APPENDIX D

Healthy Employment Relationships: The Heart of Hospitals

A Discussion Paper Prepared for the Second Annual OHA Healthy Hospital Initiative Project Symposium, October 1-2, 2004

Prepared by

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Introduction

Foreword

This short discussion paper has been prepared for the 2nd Annual OHA HHIP Symposium and is based on a larger paper, currently in preparation, which provides a more in-depth review of the 2003 Healthy Hospital Employee Survey (HHES) Pilot Project results. Due to space restrictions only a few pertinent results are provided as examples of the types of relationships found in the data. As well, a full description of the HHES Pilot Project, the survey instrumentation and the development of the scales is not presented in this discussion paper.

Background Context

Canadians, and even less so health care providers, require little reminding of the pressures to which their health care systems have been and, currently are, subjected. Koehoorn, Lowe, Rondeau, Schellenberg and Wagar (2002) characterize the creation of the current situation as having developed over the last decade due to the collision of "three macro pressures and trends - the political pressures to eliminate deficits and cut costs in the 1990's, labour supply and demand imbalances, and workforce and population ageing" (p. 4). Consequently, considerable strains among health care human resources have been documented including increases in mental health problems and time off with musculo-skeletal pain, deterioration in working conditions, and reduced intake into health care professions (examples taken from studies cited in Koehoorn et. al, 2002).

Early efforts to create a healthier workforce have often been limited to health promotion efforts with an emphasis being placed on changing unhealthy lifestyle behaviours, particularly those that were linked to physical health outcomes. This narrower approach is now being replaced with a broader and more encompassing model of workplace health that incorporates organizational factors and outcomes (Lowe, 2003). For instance, Lim and Murphy (1999) define a healthy organization as "one whose culture, climate and practices create an environment that promotes both employee health and safety as well as organizational effectiveness" (p. 64). Of particular note in this definition is the phrase "culture, climate and practices", which emphasizes a broader set of organizational elements being responsible for the development of a healthy workplace. These elements would incorporate factors such as an organization's leadership and management, its psycho-social work environment, as well as how work is planned, designed, carried out and rewarded and recognized. This broader workplace health model, therefore, requires organizations to regard the management and development of their human resources as being a cornerstone of their workplaces. Central to the model is the recognition of the importance of human resources in organizations' vision and mission statements, which are then translated into strong sustained strategic planning and support for improving those human resource elements.

Recent efforts to improve working environments and the health of employees are beginning to emerge in the Canadian health care sector. Examples of such efforts are the Healthy Hospital Initiative Project (HHIP) by the Ontario Hospital Association (2003). Other examples from across Canada include British Columbia's Interior Health Authority which has developed a "People Vision" that includes among other factors the creation of a positive and healthy work environment (British Columbia, Office of the Auditor General, 2004), and Capital Health in Halifax which has developed a number of strategic directives including the creation of a healthy work environment (Capital Health, 2004).

Reinforcing that Human Resource Management (HRM) is important in Canada's healthcare environment, the Ontario Hospital Association (2003) reports that its member hospitals experience major difficulties in the recruitment and retention for a number of healthcare professions and identified, among others, the hospital work environment as being one factor impacting the supply of health care providers. One recommendation outlined by the OHA (2003) is that "Ontario hospitals should develop and ensure sustainable and healthy work environments and processes to attract and retain a motivated and committed workforce" (p. 3). Based on research and stakeholder discussions the report discusses that feeling valued and respected was a major issue among many of the health care professionals. Obviously, treating employees as a strategic asset and properly planning and supporting positive human resource management practices would appear to be one way of creating healthy healthcare work environments.

In the Ontario healthcare sector the need to integrate human resource management elements on a strategic level is paramount as there is evidence that a significant proportion of hospitals are not yet taking such an approach. For instance, the OHA (2003) indicates, in their OHA Labour Market Survey, that only 48% of the responding hospitals "reported implementing a formal, annual strategic human resources plan" (p. 9). It should be noted, however, that the trend appears to be improving as this was a strong annual gain of 9% over the 39% who reported doing so in the 2002 Labour Market Survey. That being said, there appears to be considerable scope for improvement among Ontario's hospitals as they have not yet taken this fundamental step toward the creation on a healthy workplace.

From this brief review of literature several conclusions can be drawn:

1. Due to a confluence of external factors the healthcare sector can be characterized as being under considerable strain, i.e., healthcare workplaces are, often, "unhealthy work environments".
2. The creation of a healthy workplace requires a broad approach where human resource management practices are considered a critical cornerstone in the creation of a healthy hospital climate and culture.
3. Ontario hospitals are currently confronted with difficulty in attracting and retaining staff.

4. A significant proportion of Ontario hospitals have not taken the fundamental strategic steps necessary to create a healthy workplace.

Clearly, if Ontario hospitals are to become healthy workplaces, and if they are to be attractive in recruiting and retaining staff, solutions to the current situation are necessary.

