

The Relation Between Supportive Work Environments and Work Attitudes:
An Examination of the Mediating Role of Psychological Well-being and Perceived Stress

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in partial fulfillment of the requirements for the Masters of Arts degree

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Abstract

People are increasingly spending more time at work, thus it is important to examine how the social work environment affects individuals. In particular, social support from supervisors and the organization may have considerable impact on employee job attitudes, such as affective commitment, job satisfaction, and intention to quit. The purpose of this study was to examine whether employees' psychological well-being and perceived stress mediates the effect of supportive work environments on job attitudes. The study sample consisted of 122 employees from three units of a children's hospital working in various occupations. For the full sample, support at work positively influenced job attitudes, but support did not influence most well-being variables, therefore the mediation hypotheses were not supported. However, the associations between support at work, employee well-being, and job attitudes differed depending on the occupational group to which they belonged. These results emphasize the need to further investigate when support at work may have beneficial or detrimental effects for employees and organizations.

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The Relation Between Supportive Work Environments and Work Attitudes:
An Examination of the Mediating Role of Psychological Well-being and Perceived Stress

Work represents a central aspect of adult life. In a recent study of Canadian public, private, and not-for-profit sector employees, the average respondent worked 42 hours per week; however, 26% of respondents worked more than 50 hours per week, 14% worked between 45 and 49 hours per week, and 31% worked between 40 and 44 hours per week (Higgins & Duxbury, 2002). The work environment can be a source of stress for employees because of the number of hours worked and the accelerating changes taking place in the workplace such as technological advances, reduced job security, and increasing conflict between employees' work and family life (Cooper, 1999). Given that people spend a great deal of time at work, the social environment of the workplace represents an important feature to be examined to determine its effects on employees' well-being and work attitudes. It has become increasingly important to determine ways to reduce occupational stress, or at least to lessen its impact on the health and well-being of employees. One way to achieve this may be to increase the supportive elements in the work environment.

Supportive environments come from social support from managers, supervisors, or a general perception of social support from the organization. A supportive organization is one in which leaders care about the well-being of employees and value their contribution (Eisenberger, Huntington, Hutchison, & Sowa, 1986). This type of organization may also support managers and supervisors in being supportive of

employees (Hopkins, 1997). In such supportive environments, employees may be more committed to the organization, more satisfied with their jobs, have higher morale, and less likely to be thinking of leaving the organization (Lowe, Schellenberg, & Shannon, 2003).

Social support refers to being cared for and valued as a person, and having a sense of belongingness (House, 1981). In general, social support contributes to well-being in community and clinical samples and in organizational settings (Cohen & Wills, 1985; House, 1981). House (1981), reviewing studies of social support in the workplace, found that social support may decrease stress and other related health problems and improve the well-being of employees. If employees believe that they are supported by their supervisor and by the larger organization that employs them, it is likely that this environment will have a positive influence on their well-being. If employees are happier and healthier, they may be more likely to put greater effort into achieving organizational goals, which is of benefit to organizations (Wright & Cropanzano, 2000). Because of its implications for health and well-being, social support is an important variable in work life. Although there has been a great deal of research investigating how social support affects work-related outcomes, little is known about the possible mediators involved in the association between social support and these work outcomes (House, Umberson, & Landis, 1988).

The purpose of the present study was to examine support received in the work setting, in conjunction with two possible mediators, psychological well-being and perceived stress, as influencing the relation between support from the organization and the supervisor and employee affective commitment, job satisfaction, and intention to quit.

Employees who feel supported by their organization and their supervisors may have greater psychological well-being and less stress, which in turn may result in greater affective commitment to the organization, job satisfaction, and intention to remain.

Two indicators of well-being were used to determine which measure may be more effective in accounting for the association between support at work and job attitudes of employees. First, employees' level of stress, an often-used measure of well-being, was examined as a possible mediator. Additionally, because well-being has mostly been conceptualized in negative terms (i.e., well-being is considered to be simply low levels of distress), a more positive view of human functioning is needed. Thus, well-being was conceptualized as a multi-dimensional construct of optimal functioning that includes the dimensions of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff, 1989). Finally, given that workplace social support can come from a number of sources, the present study addressed the relative importance of organizational support and supervisor support in contributing to the prediction of employee well-being and work outcomes.

