwin, 1992; Carr, Hard & Trahant, 1996). All these changes were ongoing throughout the various branches of the bank.

This bank has over 15 branches spread throughout the country. Data collection for this study took place at the headquarters of the bank. It was assumed that the headquarters would have a fairly large number of employees to aid sampling than would be at the branch level; this was purported to enhance a high rate of return. Moreover, given the magnitude of the change initiative undertaken by the bank, it stands to reason that employees at the

headquarters would be well placed to experience the change better than their counterparts at the branch level. This made the setting favorable for the study.

Population and Sample

A total of 230 workers were approached to participate in the study. Out of this, 132 workers agreed to fill and return usable questionnaires – representing an overall response rate of 57%. Participants comprised those considered as both permanent and temporary staff. Permanent workers represented 61.1%, whereas temporary staff made a total of 38.9%. Also, the sample consisted of 62 males (47%) and 70 female employees (53%). The average age of all respondents was 32.12 years ($SD = 6.20$), and the average firm tenure was 4.87 years ($SD = 3.94$). In terms of education, 70.5% had completed a university degree, and the rest had completed diplomas, MBA and secondary education. A total of 97 respondents reported that they had no supervisory responsibility.

Procedure

As a policy, the bank did not encourage ‘outsiders’ to distribute and collect questionnaire data from employees. Banks in Ghana are generally very skeptical about information leaving their walls into the public domain, particularly ones that are very sensitive. Therefore, in order to gain acceptance and make in-roads into the bank for the purpose of collecting data, a change leader was identified and briefed about the rationale for the study. He subsequently volunteered to act as a co-researcher or research assistant. Hence, employees were contacted by the change leader, who also briefed them about the research, and sought their voluntary participation. The research assistant’s role became very important since the respondent’s main concern was trust; whether they could trust the purpose for which the information was collected. However, their willingness to participate became obvious due to the direct involvement of the change leader. The research assistant, together with other employees distributed the questionnaires in sealed envelopes that were provided by the researcher. The questionnaires were accompanied with information sheet which outlined the purpose of the study, instructions for completing and returning the questionnaire. All completed questionnaire were returned to the research assistant in sealed envelopes. Though filling out the questionnaire took 30 minutes, two weeks was given for

all participants to fill out and return the questionnaires to the designated person. Participants were instructed not to put any form of identification on any part of the questionnaire. Given the nature of the survey, randomization could not be achieved, and data collection was constrained by time limitation.

Materials/Instruments

The questionnaire was divided into several sections, with each section capturing specific data. The first section, for example, sought data regarding respondent's demographics such as age, sex, tenure, supervisory role, type of organizational change underway, and highest completed education. The rest of the sections focused on items measuring both the dependent and independent variables, which are expanded upon in the sections below.

Measures

The Healthy Change Process Index (HCPI). The HCPI developed Tvedt, Saksvik, and Nytrø (2009) was used to assess the level of perceived healthiness of the change process within this bank. Originally comprising five items, the scale was reduced to four, precluding awareness of workplace norms. This study, however, adopted three subscales namely; early role clarification, constructive conflict, and manager availability). Three items were selected for each subscale. Some of the items are: "I have had the opportunity to talk to my immediate manager about the consequences the change will have for me" and "Management is reluctant to address difficult issues regarding consequences the change will have for individual employees" (Manager Availability). "Various areas of responsibility and tasks about the change are rapidly clarified" and "In most cases we know who has responsibility for various tasks" (Role clarification). Lastly, "Management encourages dialogue about the change, but they don't listen" and "It does not feel safe to criticize management about the change" (Constructive criticisms). All the items were scored on a 5-point Likert scale ranging from "Completely disagree to fully agree" Scale reliability were as follows: Manager availability ($\alpha = .52$), Role clarification ($\alpha = .62$) and Constructive conflict ($\alpha = .79$).

The Psychosocial work environment factors were measured by, or based on, items from the Job Content Questionnaire (Karasek, et al., 1998). Items for this study were selected based on the results of a study that examined the validity and reliability of the JCQ (Landsbergis

et al., 2000). Items that were highest on the inter-item reliability of their respective scales were chosen (Hammer et al., 2004).

Job demands. Job demands were measured with three items from the JCQ, which assessed how often respondents have to work that demanded their constant attention, work with constant time pressure due to heavy workloads, and engage in work that is emotionally straining. Scale reliability was .66. Responses were on a 5-point scale ranging from *very seldom* to *very often*.

Job control. Job control was measured with two items from the JCQ scale. Two items were used. How often ... “do you have a lot to say about what happens on your job” “and “do you have the freedom to decide how to do your work?” Scale reliability was rather low, at .39. This could be attributed to the fact that, given the geographical context of the organization, employees might have perceived control in a different sense. Though scale reliability was very weak, job control was included as a study variable. The researchers review of the literature indicated that other studies had used equally low scale reliability scores (Tvedt, Saksvik and Nytro, 2009). The response categories were given on 5-point scale ranging from *very seldom* to *very often*.

Finally, *Social Support* was defined by three items from the JCQ scale: How often ... “does your colleague offer advice or help?” “does your supervisor offer advice or help?” and “does your supervisor provide information that he or she has received from others?” Scale reliability was .63. Response categories ranged from *very seldom* to *very often*.

Job Stress was measured with 7 items from the Cooper’s Job Stress scale (Cooper, 1981). Response categories were rated on a 6-point scale: *no stress at all* to *a great deal of stress*. The questions were framed in this manner: “Assess to what degree the particular statement is a source of stress for you at work?” (1) “The workload,” (2) “Time pressure and deadlines” (3) “Demands of work on my private life” (4) “Clarity of my job” (5) “Risk of redundancy” (6) “Restructuring and organizational change” and (7) “Lack of feedback on my work.” The scale showed a Cronbach’s alpha (α) = .79.

Affective Commitment was measured with items from the Three-Component Model (TMC) of commitment by Meyer and Allen (1991). The TCM of Employee commitment scale measures three forms of commitment to an organization: emotion-based (Affective),

obligation-based (Normative) and cost-based (Continuance). Four items were selected to measure affective commitment. Response categories ranged from *completely disagree* to *fully agree*. Some of the items are: “I would be very happy to spend the rest of my career with this organization,” “I really feel as if this organization’s problems are my own,” and “I do not feel emotionally attached to this organization.”

Health complaints. The Subjective Health Complaints (SHC) inventory developed by Eriksen, Camila and Ursin (1999) was used to measure health complaints. The original SHC inventory scale consists of 29 questions concerning severity and duration of subjective somatic and psychological complaints. However, 7 items were selected for this study. Each item was rated on a 5-point scale with response alternatives ranging from “No complaints” to “Severe complaints.” Questions were framed in the following way: “How much of these health complaints do you experience in connection to your work?” Scale reliability was .74. Higher scores on this variable indicated poor health.

Data analysis

Data analysis was performed with SPSS English version 17 for windows. Descriptive statistics, Pearson product moment correlation and Hierarchical multiple regression analyses were performed. Pearson correlation coefficients were calculated for key socio-demographic variables, psychosocial work environment factors (PWE), Healthy Change Process Index (HCPI), and affective commitment, health complaints, job stress as are shown in Table 1. Three hierarchical multiple regressions were conducted to assess the effect of PWE factors and HCPI factors to predicting the overall job stress, health complaints and affective commitment among employees in this study. In each case, employee age, sex, educational level, experience (tenure), terms of contract, supervisory role were entered as demographic control variables in step 1. The PWE factors were entered as step 2 of the regression analyses to examine their contribution to the overall model, after statistically holding constant the effect of the control variables. In step 3, HCPI factors were also entered to measure the degree of variance they might account for, after statistically holding constant the effect of the control variables.

Furthermore, Sobel (1982) test of mediation was performed on the DCS and HCPI factors in relation to all three dependent variables. This test is able to indicate whether a mediator carries the influence of an independent variable on a dependent variable. Three conditions ought to be established in order to conclude that mediation exist among the variables. That is, whether: (1) the IV predicts the DV; (2) the IV predicts the mediator; and (3) the mediator predicts the DV (while adjusting for the IV) (see, Preacher & Hayes, 2008, for review).

Ethical issues

Ethical regulations outlining professional guidelines for the conduct of research were strictly adhered to in this study. First and foremost, informed consent was obtained by writing a letter to the Head of corporate affairs of the bank, who upon agreeing informed employees through a memo. Secondly, the questionnaires the participants received were accompanied by introductory letters that detailed out the purpose of the research, and expected duration for participation. This was meant to ensure that respondents fully understood the research and what information was required from them. Participants were made aware that information gathered would be used only for the purpose for which it was collected - to advance knowledge in research on healthy change process implementation and psychosocial work environment during change process implementation.

Moreover, as is characteristic of all research, it was important that participation was voluntary. This was facilitated by a change leader who also acted as a research assistant. The change leader's role engendered trust in the respondents who were concerned about their privacy. They were assured that any personal information obtained will be treated confidential. Moreover, each questionnaire was coded with numbers to enhance anonymity. They were also instructed not to put any form of identification on the questionnaires to avoid being traceable. Lastly, respondents were made aware that the findings of the study will be made available to the bank in a way that will not warrant any individual employee or a particular group of people identifiable. Generally, all aspects of the research was conducted in conformity to laid down regulations as enshrined in the American Psychological Association's (APA) code of conduct (2002).