Healthy Hospital Initiative Project Pilot Survey Results: Evidence that Healthy Employment Relationships Matter

Introduction

As noted above, the Ontario Hospital Association has taken a major leadership role in supporting the development of hospitals and other healthcare agencies as exemplary models of healthy organizations in their communities through the development of the Healthy Hospital Initiative Project (HHIP).

The HHIP, in partnership with Brock University's Workplace Health Research Unit, included the development of a survey instrument, the Healthy Healthcare Employee Survey (HHES). Data from the HHES were collected during the Winter, 2003 from 19 participating OHA member hospitals and the results outlined in this report were drawn from the HHES database. The HHIP includes, among other elements, an ongoing dialogue among the OHA and its member hospitals through an annual Symposium and the regular exchange of healthy work environment information and practices among member hospitals.

Sample Characteristics

Originally, there were 20 participating hospitals in the HHES Pilot Project. They included equal numbers from each of the OHA Regions, however, one hospital dropped out of the study prior to the data being collected. Hospitals were selected on the basis of their having a common insurance carrier, the existence of established hospital structures involved in hospital workplace health promotion, and expressed strategic leadership interest in the project. The sample is not a representative sample of OHA member hospitals but it does represent a heterogeneous sample in terms of hospital size and location (i.e., representing all OHA Regions, being composed of a rural/urban mix, and having a mixture of small and larger hospitals). In total the combined workforces of the 19 hospitals represented nearly 20,000 staff. Approximately 8,000 staff members responded to the survey, i.e., a response rate of just over 40%.

In order to create equivalent groups for this report the original sample of respondents was reduced to only those respondents who had responded to all items used in the report's analyses. This strategy resulted in the loss of respondents who only answered some of the items. In total, the sample for this report's analyses consisted of 6742 respondents.

Report Constructs

In this report "culture, climate and practices" are captured by a term I have called Healthy Employment Relationships (HER), which consists of the manner with which employees perceive their hospital, their management, their coworkers and the manner in which they perceive work is designed, managed, recognized and rewarded. Four different, but related constructs of Healthy Employment Relationships were developed for this discussion paper. They are:

A. Employment Relationships Scale (ERS), which is composed of 7 items capturing the *employees' perceptions of trust, respect, fairness, personal commitment, communication, and influence in work decisions*.

B. Job Quality Scale (JQS) , which is composed of 3 items capturing *job clarity, workload, and job control*

C. Work Environment Processes Scale (WEPS), which is composed of 7 items capturing *the physical work environment, job training, career development, individual and team recognition and reward, supplies and resources, and quality improvement practices*

D. Safe Supportive Work Environment Scale (SSWES), which is composed of 5 items capturing *the impact of work on personal life, protection from harassment, safety at work, co-worker cohesion, and cooperation among work units*.

These four HER constructs were related to a number of important hospital and employee outcomes and the results provided in the next few pages constitute strong correlational evidence of their importance to Ontario hospitals.

Scoring

All items in the HHIP HHES survey were positively worded and respondents chose their response from a 7-point likert scale ranging from "strongly disagree" to "strongly agree". For each construct, higher values indicate more "agreement" and because all the HHES items are positive the higher the value obtained the more positive, or strong, the result. All results are provided as percentages with the conversion being obtained by converting each agreement/disagreement response to an equivalent percentage (e.g., "strongly disagree" is equivalent to 0%; the mid-point "neither agree nor disagree" is equivalent to 50%; and "strongly agree" is equivalent to 100%).

Using the Statistical Package for Social Scientists (SPSS) the CLUSTER procedure was used with each HER construct to create 3 groups, which have been labeled "Strong" (high values of a construct were obtained), "Moderate" (intermediate values were obtained), and "Weak" (low values were obtained). For each construct, groups of approximately equal size were obtained. One-way analyses of variance (SPSS procedure ONEWAY) were used to obtain the mean values for each of the 3 HER

construct groups on a variety of hospital and employee outcomes and are reported in the next few pages.

Cautions in the Interpretation of Results

The results in this paper are based on the inter-relationships of a number of variables drawn from employees' responses to the Healthy Hospital Employee Survey. The data are, therefore, drawn from a correlational study, which means that cause and effect conclusions cannot be derived from the results. As well, this study does not provide an ability to disentangle the myriad of uncontrolled factors that could account for differences in the levels of the outcomes presented, so the relationships demonstrated in this study may be the result of variables other than the different levels of the HER constructs used in the statistical analyses.

Section One: Organizational Satisfaction

Organizational Satisfaction is probably the most commonly measured outcome in workplace research. It represents an "overall" or "summative" measure of employees' perceptions of their workplaces. Organizational satisfaction was measured with a single item asking the respondents' overall satisfaction with their hospitals using a 7 point likert scale ranging from strongly disagree to strongly agree.