Types of Social Support in Organizations

Researchers have proposed many different types of social support that may be relevant for the health and well-being of individuals, including informational support, instrumental support, appraisal support, and emotional support (also called esteem support and emotionally-sustaining behaviours; Gottlieb, 1978; House, 1981). Emotional support, which reflects caring, respect, concern, encouragement, and understanding given to another person (House, 1981), may be the most important type of support because it is

most likely to meet to socio-emotional needs of individuals. Moreover, it is the kind of support that most individuals describe when asked about people who give them support (Gottlieb, 1978). It also tends to be the best predictor of job stress, burnout, health symptoms, and satisfaction with supervision as compared to informational and structural support (support from someone higher in the organization) (Ford, 1985). Given that emotional support is a key type of social support in the workplace, the present research focused on the effects of emotional support on employees.

Sources of Social Support at Work

There are multiple sources of social support in the workplace including the organization itself, supervisors, coworkers, union representatives, and more formal sources of support such as mental health professionals and employee assistance programs. Consistently, two sources of support that have been found to be most important in producing supportive work environments are organizational support and supervisor support, as most employees work within an organizational milieu and have a supervisor who is a significant person in their working lives (House, 1981).

Perceived organizational support. Perceived organizational support is defined as employees' "global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" (Eisenberger et al., 1986, p. 501). Employees believe that they are supported by the organization to the extent that they receive rewards for their contributions, which could be in terms of salary and benefits or social rewards such as recognition and approval (Blau, 1964). For an employee to develop a belief of support from the organization, the employee must believe that these

rewards are discretionary and represent the positive evaluation of the employee by the organization (Eisenberger, Cummings, Armeli, & Lynch, 1997). Feeling supported by the organization helps to meet the emotional needs of employees such as providing a sense of worth, esteem, approval, and belongingness by indicating that the organization will reward employees for their effort and provide aid if needed (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001).

It is through employees' interpretation of the organization's motives that employees develop and maintain beliefs regarding the extent to which the organization values their contribution and cares about their well-being (Eisenberger et al., 1986). To the extent that employees believe that the organization supports them, they are likely to reciprocate by being more committed to the organization and exerting more effort in their work. If the organization fails to reciprocate with continued rewards, employees will feel less obligated to do extra work, and commitment will be reduced in the future.

In sum, organizational support may be important in creating positive work environments and to the degree that employees feel valued and cared for by the organization, it is likely that it will positively enhance their work-related attitudes. It is not known, however, whether the influence of organizational support on work attitudes is a direct association or whether the process occurs through a mediator, such as employee well-being.

Perceived supervisor support. The second key source of work-related social support comes from immediate supervisors. Perceived supervisor support is "the extent to which supervisors provide encouragement and support to employees within their

workgroups” (Griffin, Patterson, & West, 2001, p. 537). Supervisors have an important role in communicating specific organizational goals and in facilitating employee health and well-being (Hopkins, 1997).

According to Kidd and Smewing (2001), the role of supervisors is to assist employees’ learning and career advancement, act as mentors, provide feedback and assessment, and create a supportive work climate. Duxbury and Higgins (1997) also identified behaviours that make a supervisor supportive such as sharing information, encouraging employee autonomy, and promoting work-family balance. Similarly, House (1981) stated that supportive supervisors give emotional, informational, instrumental, and appraisal support, which includes empathetic listening, understanding, and showing genuine concern for subordinates’ well-being. Clearly, the role of supervisors goes beyond controlling and directing employees to include such supportive behaviours as genuine valuation and caring for employees, mentoring, and appreciating individual differences while promoting employee performance to meet organizational objectives.

In sum, supervisors are an important source of work-related support and through their influence they may positively impact employees’ well-being as well as other personal and organizational outcomes such as job satisfaction, organizational commitment, and intention to quit. Likert (1961) proposed a relationship between supervisors’ concern for employees’ well-being and greater resulting productivity. His principle of supportive relationships dictates that supported employees are more likely to believe that they contribute to organizational goals and that these goals are meaningful, which creates a sense of esteem and worth in employees. In support of this, Baruch-

Feldman, Brondolo, Ben-Dayana, and Schwartz (2002) found that employees who reported more support from their supervisor were more productive in their job. The authors suggest that the supportive behaviours of supervisors may facilitate the performance of employees' responsibilities. Although much research has been done regarding the benefits of supervisor support, studies examining possible mediators of this kind of support on organizational outcomes are missing.