RESULTS

Descriptive statistics and Correlations

In order to examine the correlations among study variables, Pearson correlation coefficients were calculated. The correlation coefficients range between .01 and .45, which demonstrates that the variables are free from the biasing effect of multicollinearity. Field (2009) noted that a set of predictors are free from the effect of multicollinearity if the correlation values range between .01 and .70. Inspection of the correlation table show that educational qualification correlated negatively with job stress. Job demand also related positively with job stress, showing a relatively moderate correlations ($r = .38$). Social support and constructive conflict, on the other hand, showed negative correlations with job stress ($r \leq .30$). The rest of the demographic and independent variables did not show any significant correlations with job stress, except educational qualification which showed negative correlations with job stress ($r < .2$).

Among the demographic variables, gender was negatively related to health complaints ($r < .2$). Job demand was positively related to health complaints, while job control and social support showed negative associations with health complaints ($r \geq .2$), but these relationships were very weak. Two HCPI dimensions; Manager availability and Role clarification both correlated negatively with health complaints ($r < .3$). Constructive conflict, however, did not show any significant relations with this outcome variable.

Furthermore, the correlation results (see Table 1 below) show that none of the demographic factors correlated with affective commitment. On the other hand, Social support, manager availability and role clarification were the only explanatory variables that related positively with affective commitment ($r < .4$). The rest posted insignificant correlations with commitment.

Table 1. Means (M), standard deviations (SD), internal consistencies (α) and Pearson correlations of the variables included in this study (N = 132).

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender ^a	-	-	-														
2. Age	32.12	6.20	-.22*	-													
3. Education	1.46	.82	-.03	.46**	-												
4. Tenure	4.87	3.94	-.20	.90**	.45**	-											
5. Supervisor Role	1.73	.44	.09	-.38**	-.19*	-.44**	-										
6. Contract terms	1.39	.49	.10	-.33**	-.15	-.39**	.37**	-									
7. Job Demand	11.95	2.48	.10	-.12	-.19*	-.08	-.02	-.01	(.66)								
8. Job Control	5.95	2.20	.43	.13	.21*	.14	.09	.01	.03	(.43)							
9. Social support	11.60	2.21	.16	.06	-.01	.08	.01	-.03	-.13	.27**	(.63)						
10. MA ^b	10.33	2.74	.04	-.01	-.06	.04	-.07	.03	.03	-.02	.19*	(.52)					
11. RC ^c	11.83	2.44	-.05	.07	-.04	-.01	.03	.06	-.08	.11	.17	.14	(.62)				
12. CC ^d	9.59	3.53	.03	.06	.11	.07	.08	.14	-.01	.06	.15	.32**	.23**	(.79)			
13. AC ^e	14.70	3.21	.16	-.12	-.09	-.11	.07	.13	-.03	-.01	.23**	.32**	.19**	.14	(.62)		
14. HC ^f	14.33	5.50	.18*	-.10	-.05	-.13	.07	-.07	.27**	-.21*	-.24**	-.19*	-.27**	-.07	-.06	(.74)	
15. Job Stress	22.83	6.96	-.12	-.05	-.22*	-.15	-.01	.01	.38**	-.17	-.21*	-.11	-.15	-.30**	-.10	.39**	(.79)

Note: * $p \leq .05$, ** $p \leq .01$, ^a 1 = Male, 2 = female. Scale reliabilities (alpha) on the diagonal in parenthesis.

^b = Manager availability, ^c = Role clarification, ^d = constructive conflicts, ^e = Affective commitment, ^f = Health Complaints.

Hierarchical Multiple Regression Analysis

To test the relative contribution of the study variables in predicting the overall job stress, health complaints and affective commitment among bankers undergoing organizational change, three separate hierarchical multiple regressions were calculated for each of the criterion variables, as presented in tables 2, 3 and 4. In each of the three analyses, age, sex and other demographic variables were entered as control variables in step 1. The Karasek's demand-control-support factors were entered as step 2 of the hierarchical regression analysis to examine their predictive capacity, after controlling for the effect of the demographic variables. At step 3, three HCPI factors; manager availability, role clarification and constructive conflict were together added to further examine their contribution to explaining the observed variance in the overall model of the hierarchical regression analyses.

Regarding Job stress, the hierarchical regression analysis revealed that the overall model accounted for 30% of the variance in Job stress, $F(12,118) = 4.27, p < .01$. Additionally, all three Karasek's demand-control-support factors significantly explained 16% of the variance in Job stress, after controlling for the effect of the demographic factors, $\Delta F(3,121) = 8.25, p < .01$. An inspection of the Beta (β) coefficient (see Table 2) revealed that "Job Demand" was the only PWE factor that made a significant contribution to the model in step two. It uniquely accounted for 12% of the variance in Job stress (derived by multiplying its beta with its correlation coefficient). Both "control" and "support" were insignificant.

Table 2: Summary of Hierarchical Regression Analysis variables predicting Job stress from DCS and HCPI dimensions

	B	Std. error	β	s_r^2	R^2	Adj R^2	ΔR^2
Step 1					.07	.03	-
Gender	-1.84	1.24	-.13				
Age	-.30	1.37	-.03				
Education	-1.62	.82	-.19*	.03			
Tenure	-.63	1.34	-.08				
Supervisor	-1.16	1.59	-.07				
Contract	-.36	1.41	-.03				
Step 2					.23	.17	.16
Demand	1.01	.24	.36**	.12			
Control	-.34	.28	-.11				
Support	-.36	.27	-.11				
Step 3					.30	.23	.08
Manager availability	-.05	.21	-.02				
Role Clarification	-.16	.23	-.05				
Constructive conflict	-.52	.17	-.26**	.05			

* $p < .05$, ** $p < .01$, ($n = 132$), Overall $R^2 = .03$, $F(12, 118) = 4.27$, $p < .01$.

Moreover, when step 3 was added to the model, the HCPI factors together explained 8% of the variance in job stress, after statistically holding constant the effect of control factors, $\Delta F(3, 118) = 4.21$, $p < .01$. Among all the HCPI factors, constructive conflict was the only

explanatory variable which made a significant contribution to the overall model, uniquely explaining 5% of the variance in the dependent variable.

In order to assess the predictive strength of HCPI factors and Karasek's PWE factors on employee health complaints, hierarchical multiple regression analysis was performed. The results of the analysis (see Table 3) revealed that the overall model explained 26% of the variance in employee health complaints behavior, $F(12,118) = 3.53, p < .01$, after statistically controlling for the effects of age, gender and other demographic variables. Specifically, all the three Karasek's PWE factors, added in step two, accounted to 14% of the variance in employee health complaints, over and above the control variables, $\Delta F(3,121) = 7.24, p < .01$. A careful look at the Beta (β) coefficients (see Table 3) show that all three PWE factors were significant predictors of health complaints, with demand making 5% unique contribution, while control and support each made 3% unique contribution to the variance in health complaints.

Moreover, the three HCPI factors; Manager Availability, Role Clarification and Constructive Conflict all together accounted for only 6% of the variance in employee health complaints, while keeping constant the control factors, $\Delta F(3,118) = 3.11, p < .05$. Inspection of the Beta (β) coefficients (see Table 3) further reveal that among the three HCPI factors, only Role clarification made a significant contribution to the dependent variable, uniquely explaining 5% of the variance in Health Complaints. Thus, hypothesis 3 is partially supported, with role clarification accounting for 4% of the variance in employee complaints. Though, manager availability showed significant negative correlation with health complaints, it was insignificant in predicting the dependent variable. Notably, Karasek's demand-control-support factors contributed significantly to greater percentage of the variance, reaffirming the notion that the PWE factors, particularly high demands, poses great health risks to employee well-being (Roelen et al., 2008).

Table 3: Summary of Hierarchical Regression Analysis variables predicting Health complaints from DCS and HCPI dimensions

	B	Std. error	β	sr² (unique)	R²	Adj R²	ΔR^2
Step 1					.06	.02	-
Gender	1.88	.98	.17				
Age	-.27	1.09	-.04				
Education	-.07	.65	-.01				
Tenure	-.67	1.06	-.10				
Supervisor	.60	1.26	.05				
Contract	-1.85	1.12	-.16				
Step 2					.21	.15	.14
Demand	.52	.19	.24**	.05			
Control	-.49	.22	-.20*	.03			
Support	-.45	.22	-.18*	.03			
Step 3					.26	.19	.06
Manager availability	-.32	.17	-.16				
Role Clarification	-.43	.19	-.19*	.03			
Constructive conflict	.12	.14	.07				

* $p < .05$, ** $p < .01$, ($n = 132$), Overall $R^2 = .26$, $F(12, 118) = 3.53$, $p < .01$.

Hierarchical multiple regressions were also used to predict employee affective commitment from Karasek's PWE factors, and HCPI dimensions. The hierarchical regression analysis revealed that the model all together accounted for 19% of the variance in affective commitment over and above the control variables, $F(12, 118) = 2.45$, $p < .05$. All three Karasek's demand-control-support variables when added in step 2 accounted for 5% of the variance in Affective commitment, after the effects of demographic variables are statistically controlled for, $\Delta F(3, 121) = .05$, ns^* . The models contribution was, however,

not significant. Notwithstanding, a look at the Beta (β) coefficients (see Table 4) revealed that “social support” contributed significantly to the overall regression model, uniquely accounting for 5% of the variance in affective commitment.