Figure 1: Organizational Satisfaction by Strength of ERS

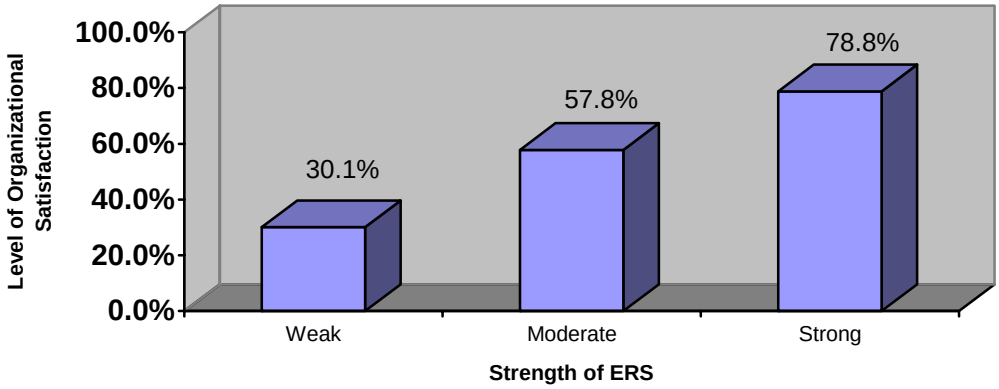
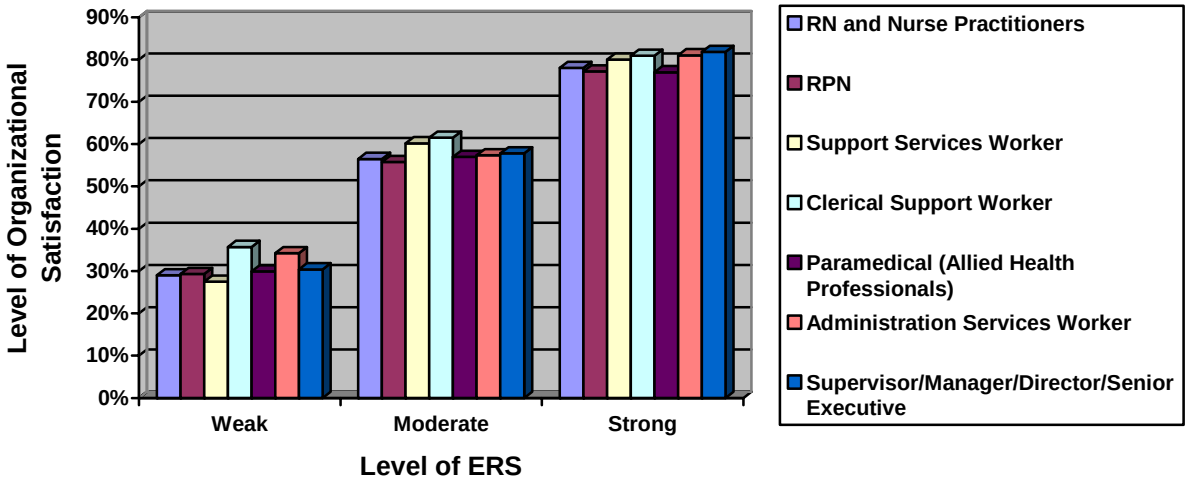


Figure 1 indicates a very clear, strong, positive relationship between the strength of ERS and organizational satisfaction. Moreover, the differences among the groups are obvious. For instance, organizational satisfaction for the strong ERS group is 2.6 times higher at 78.8% than the weak ERS group at 30.1%. As well, the moderate group's organizational satisfaction is nearly 2 times higher than the weak ERS group. These differences are highly statistically significant. Finally, though they are not displayed here, very similar results were obtained for the other HER constructs, i.e., Job Quality Scale (JQS), Work Environment Processes Scale (WEPS) and the Safe Supportive Work Environment Scale (SSWES). These results are graphic evidence of a strong relationship between the creation of healthy work environments and organizational satisfaction.

The Organizational Satisfaction results obtained for the three levels of ERS (see above) are replicated for the 7 employment categories measured in the HHES survey (i.e., RN and Nurse Practitioners, RPN, Support Services Worker, Clerical Support Worker, Paramedical (Allied Health Professionals), Administration Services Worker, Supervisor/Manager/Director/Senior Executive). The results are displayed in Figure 2 (see below), where it is obvious, other than very small variation among employment categories, that all employment categories demonstrated the same general relationships among levels of ERS and Organizational Satisfaction, i.e., the stronger the ERS score the more highly satisfied the respondents were in their satisfaction scores.

This is a highly consistent and robust finding across a very diverse set of employment categories. These results, in effect, indicate that the combined elements of trust, respect, fairness, personal commitment, communication, and influence in decision making transcend hospitals' employment categories. In other words if low ERS exists anywhere in a hospital, then low organizational satisfaction occurs, while the opposite also holds, i.e., if high ERS exists then high organizational satisfaction occurs.