Organizational support and supervisor support. Organizational support may represent a somewhat abstract form of support from the organization and senior management, whereas supervisor support may pertain to a specific person that employees turn to for emotional support; therefore, organizational support and supervisor support may characterize two different behaviours. In fact, organizational support and supervisor support have been found to be different, but related constructs (Kottke & Sharafinski, 1988). However, research may not be adequately distinguishing between organizational and supervisor support. For example, the Survey of Perceived Organizational Support (Eisenberger et al., 1986) is often used to assess supervisor support by replacing the word "organization" for "supervisor" in the items (Kottke & Sharafinski, 1988). Although Kottke and Sharafinski (1988) found empirical evidence that organization and supervisor support are distinct, their analyses may not adequately differentiate between these two sources of support because the index used does not reflect the *unique* behaviours of supportive supervisors. Whereas organizational support may characterize a general type of support, which creates a supportive work environment for employees, supervisors are not only responsible for sustaining a supportive environment, but they are also likely to

be the one providing other supportive behaviours such as mentoring, assisting employees, and providing feedback. As such, supervisors may provide more specific and targeted support to employees. Because of this, organizational and supervisor support may be differentially associated with employee attitudes.

Although organizational and supervisor support may be related, but different, sources of support in the workplace, there is some controversy as to which source of support is more important in contributing to work outcomes such as affective commitment, job satisfaction, and intent to quit. One perspective is that organizational support may better predict work attitudes because it creates a general organizational climate that is supportive of all employees by providing such things as educational and promotional opportunities. Bradley and Cartwright (2002), comparing the effects of organizational support and supervisor support on psychological distress and job satisfaction, reported that organizational support was the most effective predictor of both variables.

The other perspective is that the supervisor may be a more immediate source of support for employees and, as such, may provide support on a day-to-day basis, which may be more beneficial to employees. In addition, employees may more readily identify with and develop a working relationship with an immediate supervisor than with the organization/senior managers responsible for developing supportive organizational policies and practices (Stinglhamber & Vandenberghe, 2003). There is evidence to suggest that employees feel more supported by their supervisors than from the organization (Kottke & Sharafinski, 1988). Additional evidence that supervisor support is

the more direct contributor to employee attitudes comes from a study by Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades (2002). They found that perceived supervisor support leads to changes in perceived organizational support three months later, whereas perceived organizational support did not significantly contribute to changes in perceived supervisor support. Supervisors may have a role in interpreting and, possibly, altering information coming from the organization and then communicating this information to subordinates. Therefore, they may have greater influence on employees' job attitudes. In sum, given the conflicting evidence for both organizational and supervisor support as being the more effective means of supporting employees, it is necessary to test these constructs directly using measures of each kind of support that assess unique behaviours in order to identify the relative importance of support on multiple job-related outcomes.

The Effects of Social Support on Affective Commitment, Job Satisfaction, and Intention to Quit

Support from organizations and supervisors has important implications for work attitudes such as affective commitment, job satisfaction, and intention to quit. Affective commitment reflects the extent of emotional attachment to and identification with the organization as compared to normative commitment (the perceived moral obligation to remain with the organization) or continuance commitment (the belief that one has too much invested in the organization to be able to leave it; Allen & Meyer, 1990). Job satisfaction is the general attitude regarding one's job or various dimensions of the job, such as satisfaction with pay, benefits, and the organization (Spector, 1997). Intention to

quit reflects the degree that employees intend to quit their job within a certain period of time and is one of the most consistent predictors of actual turnover (Hom & Griffeth, 1991). These work-related attitudes represent important outcomes for employees and organizations because they have been related to life satisfaction, job performance, and withdrawal behaviours (Judge & Watanabe, 1993; Mathieu & Zajac, 1990; Meyer, Paunonen, Gellatly, Goffin, & Jackson, 1989). Each will be discussed regarding its association with organizational and supervisor support in the following sections.