Table 4: Summary of Hierarchical Regression Analysis variables predicting Commitment from DCS and HCPI dimensions

	B	Std. error	β	sr²	R²	Adj R²	ΔR²
Step 1					.05	-.00	
Gender	.91	.58	.14				
Age	.20	.64	.05				
Education	-.21	.38	-.06				
Tenure	-.41	.63	-.11				
Supervisor	-.06	.74	-.01				
Contract	-.50	.66	.08				
Step 2					.10	.03	.05
Demand	-.02	.12	-.01				
Control	-.09	.14	-.06				
Support	.35	.14	.24*	.05			
Step 3					.19	.11	.09
Manager availability	.31	.10	.28**	.06			
Role Clarification	.18	.12	.13				
Constructive conflict	-.01	.09	-.01				

* $p < .05$, ** $p < .01$, ($n = 132$), Overall $R^2 = .19$ $F(12, 118) = 2.45$, $p < .05$.

All the HCPI factors; manager availability, role clarification and constructive conflict together explained an additional 9% of the variance in affective commitment, after controlling for the effects of demographic factors, $\Delta F(3,118) = .09, p < .01$. A further inspection of the (β) coefficients at step 3 (see Table 4) revealed that, manager availability was the only dimension in step 3 that contributed to the overall regression model, uniquely explaining 6% of the variance in commitment. Clearly, role clarification and constructive conflict were both insignificant in predicting the commitment. Both demand and control of the DCS model did not make any significant contribution in step 2 of the regression model. However, “support” contributed significantly to predicting affective commitment in the final model.

Finally, the Sobel (1982) procedure was used to statistically investigate the effect of the proposed mediator on the predictor-outcome relationship. The test indicated that the Sobel statistic for social support ($z = 2.13, P < .05$) was a significant mediator of the effect of manager availability on employee commitment, indicating that social support partially mediated the relationship between manager availability and commitment. The fact that the observed p-value fell below the established alpha level of .05 indicates that the association between manager availability and commitment is reduced significantly by the inclusion of the mediator (social support) in the model; in other words there is evidence of partial mediation. (See table 5 below). Basically, in order to conduct the Sobel test for mediation, raw unstandardized coefficients and standard errors for the associations between the independent variable (manager availability) and the mediator (social support), and also for the association between the mediator (social support) and the outcome variable (commitment) were calculated (while adjusting for the independent variable). The unstandardized coefficients and standard error values are imputed into a Sobel Macro which is obtained from the web (See Preacher & Hayes, 2008, for review).

Table 5: Summary of Sobel (1982) test of mediation

1st Mediation model: Independent variable predicting Mediator (Social support)

	Unstandardized coefficient (B)	Standard Error (E)
Manager availability	0.13	0.02

*p< .05, N = 132

2nd Mediation model: IV and Mediator predicting DV (Commitment) (N = 132)

	Unstandardized coefficient (B)	Standard Error (E)
Manager availability	0.32	0.10
Social support	0.27	0.12

*p< .05, N = 132

Note: The Sobel Macros interactive calculation tool on the web was used to complete the test of mediation (Preacher & Hayes, 2008)

DISCUSSION

The results of the study are discussed in relation to the primary aim of the study; which was to investigate the effect of HCPI dimensions and DCS factors in predicting stress, health complaints, and affective commitment. In the end, core ideas of the thesis are summarized, limitations pointed out, and implications of the findings for organizations leading change, particularly those in emerging economies such as Ghana are outlined, and direction for future research are also suggested.

The HCPI dimensions and stress, health complaints and commitment

The results of the multiple regression analyses revealed somewhat mixed picture, in the sense that each of the HCPI dimension was a predominant predictor of specific dependent variable. It was hypothesized that each HCPI dimension (i.e., early role clarification, constructive conflict and manager availability) will have a negative main effect on stress and health complaints but a positive main effect on commitment. For example, early role clarification predicted health complaints, but not stress and commitment (partly supporting H1.1). Also, constructive conflicts predicted stress, but not health complaints and commitment (partly supporting H1.2). And, lastly manager availability predicted commitment but not stress and health complaints (partly supporting H1.3). Clearly, all three sub-hypothesis were partially confirmed. It seems obvious that the bankers, in this study perceive different aspects of the HCPI to be related to different organizational outcomes.

Clearly, the results have shown that early role clarification predicted health complaints. One may conclude that unclarified roles affect employees' health complaints. During workplace changes, employees may speculate about how the changes will benefit or possibly threaten their sense of security. Therefore, if they perceive that different priority areas and expectations regarding the content and the process of change are not effectively spelt out in a timely manner it may affect their health and wellbeing. This is because they might not be able to predict what could happen to them and this can jeopardize their sense of control over their changing work environment. If feelings of confusion and insecurity persist over a long time it could have detrimental effect on their health and threaten their sense of wellbeing. In a study designed to test the impact of supervisory role clarification

on stress related outcomes, Schaubroeck, Ganster, Sime and Ditman (2006) reported that when supervisors were trained in appropriate ways of clarifying roles, role ambiguity and supervisor dissatisfaction reduced significantly. Providing timely and accurate information regarding how the change affects bankers work roles, task responsibility, and most importantly their job status would seem to create feelings of relief and predictability. In this way, their uncertainty levels and confusion could be assuaged. One major aim of role clarification, which has communication as the key element, is to reduce employee's uncertainty and to keep them aware of anticipated events (Bordia et al., 2004). Clarification of role expectations has been linked with enhanced performance and job satisfaction (Bordia et al., 2004). This study has found that employees will benefit significantly, especially health wise, if they are told in advance which roles they will occupy, and what is expected of them during change implementation. Yet, it is important to stress more general explanations are available for why early role clarification reduced health complaints, but they do not readily explain the difference between stress and health complaints. In fact, it is easy to argue that unresolved issues of roles could lead to stress, but how it accounts for health complaints is difficult to explain.

Secondly, providing the possibilities for constructive conflicts reduced the bankers' stress, but no evidence for similar relationship was demonstrated for health complaints and commitment. Although poor clarification of roles is considered potential source of stress for employees due to uncertainty, especially during transformational change (e.g., DiFonzo & Bordia, 1998; Bordia et al., 2004); this study has indicated that unresolved conflicts may aggravate employees stress as well. This suggests that an organization that encourages constructive conflict approach to change would reduce employee's stress. Saksvik et al. (2007) proposed constructive conflict as the most productive way to dealing with resistance to change. Thus, employees will resist any attempt by management to introduce changes that falls out of favour with them. Yet, Saksvik et al. (2007) maintain that open resistance during change should be welcomed and dealt with effectively. According to them, change recipients will most likely resist change; hence, they advise that such behaviour tendencies should be welcomed. Reviewing the literature, Janssen, De Vliert and Veenstra (1999) argued that organizational members are believed to be in conflict as soon as they perceive

their activities or standpoints to be mutually incompatible with those held by others. And that such conflicts has the potential to derail the decision making process.

One possible reason why constructive conflict predicted stress could be attributable to the fact that as employees are involved in the decision making process, their uncertainty, frustration and anxiety resulting from lack of involvement in the decision process could be minimized. These bankers may be stressed because they are frustrated about their noninvolvement. Or, perhaps, there are other unresolved conflicts that are making them stressed. Thus, the involvement of employees and acceptance of their varied opinions about the content and process of change would prove essential in their stress experience during a healthy change process intervention. Thus, constructive conflict as opposed to destructive conflict may enhance the change process among these banking employees by allowing them to freely and openly offer suggestions and exchange ideas on ways of implementing the change goals. When such organizational climate is practiced, negative effects such as anger, hatred, annoyance etc. arising from incompatible viewpoints will be greatly minimized, which has implications for stress as well.

Lastly, the findings have shown that manager availability enhanced the bankers' commitment as compared to their stress and health complaints. No support was obtained for the influence of a managers' availability how the bankers' perceive their stress and health complaints. This suggests that employees would more often than not consider their access to a manager to influence their sense of commitment during change process intervention. This findings parallels the claim that the availability of supportive supervisors creates feelings of care and concern by the organization, (Brough & Pears, 2004; Saksvik et al., 2007), which, in turn, is likely to translate into felt obligation towards the company. Equally, the bankers did not find unresolved conflicts and poor clarification of roles to affect their level of commitment. Very little research evidence has been provided to understand this relationship, particularly during organizational change process implementation.

According to Saksvik et al. (2007), during a change process implementation access to the nearest manager who is willing to listen and use various forms of communication to achieve mutual understanding of the change is likely to help employees' better deal with the challenges of change. One may conclude that any opportunity to dialogue with an accessible manager employee's feel is interested about their wellbeing, and cares about their concerns of the change, may positively influence how they feel about the change and the organization as a whole. Employees are likely to return such discretionary supervisory effort with commitment. Lawson et al. (2009) hinted that direct supervisors are the ones who had the authority and expertise to address the many challenges faced by employees, indicating that their role during a healthy change process is highly indispensable.

In sum, the findings have revealed that poor role clarification of roles is waging its toll on their health, though not related to their stress experience. Again, the bankers are stressed by unresolved conflicts, suggesting that they are unable to feed their views, express opinions, and participate in decisions of relevance to them during change. Moreover, the bankers cited that manager availability enhanced their affective commitment, indicating that if employees have access to a manager who supports them to cope favourably with the change; they are more likely to return such managerial support with commitment.