Figure 2: Organizational Satisfaction by ERS by Employment Category



Not shown in this report, due to space restrictions, is the finding that the level of ERS (i.e., strong, moderate, and weak) and its association with organizational satisfaction is also equally consistent and compelling across each of 13 different hospital functional groupings measured in the HHES (i.e., Acute Care, Surgical, Medical Wards, Women and Children's Health, Complex Continuing Care, Diagnostics, Rehabilitation, Mental Health, Dietary/Nutrition Services, Maintenance/ Receiving/ Environmental Services, Other Clinical Programs/Units, Other Non-Clinical Programs/Units).

It is important for the reader to reflect that the original findings for the levels of ERS and organizational satisfaction are replicated, with some minor variation, across 6 different

hospital employee categories and 13 different hospital functional units. As well, it is important to keep in mind that the variation among ERS levels (in the order of 20%-25%) is much greater than the differences among groups (in the order of 3%-8%). All told, this is very compelling evidence that ERS is highly related to organizational satisfaction no matter what type of hospital work is engaged in, and no matter where that work is carried out.

These findings are entirely consistent with a growing line of research indicating that feelings of trust, fairness and respect are important to employees. Given the last decade's strains in the healthcare sector due to cost reductions, restructuring, etc., it is very clear that those employees who have high levels of ERS enjoy much higher levels of organizational satisfaction than those with lower levels of ERS.

These results are very strong correlational evidence of the need for healthcare organizations to put effort into rebuilding HER elements, i.e., trust, respect, fairness etc. In short, HER appears to be "at the heart" of organizational satisfaction.

Section Two: Job Satisfaction

Job satisfaction, too, is a very commonly measured outcome in work research. It represents an overall perception of employees' satisfaction with the jobs they carry out in their work organizations. Job satisfaction was measured with a single item asking the respondents' overall satisfaction with their jobs using a 7 point likert scale ranging from strongly disagree to strongly agree. To demonstrate the strength of prediction, another HER construct, the Work Environment Processes Scale (WEPS) is used in this section.

Figure 3: Job Satisfaction by Strength of WEPS

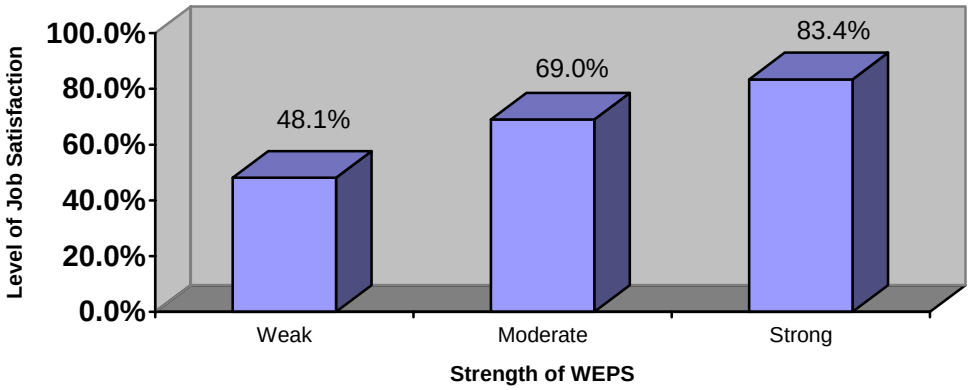
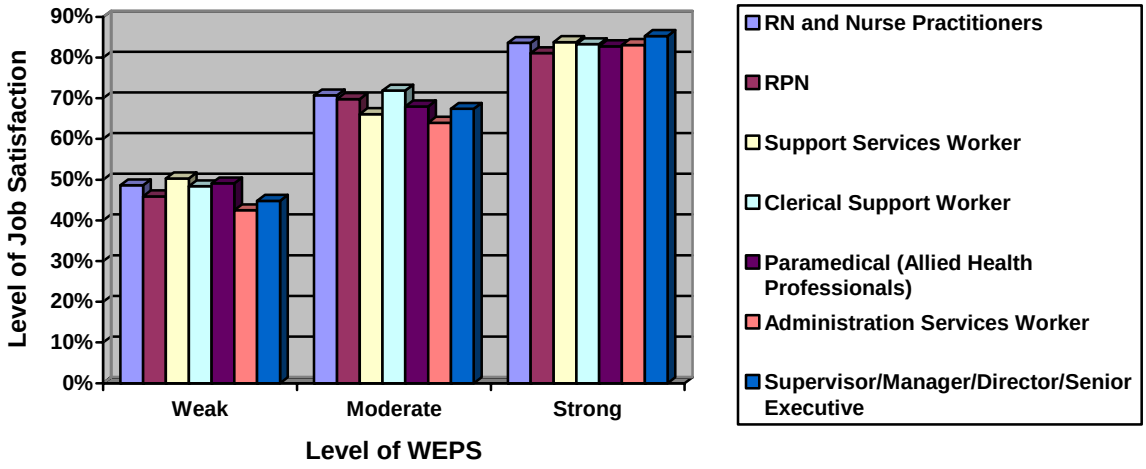


Figure 3 indicates a clear, strong, positive relationship between the three levels of strength of WEPS and job satisfaction. Job satisfaction for the strong WEPS group is 1.73 times higher than the weak WEPS group and the moderate group is 1.43 times higher than the weak group. Again, as was found for organizational satisfaction, there is a clear differentiation among the levels of a HER construct reported by employees, in

this case WEPS, and their levels of job satisfaction. Consistent with the organizational satisfaction section, the other three HER constructs were also highly related to job satisfaction.