Perceived organizational support and affective commitment. In both cross-sectional and longitudinal studies (Eisenberger, Fasolo, & Davis-LaMastro, 1990; Randall, Cropanzano, Bormann, & Birjulin, 1999; Rhoades & Eisenberger, 2002; Rhoades, Eisenberger, & Armeli, 2001), perceived organizational support has been related to greater affective commitment. Perceived organizational support may increase employees' affective organizational commitment to the organization as a form of repayment for such support (Eisenberger et al., 1986). Rhoades et al. (2001) sought to establish the direction of the relation between perceived organizational support and affective commitment. The authors identified that organizational support at Time 1 was associated with increased affective commitment two and three years later, whereas affective commitment at Time 1 was not significantly associated with changes in organizational support two and three years later. Therefore, perceived organizational support contributes to greater affective commitment over time (Rhoades et al., 2001).

The association between support and outcomes may not, however, be a direct association, but may be partially explained by other factors or mediators. In a study of

413 employees examining the association between perceived organizational support and various work outcomes, Eisenberger et al. (2001) found that the effect of organizational support on affective commitment was mediated by the employees' obligation to reciprocate and employees' positive mood. Although there is some evidence that mediators are involved in the association between perceived organizational support and affective commitment, it may also be mediated by a more personal reaction such as employees' psychological well-being and level of stress.

Perceived supervisor support and affective commitment. Supervisor support may contribute to greater affective commitment to the organization to the extent that employees view the supervisor as the person that they have the most direct contact with on a daily basis, as opposed to indirect contact from the organization. In a study of employees from various occupations that examined the role of supervisor support and employees' career and organizational commitment, supervisors' trust, respect, feedback, and goal-setting behaviours were associated with greater organizational commitment (Kidd & Smewing, 2001). Firth, Mellor, Moore, and Loquet (2004) found that emotional support from supervisors mediated the effects of job stressors on organizational commitment. In contrast, abusive supervision, which was defined as displaying hostile verbal and nonverbal behaviours, was associated with lower affective commitment (Tepper, 2000).

Whereas some research has found support for a direct association of supervisor support on increased affective commitment (Kidd & Smewing, 2001; Mathieu & Zajac, 1990), other research (Tepper, 2000) indicates that this link may be mediated by factors

such as organizational justice. In the present study, it was proposed that additional mediators may be psychological well-being and stress to the extent that employees who feel supported by their supervisor have improved well-being and less stress and, as a result, may be more committed to the organization.

Perceived organizational support and job satisfaction. The extent to which organizations care for and value their employees positively influences how satisfied they are with their job (Rhoades & Eisenberger, 2002). Cropanzano, Howes, Grandey, and Toth (1997) found a positive relation between organizational support and overall job satisfaction, even after controlling for the effects of organizational politics. In a study of salespeople and insurance agents (Allen, Shore, & Griffeth, 2003), organizational support mediated the relation between positive human resource practices (e.g., participative decision making, fairness of rewards, and growth opportunity) and job satisfaction.

Most research in this area has attempted to demonstrate a direct association between organizational support and job satisfaction. Eisenberger et al. (1997), however, examined whether employees' perception of discretionary treatment by the organization would moderate the perception of favourable job conditions and perceived organizational support. The data revealed that for those conditions that employees perceived that the organization had high discretionary control, such as training opportunities and physical working environment, perceived organizational support was enhanced, whereas this was not the case for conditions where low control was perceived, such as relationships with colleagues. These discretionary treatments were assumed by the authors to reflect the organization's positive valuation of employees (Eisenberger et al., 1997). Given the

evidence that some conditions influence the organizational support and work outcomes association, it may be important to test for the influence of other potential mediators such as psychological well-being and stress. Feeling valued and cared for by the organization may improve employees' level of well-being, which may result in greater feelings of satisfaction toward one's job.

Perceived supervisor support and job satisfaction. Supervisor support has been associated with increased job satisfaction (Griffin et al., 2001). In a study of traffic enforcement agents, support from the immediate supervisor was associated with greater job satisfaction (Baruch-Feldman et al., 2002). Additionally, a study exploring various facets of satisfaction and supervisor support identified that emotional support was predictive of satisfaction with supervision and coworkers, whereas structural support, defined as someone who provides guidance to access promotional opportunities, was predictive of satisfaction with work, promotions, and pay (Ford, 1985). In a study of government employees, Terry, Nielsen, and Perchard (1993) found that employees benefited from supervisory support, which resulted in greater job satisfaction.