The influence of DCS on stress, health complaints and commitment

As was hypothesized, DCS predicted stress, health complaints, and commitment, but this was only partially supported by the data. The results indicated that demands had a positive main effect on stress, but control and support did not (indicating partial confirmation for H2:1). The hypothesis (H2:2) in relation to health complaints was confirmed; i.e., demands had negative main effect, whereas control and support had positive main effect on health complaints. Lastly, social support had positive main effect on commitment. However, demands and control did no influence commitment (indicating partial confirmation for H2:3).

First and foremost, demands increased the bankers stress experience. Clearly, the literature is replete with examples indicating that demands contribute to stress (e.g., Dollard et al.,

2000; Pal & Saksvik, 2008; van de Doef & Maes, 1999). However, the expectation that control and support will both alleviate the negative effects of demands on the bankers stress experience was not confirmed. This inconsistent association has also received confirmation in previous research (e.g., Pal & Saksvik, 2008; Tvedt et al., 2009; van der Doef & Maes, 1999). This is not supportive of the DCS model which has long held that both control and support buffers the effect on demands on strain (de Jonge & Kompier, 1997; Van der Doef & Maes, 1999). It would seem that while the bankers, in this study, generally perceive demands to be linked with their stress, they don't consider the amount of control or social support available to them to reduce their stress. Maybe, these bankers have been socialized to perform their duties according to laid down procedures and regulations, which could affect their ability to exercise control. It may also indicate that the bankers perceive themselves to retain equal amount of control or have access to similar supportive resources in their work units, hence doing little to influence stress. This may also explain what appears to be a floor effect, where both factors make little difference on stress (Daniels & Guppy, 1994). Considering the findings in terms of social support and control: a banker with little social contact at work while simultaneously having little belief in his/her ability to control the work environment, would interestingly not perceive this to affect his stress due to high demands.

Moreover, demands increased health complaints, whereas control and social support reduced it among the bankers. Previous reported researches also made similar observations (e.g., De Croon et al., 2000; Petterson & Arnetz, 1998; Schreuder et al., 2008) However, others have reported that social support, rather than control is implicated in the DCS – health relationship (e.g., Muhanen & Torkelson, 2003; Lawson et al., 2009). Thus, providing employees the occasion for greater skill discretion and decision making-freedom, as well as access to social support provided by both colleagues and supervisors can offer valuable opportunity for enhancing the employees' health and wellbeing. Also, the explained variance accounted for by demands in health complaints, was in the expected direction, with high demands contributing to increased health complaints. This results parallels previous research (e.g Lawson et al., 2009, Schreuder, Roelen, Koopmans & Groothooff , 2008), indicating that the nature of job demands faced by employees should be monitor to ensure that these do not jeopardized their health.

Finally, social support appeared to be crucial for the banker's commitment. This confirms earlier research that has shown that perceived organizational or supervisor support enhances employees' affective commitment (e.g., Eisenberger et al., 1986; Shore & Wayne, 1993). This suggests that work-based social support from both colleagues and supervisors enhances employees' sense of commitment toward organization goals. Other reported researches have also demonstrated that social support, particularly from supervisor, correlates favourably with important work related outcomes. For example, Brough and Pears (2004) reported that supervisor support, rather than colleague support predicted job satisfaction. Thus, the results indicate that high levels of demands as well as lack of opportunity for skill discretion and decision authority do not affect employees' level of commitment. Instead, employees may view social support to be necessary in contributing to their need for affiliation, belonging, respect, recognition, affection, and nurturance (Aneshensel & Stone, 1982, cited in Daniels & Guppy, 1994), which in turn enhances their decision to become committed to organizational goals (Allan, Shore & Griffith, 2003). Eisenberger and colleagues (1990) also explained that the knowledge that the employing organization is supportive encourages employees to adopt organizational membership as part of their identity. This result suggests that building social support networks in the organization will provide important benefits of enhancing employees' commitment.

Mediating effect of JDCS factors on HCPI dimensions

The third hypothesis was tested using the Sobel (1982) test of mediation to find out whether social support mediated on manager availability to predict commitment. The results showed that social support partially mediated the effect of manager availability on commitment (confirming H3:1). Though not sufficient theoretical support have been identified for the meditational effect of the other variables, their influence should not be completely ruled out. In their study, Tvedt et al. (2009) reported meditational relationship between the DCS and HCPI. They found that HCPI had both direct positive and negative effects on stress control and social support. And the general indication has been that control was more closely connected to health complaints, whereas support was more closely connected to stress.

This study has demonstrated that manager availability acted through social support to predict commitment among the bankers. This observed relationship is important in the sense that it demonstrates how managers' availability could be explained from the point of view of the supportive role they provide during change process intervention (e.g., Brough & Pears, 2004; Saksvik et al., 2007). It is important to emphasize that an accessible manager's role during change process should be to support employees. The managers responsibility including: nurturing a two-way communication geared towards building consensus and mutual agreement on issues of grave diversity, building relationship with those affected with change, encouraging participation in decision making, promoting a climate of openness to varied views (Dent & Goldberg, 1999; Saksvik et al., 2007) are all discretionary organizational or supervisory efforts culminating into support.

Some reported researches have shed light on the remarkable effect of managerial support on favourable organizational outcomes. For example, Bough and Pears (2004) argued that social (emotional and practical) support mechanism provided especially by supervisors contributed significantly to key organizational outcomes such as job satisfaction. Rhoades, Eisenberger and Armeli (2001) reported that perceived supervisor support contributed significantly, but indirectly to affective commitment through perceived organizational support. Such relationship was also hypothesized to significantly reduce employee withdrawal behaviour. Allen, Shore and Griffeth (2003) also confirmed this conclusion by reporting that organizational support practices such as employee participation in decision making, growth opportunities, and fairness of reward/recognition contributed to perceived organizational support, which ultimately led to affective commitment. The social exchange view of commitment (Eisenberger et al, 1986) proposes that employees' perceptions of the organization's commitment to them (perceived organizational support [POS]) creates feelings of obligation to the employer, which enhances employees' work behavior or attitudinal outcomes such as commitment (Eisenberger et al., 2001; Shore & Wayne, 1993).

Implications of the study

The findings from this study have far reaching implications particularly for corporate decision makers, change leaders or management teams and Human resource practitioners and these are highlighted below.

i. Leadership/Management

A range of factors have been identified as contributing to a healthy change process. First, top executives must take a lead role in promoting an organizational culture which inculcates practices such as timely clarification of roles, constructive conflict, and making manager available during process implementation. Second, management may empower departmental heads and supervisors within the bank to exercise discretionary authority in facilitating constructive dialogue, and dealing with change dilemmas that requires immediate clarification since this has been identified to influence the bankers health complaints and stress respectively. Furthermore, in order to develop a core competence in change process implementation the leadership strategy should be “leadership by caring,” since managerial support has been highlighted as contributing to affective commitment. Overall, corporate decision makers should ensure that strategies for enhancing the bankers work experience include healthy change process mechanisms. This should form part of the overall organizational policy on human capital development.

ii. Human Resource practitioners

In line with the findings, human resource practitioners should be guided by the fact that change conflicts that are resolved in a constructive manner will reduce employees stress. This allows all stakeholders to discuss pertinent issues in an environment of mutual respect, and consideration of each other’s position. The study has also shown that the bankers health complaints were reduced when the change resorted to early role clarification, implying that HR practices should emphasize the need for timely clarification of roles whenever change of any sort are to be introduced. Anything employees need to know should be communicated as early as possible in order to enhance their health. Moreover, the physical and psychological availability of an accessible manager is shown to contribute to employee’s commitment during change. HR practices and policies should emphasize this, and also ensure that these managers are very visible, and have the competence and

organizational insight to address employee's challenges of change (Saksvik et al., 2007). This would require training. Notably, manager availability acted through social support to predict commitment, suggesting that while it is important to make managers available their concern should also be to support employees to better cope with change. They must demonstrate that they care, and are concerned about employees' wellbeing. Hence, nearest managers should be educated about interpersonal relations, group processes, and social exchange dynamics.

Moreover, the findings have revealed that demands increased both stress and health complaints. Hence, the most practical implication will be to ensure that demands are reduced to reasonable levels. Both Control and support resulted in fewer health complaints, which suggest that HR policies and practices should emphasize increasing employees' level of control during task performance, as well as support resources at all levels of the bank as potential avenues for improving staff psychosocial health (e.g., Brough & Pears, 2004; Bond & Bunce, 2001). On the contrary, both control and support did not contribute to reducing stress, indicating that any attempt to minimize occupational stress, in this sample should not be overly placed on increasing control or social support. This point is buttressed by the fact that inconsistent validation has been reported for this relationship (e.g., De Jonge & Kompier, 1997; Van der Doef & Maes, 1999). Moreover, since the bankers reported that the support contributed to their sense of commitment, it makes it necessary for the bank to realign its HR policies to assure employees of its support systems designed to help them.

iii. Change leaders/management teams

Change leaders or management teams should be aware that healthy change process can best be managed by focusing on early clarification of roles, constructive conflicts, and manager availability. For example, change leaders can advise the bank that in order to get things right it was important that roles were clarified early in the process. Since both leaders and employees are unable to foresee every aspect of changing roles, it is crucial for champions of change to advise the organization to integrate this approach into the overall change strategy of the bank. Through this awareness, change leaders or management teams could influence change processes by championing these practices to empower these bankers in order to enhance their psychosocial health, and commitment towards the organization. This

has both practical and economic benefits to the worker and the bank. Furthermore, with high demands contributing to stress and health complaints, it is important that change leaders together with organizational health advocates monitor the rate, volume and complexity of the demands faced by these bankers in order to ensure that their wellbeing is not undermined (e.g., Lawson et al., 2009). They should consistently seek ways to help reduce demands to reasonable levels. This suggestion is very important as the banking environment in Ghana is generally considered to be very demanding and highly stressful.