The Job Satisfaction results obtained for levels of WEPS (see above) are, again, replicated for the 7 employment categories measured in the HHES survey (i.e., RN and Nurse Practitioner, RPN, Support Services Worker, Clerical Support Worker, Paramedical (Allied Health Professionals), Administration Services Worker, Supervisor/Manager/Director/Senior Executive). The results are displayed in Figure 4 (see below), where it is obvious that, other than some variation among employment categories (from between 5% and 9%), all employment categories demonstrated the same general relationships among levels of WEPS and Job Satisfaction, i.e., the stronger the WEPS score the more highly satisfied the respondents were in their job satisfaction scores.

Figure 4: Job Satisfaction by WEPS by Employment Category



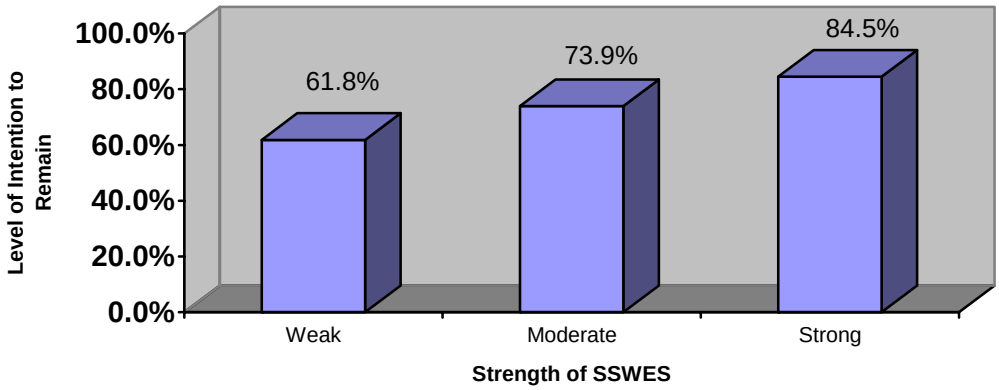
Section Three: Intention to Remain

Intention to remain (its converse is intention to turnover), too, is a very commonly measured work research outcome. It represents an overall perception by employees as to whether they are likely to remain in (or leave) their hospital employment. Intention to remain was measured with a single item stating the respondents' intentions to remain at their hospitals using a 7 point likert scale ranging from strongly disagree to strongly agree. To demonstrate the strength of prediction for another HER construct, the Safe Supportive Work Environment Scale (SSWES) is used in this section.

Figure 5 (see next page) indicates a clear, strong, positive relationship between the three levels of strength of SSWES and intention to remain. Intention to remain for the strong SSWES group is 1.37 times higher than the weak SSWES group and the

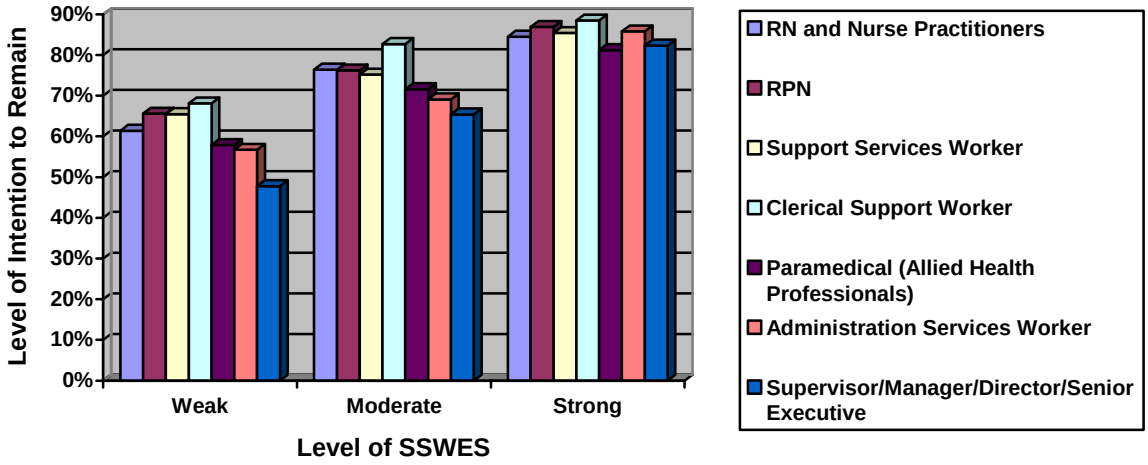
moderate group is 1.20 times higher than the weak group. Again, as was found for the previous two outcomes, there is a clear though lower differentiation among the levels of employees' SSWES and their levels of intention to remain in their hospitals' employment.