A positive relationship has consistently been found between perceived supervisor support and job satisfaction, but the process by which social support operates to increase positive work attitudes has not been adequately studied. It may be that support from the supervisor enhances employees' well-being and reduces stress, and employees who are psychologically healthy are more likely to be satisfied with their job.

Perceived organizational support and intention to quit. Believing that the organization values and cares about employees is associated with reduced intentions to

leave the organization (Rhoades & Eisenberger, 2002; Shore & Wayne, 1993; Wayne, Shore, & Liden, 1997). A study comparing the effects of supportive environments and environments characterized by politics (i.e., organizational members are perceived as manipulative and self-serving) found that organizational support predicted lower intentions to quit over and above that predicted by organizational politics (Randall et al., 1999). The authors suggest that organizational support provides a greater contribution to positive behavioural intentions, whereas organizational politics contributes to negative behavioural intentions.

It is possible that a supportive work climate may exert its effects through employees' well-being. Given that perceived organizational support is effective to the degree that it meets the emotional needs of employees for approval, esteem, and belongingness (Eisenberger et al., 1986), meeting the emotional needs of employees is likely to have a positive impact on employees' well-being and they may be less likely to think of leaving the organization.

Perceived supervisor support and intention to quit. Support from one's supervisor is an important factor to consider if organizations are looking to reduce intentions to quit and actual turnover. In a study of male and female executives, those who reported that their supervisors were not supportive were more likely to report wanting to quit (Rinfret & Lortie-Lussier, 2003). Additionally, a study testing a model of salespeople's intentions to quit found that stressors had a negative influence on perceived supervisor support, which was related to lower commitment and job satisfaction, which led to intentions to quit (Firth et al., 2004).

The association between supervisor support and intention to quit may also be mediated by individual factors. Tepper (2000) examined the consequences associated with abusive supervisors. Based on a random sample of employed citizens, people who reported having an abusive supervisor were more likely to quit. Importantly, abuse by supervisors led to greater perceptions of injustice, which in turn were associated with intent to quit. To the extent that supportive supervision is the opposite of abusive supervision, it is possible to infer that the former will be related to greater intentions to stay. Other mediators may also be involved in the association between supervisor support and intention to quit. Lack of supervisor support may lead to intentions to quit because of the influence on employees' psychological well-being and stress. The absence of support from a supervisor may negatively impact employees' well-being and they may become unhappy with the work situation, which may lead to greater intentions to quit. Therefore, supervisors may positively influence subordinates' well-being by engaging in supportive behaviours, which may result in greater retention.

Social Support and Stress

In addition to the associations between social support and employee job attitudes, lack of support has consistently been associated with stress and negative mental health outcomes (Berkman, 1985). In organizational settings, lack of social support from managers and supervisors has also been linked to detrimental effects in employees (Carayon, 1995; Firth et al., 2004; Rhoades & Eisenberger, 2002).

House et al. (1988) proposed that more attention should be paid to the psychological processes involved in social support. In the current study, employees'

perceived stress was hypothesized to mediate the relation between support at work and job attitudes. The following sections outline the associations needed for a mediation model.

Perceived organizational support and stress outcomes. To the extent that the organization's actions represent the positive evaluation of workers, employees' stress may be decreased. In a study of 185 part-time employees, organizational support was negatively associated with job-related stress, fatigue, and burnout (Cropanzano et al., 1997). These findings were replicated in a study of 311 full-time employees where it was found that perceived organizational support mediated the relation of perception of politics in organization and job-related stress (Hochwarter, Kacmar, Perrewe, & Johnson, 2003). Additionally, in a sample of 191 female managers, Richardsen, Burke, and Mikkelsen (1999) reported that organizational support was negatively associated with psychosomatic symptoms and emotional exhaustion and was positively associated with life satisfaction. Organizational support was also a significant predictor of reduced work-life conflict and lower levels of anxiety, depression, and concern for one's health, in a sample of 118 employees working overseas (Grant-Vallone & Ensher, 2001). It may be that increasing support may reduce employees' beliefs that the work conditions are stressful (Jones, Flynn, & Kelloway, 1995), thereby lessening the adverse effects of stress. These findings support the association between perceived organizational support and lower stress. However, there have been few studies examining the effects of organizational support on well-being, defined in positive terms (for an exception, see Richardsen et al., 1999).