Limitations of the study

There are a couple of limitations in this study that should be noted. First of all, the cross-sectional nature of the study prevents causal attributions to be made about the direction of the associations discovered (Muhonen & Torkelson, 2003; Pal, 2009). The regression analyses and mediation test share with Structural Equation Modeling (SEM) that they assume a certain causal direction but they could not be proven. Another is the problem associated with response-bias and common-method variance; commonly cited as drawbacks to all questionnaire-based research (e.g., Bough & Pears, 2004). Third, the study was based on a case study or a specific group of employees; hence, any attempt to generalize these findings to a larger population becomes problematic, and hence, should be done with utmost caution. Moreover, Control had a rather lower scale reliability, which can be attributed to the fact that it was measured with only two items. Peterson (1993) pointed out that alpha is affected by both the number and quality of items included in a scale. This implies that it would have been better to measure control with more items, and of which the sample better understood. Another methodological problem in the present study was in relation to low response rate, something that is likely to serve as a threat to validity of the results (Pal, 2009). Not many meditational effects could be proven due to the limitation of sample size. Preacher and Hayes (2008) suggested that the Sobel test of mediation fares generally better when the sample size is large. Finally, as the present study was the first attempt to examine the individual dimensions of the HCPI framework, there was no peer reviewed publications to compare the findings with. The study was also constrained as a result of time limitations.

Suggestions for future research

In order to better understand healthy change process and its association with other work related variables, particularly from the standpoint of populations in emerging economies such as Ghana, a triangulated methodological approach which combines both qualitative and quantitative methods of research is recommended. By using a qualitative approach respondents may freely express their opinion on key aspects of the change process they consider very essential and unique to only this work setting. Such an approach may shed more light on other factors that will strengthen the HCPI model, as its development is still in progress. Qualitative methods can also be used to better understand why, for example, employees in this study perceive job control and support to contribute to health complaints and not to job stress. It will also help to understand the role of an available manager better and what employees require of such a change leader. Also, by using qualitative study researchers will be able to, for example, find out why workers perceive unresolved issues of roles and expectations influence their health complaints, but not stress. These among others are difficult to uncover in quantitative data alone.

It is also recommended that in future similar study should employ a longitudinal study design across various industry sectors in Ghana, and with larger sample size and at different time points. Critical examination of variables under study over time will help illuminate our understanding on effective process implementation for successful change. Given the inconsistent support for the DCS model, it would be necessary to further investigate the relevance of it in similar occupational settings. Furthermore, the differences in predictors of job stress, health complaints and affective commitment by individual HCPI dimension raises an interesting concern as to whether the HCPI dimensions should be treated as a composite model or consider the individual dimensions in their own right. More empirical studies are needed across different cultures to validate the relevance of the model, and to further determine the extent to which the current findings are generalizable to other bankers and professionals across different industry sectors. In this regard, a more sophisticated analysis kit, such as Structural Equation Modeling is suggested in order to be able to better understand how the variables influence each other.

This study was conducted against the backdrop that in so far as a new CEO had been appointed change was to be expected throughout the bank. Future research should ascertain

to what extent employees felt ongoing changes affected the work environment or how they performed their job in pilot studies before commencement of actual research. Moreover, factors such as job satisfaction, burnout, coping strategies, leader-manager exchange, employee withdrawal behaviour etc. are interesting outcomes that could be assessed in relation to the HCPI.

Summary and Conclusion

In summary, the study has revealed interesting outcomes which are noteworthy. First, the findings have shown that each of the HCPI dimensions predicted a specific dependent variable. Clearly, constructive conflicts predicted stress, whereas role clarification predicted health complaints. Manager availability also predicted affective commitment. Again, manager availability acted through social support to predict commitment. The present study has demonstrated that lack of role clarification in a changing workplace affects employees' health complaints. Issues such as unclear expectations, or role conflicts should be tackled rapidly by this bank if management or the Human resource department seeks to enhance the workers' health and wellbeing. Also, it was obvious from the study that an organizational practice that encouraged different views of change contributed to reducing the workers stress. Lastly, accessibility of a manager or supervisor was shown to influence employees' commitment through the social support they perceive to receive. This also suggests that managers who have additional responsibility as change leaders should concentrate on providing support. In general, the results points out the fact that corporate decision makers, change leaders, and HR practitioners ought to concentrate effort on particular HCPI dimensions if they wish to influence stress, health complaints and commitment during workplace changes.

Moreover, the findings corroborate other findings that suggest that demand contribute to job stress (de Jonge & Kompier, 1997; Muhonen & Torkelson, 2003). Thus, the bankers stress was reportedly high as levels of demands increased. Though control and support significantly reduced health complaints, such evidence was missing in terms of stress. Employees in this study did not perceive control and support to influence their stress experience, which confirms similar findings in previous research (e.g., Van Der Deof & Maes, 1999). Social support received from both managers and work colleagues improved

commitment among the bankers. Hence, support mechanisms within the bank need strengthening in order to boost employees' morale and sense of commitment (Allen & Meyer, 1990).

It is important to point out, however, that the HCPI model seems too general and simplistic. For example, it does not exactly say what constructive conflicts mean. It only makes inferences from resistance to change, suggesting that more work is required to define the constructs more precisely in order to make measurement easy. It also appears that the demand-control-support model is not fully supported due to the inconsistent findings that have been reported in previous studies (see van der Doef & Maes, 1999). And that the shortcomings identified in previous studies regarding the DCS model thwarts conclusion that could be drawn from them (De Lange et al., 2003). Notwithstanding, the relevance of both models cannot be underestimated. Certainly, both the HCPI and the DCS models have proved very relevant in understanding stress, health complaints and commitment among the Ghanaian bankers in this study. Methodologically, future research should focus on the use of longitudinal designs in order to make causal inferences from observed relationships.

Generally, as banks continue their change initiatives in order to remain competitive, it is imperative that those change programmes incorporate key process requirements geared towards promoting employee wellbeing as highlighted in this study. Thus, this calls for a more holistic and comprehensive approach to dealing with the myriad of challenges that plague nearly all change initiatives due to inattention to human factors (Callan, 1993, Martin, Jones & Callan, 2005). Notably, the present study has contributed to raising awareness on the need for building healthy change processes into the overall change strategy of the bank. The researcher believes that a better change can be achieved if more attention is given to the healthiness of the change processes which are geared towards empowering employees (Saksvik et al, 2007). When employees are empowered and feel confident about change, this is likely to be returned with increased commitment towards the achievement of organizational goals. Overall, the HCPI and the DCS models proved useful in understanding the banker's level of stress, health complaints, and the extent of their commitment during change. So, in future more work should be carried out in order to fully appreciate these models contribution and relevance in a different cultural context such as Ghana.

REFERENCES

- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Allen, D.G., Shore, C.M., & Griffeth, R.W. (2003). The Role of Perceived Organizational Support and supportive human resource practices in the turnover process. *Journal of Management*, 29, (1), 99-118.
- American Psychological Association Ethical Codes (2002). Retrieved May 29, 2010, from <http://www.apa.org/ethics/code/index.aspx>.
- Armenakis, A.A., & Bedeian, A.G. (1999). Organizational Change: A review of Theory and Research in the 1990s. *Journal of Management*, 25, 293-315.
- Ashford, S. J. (1988). Individual strategies for coping with stress during organizational transitions. *Journal of Applied Behavioral Science*, 24, 19-36.
- Backer, T. E. (1997). Managing the human side of Change in VA's transformation. *Hosp. Health Serv. Adm.*, 42(3), 433-59.
- Bass, B. M. (1995). *Leadership and Performance beyond Expectations*. New York: Harper & Row.
- Bass, B.M. (1998) *Transformational leadership: Industrial, military, and educational impact*. Mahwah, NJ: Lawrence Erlbaum & Associates.
- Beer, M. & Nohria, N. (2000). *Breaking the Code of Change*. Boston, MA: Harvard Business School Press.
- Bennett, H. & Durkin, M. (2000). The effects of organizational change on employee psychological attachment. *Journal of Managerial Psychology*. 15, 126 - 147.
- Bennis, W. & O'Toole, J.O. (2000). Do not Hire the wrong CEO. *Harvard Business Review*, 78(3), 170 -176.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, J. V. (2004). Uncertainty during organizational Change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18(4), 507-532.