Figure 5: Intention to Remain by Strength of SSWES



The Intention to remain results obtained for the three levels of SSWES (see above) are, again, replicated (see Figure 6 below) for the 7 employment categories measured in the HHES survey (i.e., RN and Nurse Practitioner, RPN, Support Services Worker, Clerical Support Worker, Paramedical (Allied Health Professionals), Administration Services Worker, Supervisor/Manager/Director/Senior Executive).

Figure 6: Intention to Remain by SSWES by Employment Category



Although there is greater variation among employment categories (up to 20%) within each level of ERS, the results displayed in Figure 5 (see above) again demonstrate the

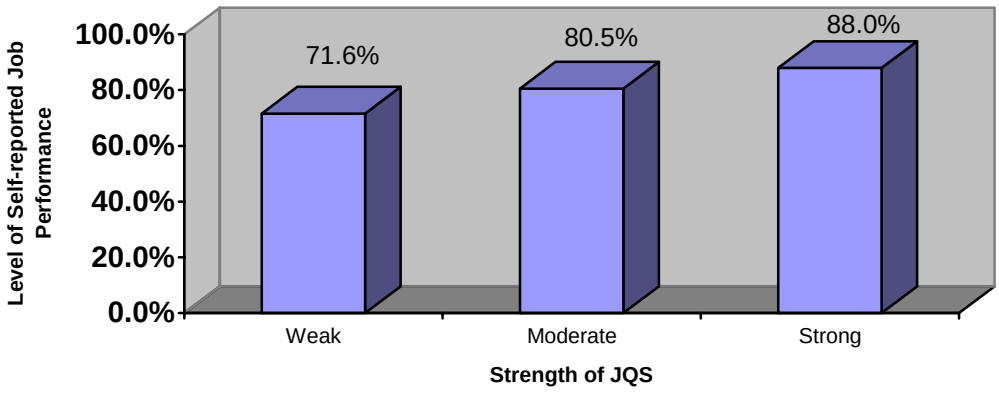
robustness of the positive relationship between the level of SSWES and employees' intentions to remain employed at their current hospital. Most importantly, low SSWES appeared to be most strongly related to quitting (i.e. lower levels of intention to remain) for allied health professionals, administrative workers and the various levels of management. Given that these groups contain some of the hardest to attract and retain healthcare workers, these results are compelling evidence for hospitals to assess how healthy their work environments are for their staff and to implement interventions designed to improve those environments.

These lower levels of differentiation for levels of SSWES and intention to remain and the greater within SSWES levels of variation are not unexpected. There are a lot of factors beyond an organization's control that can account for employees either staying or leaving their employment. For example, partners' jobs can cause employees to stay even when they are in a poor work environment. Equally and conversely, partners moving their job location can cause employees to leave even when they are in a good work environment. As well, poor local job markets (i.e., low opportunity for other employment) will increase the likelihood of employees staying in poor work environments and good local job markets (i.e., high opportunities for other employment) will increase the likelihood of employees leaving poor work environments.

Section Four: Self-reported Job Performance

Job performance is not commonly measured as a work outcome in many studies. This is mainly due to the sensitivity of such measures and the difficulty in tapping such data. Most commonly, though, when such data are collected it is self-reported information. In the HHES job performance was measured with a five item scale that asked respondents to respond to their ability to complete assigned duties, fulfill responsibilities, perform tasks expected of them etc.

Figure 7: Self-reported Job Performance by Strength of JQS

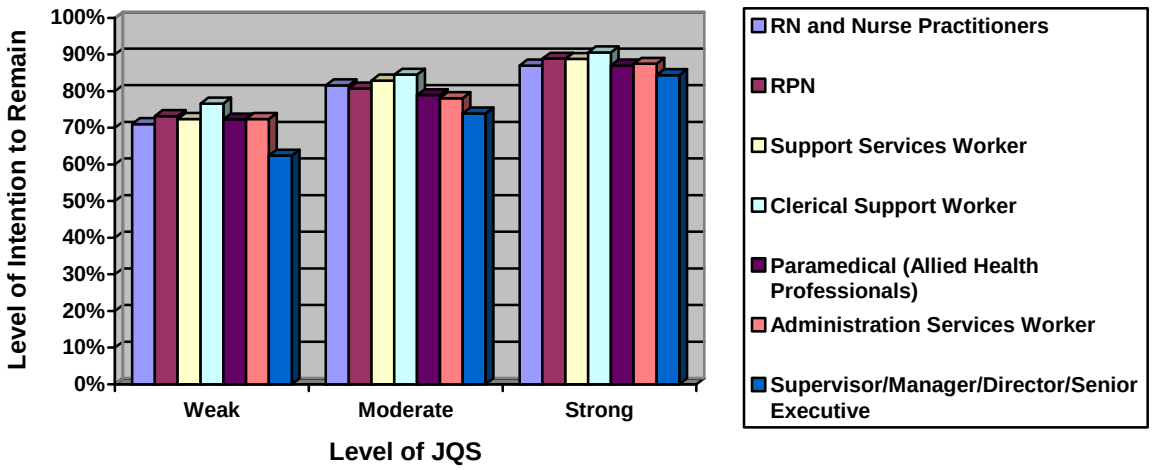


The five-point frequency rating scale used for self-reported job performance measured from “never” through to “always”, which were converted to percentages where “never” (value = 0) converts to 0% and “always” (value = 4) converts to 100%. To demonstrate the strength of prediction for another HER construct, the Job Quality Scale (JQS) is used in this section.