Perceived supervisor support and stress outcomes. Supervisors may also contribute to subordinates' lower level of stress by providing emotional support (Carayon, 1995). Hopkins (1997) suggested that supervisors are responsible for employees' professional and personal development and thus, play a major role in employee' well-being by creating a supportive work climate. A cross-sectional study of 256 part-time students examining supervisor's leadership behaviour and employee burnout found that employees who rated their supervisor as more considerate reported lower levels of burnout (Seltzer & Numerof, 1988). This finding was also found in a sample of traffic enforcement agents who reported less burnout when they had more support from their unit supervisor, although not from their immediate supervisor (Baruch-Feldman et al., 2002).

In a longitudinal study, Bailey, Wolfe, and Wolfe (1994) reported that supervisor support was positively related to quality of life and negatively related to depression, anxiety, somatic complaints, and job tension in employees of a health insurance company and a manufacturing company. The authors suggested that support may facilitate the use of more effective coping skills at work. Given this finding that supervisor support was related to improved quality of life, this suggests that support at work should also be associated with other positive dimensions of well-being.

Stress as a Mediator

Consistently, employees who experience greater stress also report more negative attitudes regarding their job. Higher levels of work stress have been associated with lower commitment to the organization, lower job satisfaction, and higher intentions to quit

(Baba, Jamal, & Tourigny, 1998; Flanagan & Flanagan, 2002; Johnson et al., 2005; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

Stress has also been suggested to be a mediator in the relation between social support and work outcomes. In a sample of 148 human service managers, support from the organization and the supervisor was indirectly associated with emotional exhaustion through the influence of role stress (Lee & Ashforth, 1993). In another study Scheck, Kinicki, and Davy (1997) found that respondents' perception of negative stressors mediated the relation between social support and job satisfaction, life satisfaction, and organizational commitment. In a sample of nurses, the degree of emotional exhaustion mediated the association between social support from people at work and job performance, absenteeism, and turnover intention (Parker & Kulik, 1995). Although stress has been found to be a mediator between support at work and job attitudes in some studies, positive well-being has not been examined in such a way.

Positive Well-being

Social support in the workplace may not only decrease stress, but it may also increase employees' level of positive well-being, which may increase commitment, job satisfaction, and intentions to remain. Most studies of stress and social support consistently focus on disorders and ill-health and frame well-being as the absence of the negative (Seligman & Csikszentmihalyi, 2000). As such, well-being has been operationalized as less depression, lower burnout, and fewer somatic complaints. This approach to well-being is limited; for example, using depression as a measure of well-being provides information about the magnitude of depressive symptoms, but does not

necessarily provide an indication of participants' level of positive well-being. Rafanelli et al. (2000) found that psychological well-being was not directly comparable to absence of distress in a study of individuals with an affective disorder in remission and control participants. They reported that individuals in remission with low distress were still significantly different than controls because of their low levels of psychological well-being as measured by Ryff's (1989) Scales of Psychological Well-being. This indicates that a low level of distress is not the same as being psychologically healthy. Thus, using a positive indicator of well-being may provide additional information on individuals' total well-being. Research using positive indicators of well-being, which in keeping with the World Health Organization (1948) definition that health is more than the absence of disease, is needed to determine whether support at work is effective in increasing employees' level of well-being and not just lowering psychological distress.

Commonly used positive well-being measures include happiness (Argyle, 2001), quality of life (Achat et al., 1998), life satisfaction (Diener, Emmons, Larsen, & Griffen, 1985), and subjective well-being, which corresponds to a general evaluation of life satisfaction, high frequency of positive affect, and low frequency of negative affect (Diener, 1984). Many of these measures of positive well-being focus on specific aspects such as happiness or life satisfaction. However, psychological well-being may be a more integrative, complex construct that includes these dimensions plus others such as forming quality ties with others, developing a purpose and meaning in life, and actively engaging with the environment (Jahoda, 1958; Ryff & Singer, 1998; United States Public Health Service, 1999; Waterman, 1993).