- Bond, F. W., & Bunce, D. (2001). Job Control Mediates Change in a Work Reorganization Intervention for Stress Reduction. *Journal of Occupational Health Psychology*, 6, 290-302.
- Branch, K. M. (2002). *Change management*. [Electronic version]. Retrieved April 15, 2010, from <http://www.au.af.mil/au/awc/awcgate/doe/benchmark/ch04.pdf>.
- Brockner, J., DeWitt, R.L, Grover, S., & Reed, T. (1990). When it is Especially Important to Explain Why: Factors Affecting the Relationship between Managers' Explanations of a Layoff and Survivors' Reactions to the Layoff, *Journal of Experimental Social Psychology*, 26, 389-407.
- Brough, P., & Pears, J. (2004). Evaluating the influence of the type of social support on job satisfaction and work related psychological well-being. *International Journal of Organizational Behaviour*, 8, 472-485.
- Buono, A.F., & Bowditch, J.L. (1989). *The Human side of mergers and acquisitions: Managing collisions between people, cultures, and organizations*. Washington D.C: Jossey-Bass Inc.
- Burke, W. W. (2008). *Organization Change: Theory and Practice*. Los Angeles: Sage Publications.
- Burke, W. W. & Litwin, H. G. (1992). A causal model of Organizational Performance and Change. *Journal of Management*, 18, 523-545.
- Burke, W. W., and Trahan, W., 2000 *Business Climate Shifts: Profiles of Change Makers*, Butterworth- Heinemann, U. S. A.
- Burnes, B. (2004a). Kurt Lewin and The Planned Approach to Change: A Re-appraisal. *Journal of Management studies* , 41, 977-1002.
- Burnes, B. (2004b). Kurt Lewin and complexity theories: back to the future? *Journal of change management*, 4, 309-325.
- Cahill, J., Landsbergis, P.A., & Schnall, P.L. (1995). Reducing occupational stress: An introductory guide for manager, supervisors and union members. Presented at the Work Stress and Health '95 conference. Retrieved on 21st February, 2010 from <http://www.workhealth.org/prevention/prred.html>.

- Cameron, E., & Green, M. (2004). *Making sense of change management: A complete guide to the models, tools and technologies of organizational change*. London: VA Kogan Page.
- Carr, D. K., Hard, J., and Trahan, W. J. (1996). *Managing the Change Process: a field book for Change agents, consultants, team leaders, and reengineering managers*. New York: McGraw-Hill.
- Clampitt, P. G., & Williams, M. L. (2005). Conceptualizing and measuring how employees and organizations manage uncertainty. *Communication Research Reports*, 22(4), 315-324.
- Cooper, C.L. (1981). *The stress check*. New York: Prentice Hall.
- Daniels, K., & Guppy, A. (1994). Occupational Stress, Social Support, Job Control, and Psychological Well-being. *Human Relations*, 47, 1523-1544.
- Dawson, P. (2003). *Reshaping change: A processual perspective*. London: Routledge.
- De Croon, E.M., Van der Beek, A.J., Blonk, R.W.B., et al. (2000). Job stress and psychosomatic health complaints among Dutch truck drivers: a re-evaluation of Karasek's interactive demand-control model. *Stress and Health*, 16, 101–107.
- De Jonge, J., Dorman, C., Jansen, P.P.M., Landeweerd, M.F., & Nijhuis, F.J.N. (2001). Testing reciprocal relationships between Job characteristics and Psychological Wellbeing: A cross-lagged Structural Equation Modelling. *Journal of Occupational and Organizational Psychology*, 74, 29-46.
- De Jonge, J., Kompier M.A.J. (1997). A critical examination of the demands-control-support model from a work psychological perspective. *Int J Stress Manage*, 4, 235-258.
- De Lange, A. H., Taris, T.W., Kompier, M. A., Houtman, I.L.D., & Bongers, P. M. (2003). “The very best of the Millenium”: Longitudinal Research and the Demand-Control-(Support) Model. *Journal of Occupational Health Psychology*, 8, 282-305.
- Dent, E. R., & Goldberg, S. G. (1999). Challenging “Resistance to Change” *The Journal of Applied Behavioural Sciences*, 35, 25-41.
- DiFonzo, N., & Bordia, P. (1998). A Tale of Two Corporations: Managing Uncertainty during Organizational Change. *Human Resource Management*, 37, 295-303.

- Dollard, M. F., & Winefield, A. H. (1998). A test of the Demand-Control/Support model of work stress in correctional officers. *Journal of Occupational Health Psychology, 3*, 243-264.
- Dollard, M.F., Winefield, H.R., Winefield, A.H., & De Jonge, J. (2000). Psychosocial Job strain and productivity in human services workers: A test of the demand-control-support model. *Journal of occupational and organizational psychology, 73*, 501-510.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.
- Eisenberger, R., Fasolo, P., & Davis-LaMastro, V. (1990). "Perceived Organizational Support And Employee Diligence, Commitment and Innovation. *Journal of Applied Psychology, 75*, 51-59.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology, 87*, 565-573.
- Eriksen, H.R., Camila, I., & Ursin, H. (1999). A scoring system for subjective health complaints (SHC). *Scandinavian Journal of Public Health, 1*, 63-72.
- Fernandez, S. & Rainey, G. H. (2006). Managing Successful Change in the Public sector. *Public Administration Review, March/April*, 168-176.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London: Sage Publications.
- Furnham, A. (2001). Managers as change agents. *Journal of Change Management, 3*, 21-29
- Ford, J.D., & Ford, L.W. (1995). The role of conversation in producing intentional change in organizations. *Academy of Management Review, 20*, 541-570.
- Gill, R. (2003). Change management - or change leadership? *Journal of Change Management, 3*, 307-318.
- Gilley, A., Dixon, P., & Gilley, J. W. (2002). Characteristics of leadership effectiveness: implementing change and driving innovation in organizations. *Human Resource Development Quarterly, 19*, 153-169.
- Goleman, D. (2000). Leadership that gets results. *Harvard Business Review, 78, 2*, 78-90.

- Goodman, J., & Truss, C. (2004). The medium and the message: communicating effectively during a major change initiative. *Journal of Change Management*, 14, 217-228.
- Goodstein, L.D., & Burke, W.W. (1991). Creating Successful Organization change. *Organizational Dynamics*, 19, 5-17
- Hammer, T.H., Saksvik, P.Ø., Nytr ø, K., Torvatn, H., & Bayazit, M. (2004). Expanding the Psychosocial Work Environment: Workplace Norms and Work-Family Conflicts as Correlates of Stress and Health. *Journal of Occupational Health psychology*. 9, 83-97.
- Hayes, A.M., & Strauss, J.L. (1998). Dynamic Systems Theory as a Paradigm for the Study of Change in Psychotherapy: An Application to Cognitive Therapy for Depression. *Journal of Consulting and Clinical Psychology* , 66, 939-947.
- Hendry, C. (1996). Understanding and creating whole organizational change through learning theory. *Human Relations*, 49(5), 621-41.
- Higgs, M. J. & Rowland, D. (2000) Building change leadership capability: ‘the quest for change competence’, *Journal of Change Management*, 1(2), 116–131.
- Higgs, M. J., & Rowland, D. (2005). All changes great and small: Exploring approaches to change and its leadership. *Journal of Change Management*, 5, 121-151.
- Issabella, L. (1990). Evolving interpretations as a change unfolds: How managers construe key organizational events. *Academy of Management Journal*, 13, 55-75.
- Janssen, O., De Vliert, E.V., & Veenstra, C. (1999). How Task and Person Conflict Shape the Role of Positive Interdependence in Management Teams. *Journal of Management*. 25, 117-141.
- Jimmieson, N. L., Terry, D. J., & Callan, V. J. (2004). A longitudinal study of employee adaptation to organizational change: The role of change-related information and change-related self-efficacy. *Journal of Occupational Health Psychology*, 9, 11–27.
- Kanter, R. M. (1985). Managing the human side of change. *Management Review*, 74(4), 52-56.
- Kanter, R.M., Stein, B.A. & Jick, T. D. (1992). *The challenge of organizational*

- Change: How companies experience it and leaders guide it.* New York: The Free Press.
- Karasek, R. A. (1979). Job demands, job decision latitude and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285–308.
- Karasek, R., & Theorell, T. (1990). *Healthy work: stress, productivity and the reconstruction of working life.* New York: Basic Books.
- Karasek, R.A., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., & Amick, B.C. (1998). The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*, 3, 322-355.
- Kotter, J. P. (1996). *Leading Change* Boston, MA: Harvard Business School Press.
- Kotter, P.J., & Cohen, D.S. (2002). *The Heart of Change: Real-life stories of how people change their organizations.* Massachusetts: Harvard Business Review School Press
- Kotter, P. J., & Schlesinger, A. (2008). Choosing strategies for change. *Harvard Business Review*, 57(2), 41-53.
- Landsbergis, P.A., Mikelsen, A., Saksvik, P.Ø., Jonge, D.E.J., Houtman, I., Cedillio, L., et al. (2000, November). Reliability and validity of the Job Content Questionnaire (JCQ) decision latitude scale. Paper presented at the International Congress of Behavioral Medicine, Brisbane, Australia.
- Lawrence, P. (1954), “How to deal with resistance to change”, *Harvard Business Review*, 32, 3, 49-57.
- Lawson, K.J., Noblet, A.J., & Rodwell, J.J. (2009). Promoting employee wellbeing: the relevance of work characteristics and organizational justice. *Health Promotion International*, 24, 223-233.
- Le Blanc, P., de Jonge, J., & Schaufeli, W. (2000). Job stress and Occupational Stress. In N. Chmiel (Ed.), *An introduction to work and organizational psychology: a European Perspective* (pp.119-143). Massachusetts:Blackwell Publishers.
- Leban, B., K. A., & Stone, R. (2006). *Managing Organizational Change.* New Jersey: John Willey & Sons Ltd.
- Lewin, K. (1947). Frontiers in group dynamics. *Human Relations*, 1, 5-41.