With self-reported job performance, respondents are reporting about their own work behaviour, which results in responses with low variation and high averages. In spite of these measurement issues, the three levels of JQS demonstrate a clear, strong, positive relationship with self-reported job performance (see Figure 7 previous page). The average self-reported job performance rating for the strong JQS group was 88%, whereas the weak JQS group rated its performance at 71.6%, a difference of 16.4 percentage points. The moderate group’s performance rating is intermediate at 80.5%.

The self-reported job performance results obtained for the three levels of JQS (see above) are, again, replicated (see Figure 8 below) for the 7 employment categories measured in the HHES survey (i.e., RN and Nurse Practitioner, RPN, Support Services Worker, Clerical Support Worker, Paramedical (Allied Health Professionals), Administration Services Worker, Supervisor/Manager/Director/Senior Executive).

Figure 8: Self-reported Job Performance by JQS by Employment Category



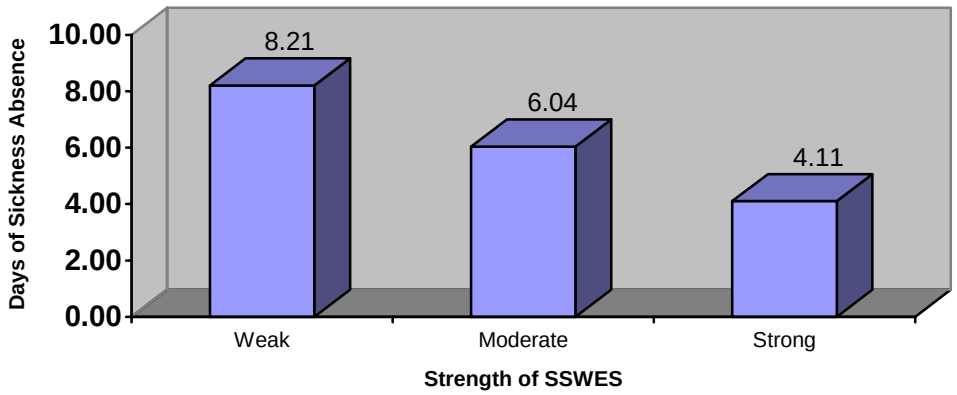
Recently, researchers have been attempting to measure a productivity rating called “Presenteeism”, which is a measure that attempts to capture the productivity levels of workers who are present at work but working at less than optimal performance. Given the nature of the HHES scale used to measure self-reported job performance, i.e., ability to complete assigned duties, fulfill responsibilities, perform expected tasks etc., the self-reported job performance results represent a proxy form of presenteeism. The results clearly provide evidence that the creation of strong HER environment could result in up to 16.4 percentage points of improvement over weak HER environments and 7.5 percentage points of improvement over moderate HER environments.

Importantly, the improvements would occur across all employment categories and appear to be greatest for those in managerial work roles.

Section Five: Self-reported Sickness Absence

Absence is a fairly commonly measured work outcome in research studies. Frequently, however, due to the sensitivity of such measures and the difficulty in tapping such data, absence is self-reported, as it is in this study. In the HHES, sickness absence was measured with an open question that asked respondents to estimate the number of whole days in the last year that they had been absent from work. For illustrative purposes, the Safe, Supportive Work Environment Scale (SSWES) is used in this section.