There appear to be two approaches to the study of a multidimensional construct of well-being. First, the hedonic well-being approach represents the experience of happiness, pleasure, and positive emotions; it is often operationalized as subjective well-being (Ryan & Deci, 2001). Hedonic well-being is the most commonly used assessment of positive well-being. The second approach is eudaimonic well-being, which denotes the realization of individual potentials that can be achieved through personal growth, meaning, and seeking purpose (Lent, 2004; Waterman, 1993). This approach to well-being recognizes that attaining a state of well-being may involve challenge and effort on the part on the individual. Although this process will not necessarily make people happier (in the sense of hedonic well-being) (Lent, 2004), they are likely to demonstrate higher levels of personal functioning because they realize their potential. In a study comparing the two approaches to well-being, only eudaimonic well-being was associated with dimensions of self-realization such as feeling challenged, competent, and having clear goals (Waterman, 1993).

It was in response to the shortcomings of the hedonic approaches to well-being that Ryff (1989) proposed a multidimensional construct of eudaimonic well-being, called psychological well-being, which includes the dimensions of autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. The six dimensions represent aspects of positive human functioning (Ryff, 1989) that may be affected by environmental and life events (Keyes, Shmotkin, & Ryff, 2002). The first dimension of autonomy concerns the individual's self-determination and independence. People who are autonomous and independent are able to make their own

decisions while resisting social pressures. The second dimension of environmental mastery refers to a sense of control and competence in creating and maintaining an environment that is suitable to the individual's needs. A person high in environmental mastery actively participates in external events. The third dimension of personal growth is defined as the ability to develop and grow as a person. This person continually seeks to improve and can see self-improvements over time. The fourth dimension of positive relations with others refers to the extent to which the individual has caring and trusting relationships with others. This person can show empathy and affection towards others. The next dimension of purpose in life refers to the sense that life is meaningful and purposeful. This person sets goals and objectives for their life. The last dimension of self-acceptance is defined as having positive attitudes about the self. This person is accepting of their past life and who they are as a person.

Because Ryff's conception of well-being includes several dimensions, it may represent a more complete picture of psychological well-being than previous constructs. Keyes et al. (2002) compared the dimensions of psychological well-being and the subjective well-being construct (i.e., life satisfaction, positive and negative affect) in a national sample of 3,032 Americans. They found that although psychological well-being and subjective well-being are related, they are distinct constructs and that the psychological well-being construct covers additional dimensions of well-being not covered by subjective well-being (Keyes et al., 2002). Similar results were also found in a study of 1,108 adults by Ryff and Keyes (1995) who compared the psychological well-being construct to other measures of well-being such as happiness, life satisfaction, and

depression. The authors conclude that indicators such as happiness and life satisfaction do not account for all dimensions of well-being that may be important to positive functioning (Ryff & Keyes, 1995).

Although psychological well-being as assessed by Ryff's (1989) Scales of Psychological Well-being have been found to be related to life transitions and challenges (Ryff, Schmutte, & Lee, 1996), it has seldom been used in organizational research. Indeed, only a few studies have used the psychological well-being construct specifically with employed individuals or applied within an organization (Carr, 1997; Keyes & Grzywacz, 2005; Keyes, Hysom, & Lupo, 2000; Lindfors, 2002). For instance, Keyes & Grzywacz (2005) found that individuals who had higher psychological well-being also reported greater productivity at work, exerted more effort, and were less likely to be absent from work.

Social Support and Psychological Well-being

There is considerable evidence that social support at work may be positively associated with some aspects of positive well-being, in particular hedonic well-being. For instance, in a study of professional and managerial women, feeling supported by the organization was positively associated with greater life satisfaction (Richardson et al., 1999). Employees' quality of life is also influenced by support at work; Bailey et al. (1994) reported that greater support from supervisors and coworkers was related to the higher quality of life of employees. Similarly, in a longitudinal study of nurses, those who had a large social network had better quality of life as compared to those who had smaller networks or who were socially isolated (Achat et al., 1998). Work-related sources