- Lewis, L.K., & Seibold, D. (1998). Reconceptualising organizational change implementation as a communication problem: A review of literature and research agenda. *Communication Yearbook* . 2, 93-151.
- Lewis, L.K., Hamel, S.A., & Richardson, B.K. (2001). Communicating change to non-profit stakeholders: Models and prediction of implementers approaches. *Management Communication Quarterly*, 5, 5-41.
- Lines, R. (2004). Influence of participation in strategic change: resistance, organizational commitment and change achievement goals. *Journal of Change Management*, 4, 193-215.
- Litchenstein, B. M. (1996) Evolution or transformation: a critique and alternative to punctuated equilibrium. In: D. Moore (Ed.) Academy of Management Best Paper Proceedings, pp. 291–295 (Vancouver: Academy of Management)
- Lorenzi, N. M., & Riley, R.T. (2000). Managing Change: An overview. *Journal of the American Medical Informatics Association*, 7, 116-124.
- Lowe, G.S. (2004). *Healthy workplace Strategies: Creating change and achieving results*. Report prepared for the workplace health strategies bureau Health Canada. Retrieved May 4, 2010, from <http://www.grahamlowe.ca/documents>.
- Martin, A.J., Jones, E.S., & Callan, V.J. (2005). The role of psychological climate in facilitating employee adjustment during organizational change. *European Journal of work and organizational psychology*. 4, 263-289.
- Meyer, J. P. & Allen, N. J. 1991. A three component conceptualization of organizational commitment. *Human Resource Management Review*. 1, 61- 89
- Miller, K.I., and Monge, P.R. (1985). The influence of social information on employee anxiety about organizational change. *Human Communication Research*, 11, 365-386.
- Muhonen, T., & Torkelson, E. (2003). The Demand-Control-Support Model and Health among Women and Men in Similar Occupation. *Journal of Behavioural Medicine*, 26, 601-613.
- Pal, S., & Saksvik, P. Ø. (2008). Work-family conflict and psychosocial work environment stressors as predictors of job stress in a cross-cultural study. *International Journal of Stress Management*, 15, 22-42.

- Pal, S. (2009). *Cultural Differences in Work and Family conflict: Contrasting Western and Eastern Perspectives*. Doctoral Thesis. Trondheim: NTNU-trykk.
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to data analysis using SPSS for windows (Version 12)* (2nd ed.). Berkshire: Open University Press.
- Pelfrene, E., Vlerick, P., Mak, R.P., De Smet, P., Kornitzer, M., & De Backer, G. (2001). Scale reliability and validity of the Karasek 'Job Demand-Control-Support' model in the Belstress study. *Work & Stress*, 15, 297_313.
- Peterson, R. A. (1993). A meta-analysis of Cronbach's coefficient alpha. *The Journal of Consumer Research*, 21, 381-391.
- Petterson, I., & Arnetz, B.B. (1998). Psychosocial stressors and well-being in health care workers. The impact of an intervention program. *Social Science and Medicine*, 47, 1763-1772.
- Pettigrew, A. (1985). *The awakening giant: Continuity and change in imperial chemical Industries*. Oxford: Basil Blackwell.
- Pettigrew, A. (1987). Context and action in the transformation of the firm. *Journal of Management studies*, 26, 649-670.
- Poulin, J., & Walter, C. (1993). Social work burnout: A longitudinal study. *Social Work Research and Abstracts*, 29, 5-11.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.
- Rhoades, L., Eisenberger, R., Armeli, S. (2001), "Affective commitment to the organization: the contribution of perceived organizational support", *Journal of Applied Psychology*, 86, 825-36.
- Roelen, C.A.M., Schreuder, J.K., Koopmans, P.C., & Groothooff, J.W. (2008). Perceived job demands relate to self-reported health complaints. *Occupational medicine*, 58, 58-63.
- Saksvik, P.Ø., Tvedt, S.D., Nytrø, K., Andersen, G.R., Andersen, T.K., Buvik, M.P., et al. (2007). Developing criteria for healthy organizational change. *Work & Stress*, 21, 243-263.

- Saksvik, P.Ø., & Tvedt, S.D. (2008). Leading in a healthy way. *Scandinavian Journal of Organizational Psychology*, 20- 28.
- Schabracq, M. J. & Cooper, C. L. (1998): Toward a Phenomenological Framework for the Study of Work and Organizational Stress, *Human Relations*, 51, 625-648.
- Schaubroeck, J., Ganster, D.C., Sime, W.E., & Ditman, D. (2006). A field experiment testing supervisory role clarification. *Personnel Psychology*. 46, 1-25.
- Schein, E.H. (1990). "Organization culture", *American Psychologist*, (February), 109-119.
- Schreuder, K. J., Roelen, C. A. M., Koopmans, P.C., & Groothoof, J. W. (2008). Job demands and health complaints in white and blue collar workers. *Journal of Prevention, Assessment and Rehabilitation*, 31(4), 425-432.
- Schweiger, D.M., & DeNisi, A.S. (1991). Communication with employees following a merger: A longitudinal field experiment. *The Academy of Management Journal*, 34, 110-135.
- Shore, L. M., & Wayne, S. J. (1993). Commitment and Employee Behaviour: Comparison of Affective commitment and Continuance Commitment with Perceived organizational Support. *Journal of Applied Psychology*, 78(4), 774-780.
- Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equations models. [Electronic version]. Retrieved April 17,2010, from <http://www.people.ku.edu/~preacher/sobel/sobel.htm>
- Taplin, I. M. (2006). Strategic change and organizational restructuring: How managers negotiate change initiatives. *Journal of International Management*, 12, 284-301.
- Tvedt, S.D., Saksvik, P. Ø.,& Nytrø, K., (2009). Does change process healthiness reduce the negative effects of organizational change on the psychosocial work environment? *Work & Stress*, 23, 80-98.
- Van der Doef M, Maes S. (1999). The job demand-control (-support) model and psychological well-being: a review of 20 years empirical research. *Work Stress*,13,87-114.
- Waddall, D., & Sohal, A.S. (1998). Resistance: A constructive tool for change management. *Management Decision*, 36(8), 543-548.

- Walinga, J. (2008). Toward a theory of change readiness: The roles of appraisal, focus and perceived control. *The Journal of Applied Behavioral Sciences*, 44, 315-347.
- Washington, M., & Hacker, M. (2005). Why change fails. Knowledge counts. *Leadership and Organizational Development Journal*, 25(5/6), 400-411.
- Weber, P. S., & Weber, J. E. (2001). Changes in Employee perception during organizational change. *Leadership & Organizational Development Journal*, 22, 291-315.
- Weick, K. E., & Quinn, R. E. (1999). Organizational Change and Development. *Annual Review of Psychology*, 50, 361-386.
- Weymes, E. (2003). Relationships not leaderships sustain successful organizations. *Journal of Change Management*, 3, 319–331.
- Woodward, S. & Hendry, C. (2004). Leading and Coping with Change. *Journal of Change Management*, 4, 155-183.
- Yu, M. (2009). Employees' perception of organizational change: the mediating effects of stress management strategies. (Statistical data). *Public Personnel Management*, Retrieved March, 22, 2010, from http://www.entrepreneur.com/tradejournals/article/198412914_2.html

APPENDIX A: Introductory Letter

Relevance of Healthy change processes, and psychosocial work environment factors in predicting stress, health complaints, commitment among bankers in Ghana

This questionnaire is part of a project that tries to measure the healthiness of the process of change and find out how this is related to other factors concerning work. The Change Process Index (HCPI) used for this survey maintains that for every organizational change to be effective certain factors such as diversity among employees absorbing changes, role clarification, manager availability and constructive conflict need critical consideration to make good of the change. Moreover, the study will also examine to what extent established psychosocial work environment factors explain employees stress experiences, health complaints, and commitment. Cross culturally, how does organizational members experiencing various forms of workplace changes perceive and respond to the dynamics of changes? Issues such as these form the basis of the research. In the end, implications of the findings will be discussed for the development of appropriate intervention strategies, during workplace restructuring.

This survey is conducted by Emmanuel Quaye, graduate student at the Norwegian University of Science and Technology (NTNU), in collaboration with Prof. Per Øystein Saksvik, and under the supervision of Prof. Sturle D. Tvedt.

The questionnaire is confidential and participation is voluntary. At the end of the survey, a copy of the findings in a form of a report will be made available to the bank, but in a way that renders identification of a respondent impossible. Any persons connected to the project are subject to a non-disclosure agreement. Filling out the questionnaire will take about 30 minutes and your participation is highly valued. When all the questions are answered, put the questionnaire in the envelope provided and close it. Then give it to our representatives that are present at the hand-out. We ensure your anonymity.

In case you need additional information contact: Emmanuel Quaye, Psykologisk Institute, NTNU. E-post: emmanuq@stud.ntnu.no Telefon: +233 244780373

It is our hope that you will participate fully and willingly to help increase knowledge in the area of change process implementation, particularly in an emerging economy such as Ghana.

Thank you for participating.

Emmanuel Quaye,
Master's Degree student
Institute of Psychology

Prof. Sturle D. Tvedt,
Associate Professor - Supervisor
Institute of Psychology



Appendix B:

HEALTHY CHANGE PROCESS INDEX (HCPI) AND JOB CONTENT QUESTIONNAIRE

This questionnaire is part of a project that tries to measure the healthiness of the process of change and find out how this is related to other factors concerning work.