Figure 9: Self-reported Sickness Absence by Strength of SSWES

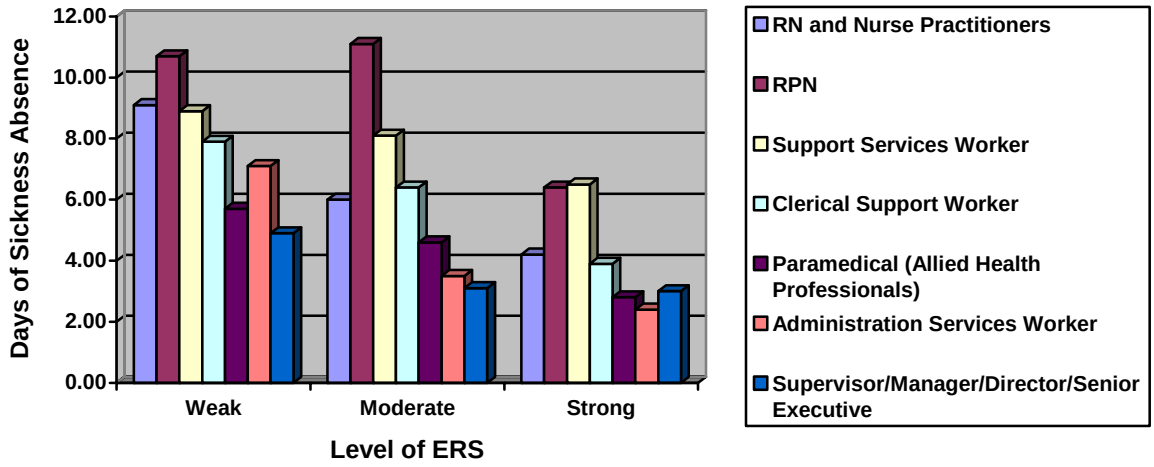


The average self-reported annual sickness absence for the weak SSWES group was 8.21days, compared to 6.04 days absence for the moderate group, and just 4.11 days sickness absence for the strong SSWES group (see Figure 9 above). In other words, nearly double the sickness absence was reported by the weak SSWES group compared to the strong SSWES group. This is a dramatic difference in sickness absence based on differences in the value of an HER construct. Similar results were obtained for the other HER constructs, i.e., Employment Relationships Scale (ERS), Job Quality Scale (JQS), and the Work Environment Processes Scale (WEPS).

The sickness absence results obtained for the three levels of SSWES (see above) are, again, to a very large degree replicated (see Figure 10 on the next page) for the 7 employment categories measured in the HHES survey (i.e., RN and Nurse Practitioner, RPN, Support Services Worker, Clerical Support Worker, Paramedical (Allied Health Professionals), Administration Services Worker, Supervisor/Manager/Director/Senior Executive). The only group for whom there is not a reduction from one level of the SSWES to the next is the RPN group who, if they reported weak SSWES, had on average 10.7 days sickness absence compared to the 11.1 days sickness average

absence reported by those experiencing moderate SSWES levels. However, there was a dramatic drop to 6.4 days sickness absence for the RPN's who reported high levels of SSWES. In general, however, there is a fairly clear drop in the reported number of sick days absent for all employee categories based on increasing levels of SSWES. This is compelling correlational evidence supporting the statement that "sick environments cause workers to be sick more often"!

Figure 10: Days of Sickness Absence by ERS by Employment Category



It has been reported that health care workers have, on average, more absence than workers from all other work sectors (Lowe, 2004). The above results indicate that the creation of positive, healthy work environments may well have a strong impact on reducing sickness absence across all hospital employee categories.

Summary and Conclusions:

This discussion paper reviews the effects of 4 different, but related, Healthy Employment Relationship (HER) constructs with 5 important hospital and employee outcomes: Organizational Satisfaction, Job Satisfaction, Intentions to Remain (its converse being Intentions to Quit), Self-reported Job Performance, and Sickness Absence. The HER constructs cover a wide range of organizational, environmental, management, and job elements.

For every analysis, with very high levels of consistency, the results were the same. The higher the levels of each HER construct, the higher the levels of positive outcomes (e.g., job satisfaction, job performance) and the lower the levels of negative outcomes (e.g., sickness absence, intentions to quit).

There is wide ranging research indicating that healthcare organizations, hospitals in particular, have been under considerable strain over the last decade. That strain has emerged in the form of poorer work environments, which at their extreme could be

characterized as “toxic”, with consequent effects on hospital staff such as high levels of absence and lowered levels of job satisfaction.

Though one cannot draw cause and effect relationships from results drawn from survey data such as the HHES data set, the correlational evidence derived from this discussion paper’s analyses are consistent and compelling.

The results indicate that improvements in employment relationships in Ontario hospitals could result in very positive results in productivity, satisfaction, and absence across all hospital employment categories and across all hospital functional units. Given current hospital budget restraints and increasing demands for services, improvements in these factors could help meet these twin demands on our hospitals.

In particular, hard to recruit and hard to retain professionals such as nurses, physiotherapists, occupational therapists, and pharmacists could be encouraged to work at, or stay working at, Ontario hospitals. While there are undoubtedly other factors that affect decisions to work in hospitals, improvements in hospital employees’ working environments, such as those measured by the HER constructs, could play a major role in the recruitment and attraction of hospital employees. As well, significant improvements in productivity and satisfaction could result from such improvements.

While the OHA Healthy Hospital Initiative Project is but one form of healthcare organization intervention, it is clear that if it can improve working environments in Ontario’s hospitals there could be strong improvements in hospital and employee outcomes. Therefore, support through ongoing or improved funding to continue development of the HHIP, and/or other Healthy Employment Relationship interventions, should be strongly considered as the results of this study clearly support such an investment.

As the previous results indicate, at the heart of hospital productivity and employee satisfaction are Healthy Employment Relationships.

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Note:
References are available upon request from the author.