In this questionnaire there are no right or wrong answers. Please read the questions carefully and choose the reply you find most fitting. We hope you answer the questions to the best of your ability, even if not all of the questions present a good fit to your situation. For the survey to be useful it is of utmost importance that all the questions are answered. When all the questions are answered, put the questionnaire in the envelope provided and close it. Then give it to our representatives that are present at the hand-out. We ensure your anonymity.

Contact information: Emmanuel Quaye, Psykologisk Institutt, NTNU, Norway.
E-post: emmanuq@stud.ntnu.no Telefon: +233 244780373

<i>READ THIS BEFORE YOU START!</i>	<ul style="list-style-type: none">● Write clearly and do not write outside the marked areas.● Put only one mark at each question unless stated otherwise.
--	--

1. We start with a few questions about you and your background. Remember to write clearly and only put one mark at each question unless stated otherwise.

a) Gender: b) Year of birth c) What is your highest completed education?

Female 1

Male.... 2

1 19

d) How long have you worked in this company?

If you have worked here less than a year, please write 1.....

year

e) Do you have supervisor responsibility? Yes..... 1
No..... 2

f) Do you have a permanent position? Yes..... 1
No..... 2

g) What kind of change is your company undergoing?

2. Here are a few questions about the psychosocial work environment in your business
Assess how often you are exposed to the factors mentioned.

How often...

	<i>Very Seldom</i>	<i>Quiet seldom</i>	<i>Sometimes</i>	<i>Quite often</i>	<i>Very often</i>
	1	2	3	4	5
a) ...do you have work that demands your constant attention?	<input type="checkbox"/>				
b) ...do you work with constant timepressure due to heavy workloads?	<input type="checkbox"/>				
c) ...do you do work that is emotionally straining?	<input type="checkbox"/>				
d) ...does your colleagues offer advice or help?	<input type="checkbox"/>				
e) ...do you have a lot to say about what happens on your job?	<input type="checkbox"/>				
f) ...do you have the freedom to decide how to do your work?	<input type="checkbox"/>				
g) ...do you know what is expected of you in your work?	<input type="checkbox"/>				

3. Here are a few questions about the relationship with your supervisor. Assess how often you are exposed to the situations mentioned.

How often...

	<i>Very Seldom</i>	<i>Quite seldom</i>	<i>Sometimes</i>	<i>Quite often</i>	<i>very often</i>
	1	2	3	4	5
a) ...does your supervisor offer advice or help?	<input type="checkbox"/>				
b) ...does your supervisor provide important information that he or she has received from others.....	<input type="checkbox"/>				
c) ... does your supervisor try to solve conflicts in a constructive manner?	<input type="checkbox"/>				
d) ... does your supervisor distribute authority so you can make important decisions without his or her approval?.....	<input type="checkbox"/>				

1. This organisation is undergoing some changes. Here, we are mainly interested in how you regard the day-to-day management of (the organisation), your immediate manager and your colleagues.

<i>In this change I feel that:</i>	<i>Compl. Disagree</i>	<i>Part. Disagree</i>	<i>Neutral</i>	<i>Partially Agree</i>	<i>Fully Agree</i>
	1	2	3	4	5
1. .. Management is showing little interest in what the employees are capable of and what they know	<input type="checkbox"/>				
2. .. The department / business culture is safeguarded	<input type="checkbox"/>				
3. .. All departmental / organisational traditions are being brutally violated	<input type="checkbox"/>				

4. .. We are finally rooting out some of the bad habits that the department / organisation has acquired
5. .. We have an open discussion about the traditions or ways of doing things that we want to change, and those we want to preserve.
6. .. Management has taken into account that people react in different ways.
7. ..Management has tried to get every view out in the open
8. ..Management listens too much to those who like to take the floor
9. .. There is a specific group which is getting its way at the expense of other groups
10. ..It is safe here to express your point of view
11. . I have had the opportunity to talk with my immediate manager about the consequences for me..
12. .. My immediate manager knows no more than I do about the consequences for me
13. ..My immediate manager is so busy that it is difficult to have a one-on-one discussion.
14. .. My immediate manager is reluctant to address difficult issues regarding consequences for individual employees.....
15. ..My immediate manager does not have the authority to take decisions that might have helped me.
16. .. My immediate manager is good at bringing up difficult issues regarding consequences for individual employees
17. .. Ambiguities in relation to responsibility and tasks have resulted in personal conflicts
18. ..I am left unsure as to what is expected of me in my job.
19. .. Various areas of responsibility and tasks are rapidly clarified
20. .. In most cases we know who has responsibility for various tasks..
21. ..I am faced with expectations which are impossible to reconcile....
22. . I have received necessary training in relation to new tasks and roles
23. . I have opportunities to learn interesting things and enhance my skills.....
24. ..Management has communicated in a way that allows for dialogue
25. . At my place of work there has been no problem in expressing differences of opinion to management
26. .. Management encourages dialogue, but they don't listen to us
27. ..I see no point in discussions with management.....
28. .. It does not feel safe to criticize management.....
29. ..There has been resistance among the employees

30. .. I am a supporter of the change.....
31. ..We are influenced by bad experiences during previous changes
32. ..We are influenced by good experiences during previous changes
33. ..Personal incompatibilities have played an important role
34. ..Contradictions between different departments
or work groups have led to difficulties
35. ..Employees have shown little interest in getting involved
36. .. Suggestions from employees have often been taken seriously.....
37. ..Management has done much to involve the employees
38. ..There are few issues in which it is appropriate to
involve many employees
39. .. By the time the employees become involved the
important decisions have generally already been taken.....
40. ..Lack of information has caused rumours to circulate
at my place of work
41. ..It is easy to find our way about the information
we get from management
42. ..Management ought to have been quicker in providing information
43. ..The information from management ought to have
been subject to better quality assurance
44. .. Rumours and gossip have been my most important
sources of information
45. .. The media or other external sources have been my most
important sources of information

5. What significance does this change have for you? Decide to what extent you disagree or agree with the following statement:

This change ...

- | | <i>Compl.</i> | <i>Partially</i> | <i>Neutral</i> | <i>Partially</i> | <i>Fully</i> |
|--|-----------------|------------------|-----------------|------------------|--------------|
| | <i>Disagree</i> | <i>Disagree</i> | <i>Disagree</i> | <i>Agree</i> | <i>Agree</i> |
| | <i>1</i> | <i>2</i> | <i>3</i> | <i>4</i> | <i>5</i> |
| 46. ..has significant consequences for the conditions
at my workstation / my area of work / office <input type="checkbox"/> | | | | | |
| 47. .. affects my daily activities / tasks to a large extent..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | |
| 48. ..has great significance for my influence within the organisation ... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | |
| 49. .. has from my point of view a considerable effect on
social cohesion at my place of work..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | |
| 50. .. has great significance for the conditions of my employment <input type="checkbox"/> | | | | | |
| 51. .. will effect the time I use to commute to work / travel to work..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | |

52. .. has great significance for my personal career or job security.....
53. .. has great significance for my salary / fringe benefits
54. .has great significance for how I see myself in relation to my job.

6. When you experience changes at your place of work, how do you usually react? Please consider to what degree you agree or disagree with the following statements.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Partly disagree</i>	<i>Agree</i>	<i>Strongly agree</i>	
	1	2	3	4	5	
	6					
a) In times of uncertainty I usually expect the best.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I am always optimistic about my future.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) I like doing things the usual way rather than trying new and different approaches.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Whenever I feel that life is becoming routine, I try to make a change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) It is important for me to have a lot to do.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) I am not easily shaken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) When I am informed about change of planes, I tend to get a little tense.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) It is easy for me to relax.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) If anyone work against me in my job, I find means and ways of accomplishing what I want	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) I am certain I can cope with unexpected events at work....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) When I have reached a conclusion it is unlikely that I will change my mind.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) No matter what happens at work, I am usually capable of dealing with it.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) My views on matters are very stable over time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. How much of these health complaints do you experience in connection to your work?

	<i>No complaints</i>	<i>Some complaints</i>	<i>severe complaints</i>
	1	2	3
1. Muscular pain.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Headaches.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Sleeping problems.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Stomach aches.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Overall fatigue.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Irritability.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Dizziness.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Assess to what degree the particular statement is a source of stress for you at work.

	No stress <i>at all</i>			A great deal <i>of stress</i>		
	1	2	3	4	5	6
1. Workload	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Time pressure and deadlines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Demands of work on my private life.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Clarity of my job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Risk of redundancy.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Restructuring and organizational chang.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Lack of feedback on my wor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. These questions are meant to examine the extent to which you are committed to the company generally.

	<i>Compl. Disagree</i>	<i>Partially Disagree</i>	<i>Neutral</i>	<i>Partially Agree</i>	<i>Fully Agree</i>
	1	2	3	4	5
a) I would be very happy to spend the rest of my career with this organization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) I really feel as if this organization's problems are my own	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) I do not feel emotionally attached to this organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) This organization has great deal of meaning for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) I am more concerned about my professional development.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) I am not afraid of what might happen if I quit my job without having another lined up for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Too much in my life would be disrupted if I decided I wanted to leave this organization.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) If I got another offer for a better job elsewhere, I would not feel it was right to leave my organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) I do not think that wanting to be a 'company man' or 'company woman' is sensible anymore	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THANK YOU FOR PARTICIPATING