of support also predicted happiness in a sample of factory employees (Loscocco & Spitze, 1990). Likewise, in a longitudinal study, social support was significantly associated with subjective well-being (Lu, 1999). Given that social support is associated with hedonic well-being, it is expected that there will also be a positive relation between supervisor and organizational support and eudaimonic well-being, assessed using the multidimensional approach to psychological well-being. This was argued in a theoretical paper by Keyes et al. (2000) who discussed how employees' psychological well-being may be improved by effective leaders, which may result in greater organizational productivity. Effective leaders were described as successful because they generate trust and positive emotions in their subordinates, they give them greater autonomy to do their job, and provide them with opportunities for development (Keyes et al., 2000), qualities that would also be present in supportive leaders.

Associations Between Psychological Well-being and Job Attitudes

Although researchers have not used Ryff's (1989) scales in examining the association of psychological well-being to specific job attitudes, some studies have used measures or concepts similar to some of the dimensions in Ryff's scales. For example, in studies of nurses, personal autonomy was negatively related to intention to quit (Purvis & Cropley, 2003) and was positively related to job satisfaction (Dallender & Nolan, 2002). As well, employees who feel that they are competent at managing the environment around them and who perceive continuous development and growth in their life may also hold more positive attitudes toward work. In fact, the perception of control over the work environment is positively related to job satisfaction (Tetrick & LaRocco, 1987) and lack

of growth opportunity predicted lower work satisfaction in postal employees (Johnson & Johnson, 2000). Finally, having quality ties with others may contribute to work attitudes because the workplace provides opportunities to develop relationships with coworkers and supervisors, which had direct effects on job satisfaction and indirect effects on organizational commitment and intention to quit (Riordan & Griffeth, 1995). These six dimensions of psychological well-being may combine into an interesting construct to explain the relation between social support and work-related variables.

Psychological Well-being as a Mediator

House et al. (1988) have called on researchers to examine the underlying processes associated with social support to better understand how it is beneficial. Only some researchers have taken up this line of research within organizational settings. Organizational justice (Tepper, 2000), burnout (Parker & Kulik, 1995), and perceived stress (Lee & Ashforth, 1993; Tepper, 2000) have been found to mediate the effects of social support on job satisfaction, job performance, intention to quit, and emotional exhaustion. Given that stress has been found to be a mediator, it is also possible that psychological well-being would also be a mediator. Using a positive operationalization of well-being may demonstrate the benefits of a supportive work environment than more negative operationalizations (e.g., less stress) currently used. In fact, using a hedonic definition of well-being, Unden (1996) reported that low social support was associated with poorer quality of life, which in turn resulted in higher rates of absenteeism.

Fredrickson (2003) argued in her broaden-and-build theory that positive emotions serve to broaden people's thoughts and actions (by being more flexible and creative),

which build physical, intellectual, social, and psychological resources that can be used at a later time (Fredrickson, 2001). There is also some evidence that positive emotions may undo the harmful effects of negative emotions (Fredrickson, 2001). According to Fredrickson and Joiner (2002), the accumulation of positive emotions and broadened thinking may lead to improved well-being and growth. In the same vein, employees who feel supported by their supervisors and managers may experience more positive emotions and improved well-being, and as a result, become more effective organizational members, which fosters a more successful organization (Fredrickson, 2003). In fact, in a sample of hospital employees and manufacturing workers, Staw, Sutton, and Pelled (1994) found that experiencing positive emotions was related to greater performance at work. Similarly, in a meta-analysis of 42 studies, it was reported that organizations whose employees were highly engaged (i.e., involvement, satisfaction, and enthusiasm for work) had higher customer satisfaction, productivity, and profit, as well as lower turnover and fewer work-related accidents (Harter, Schmidt, & Hayes, 2002). Harter, Schmidt, and Keyes (2003) contend that one of the ways to improve engagement is through supportive social environments. These studies suggest that employee well-being may be associated with positive outcomes for employees and the organization.

In the present study, a eudaimonic definition of well-being was proposed as having a mediating influence on the association between support from the organization and the supervisor and affective commitment, job satisfaction, and intent to quit. This construct includes six dimensions that may be particularly relevant in the workplace (i.e., autonomy, environmental mastery, personal growth, purpose in life, positive relations

with others, and self-acceptance), most of which have been used independently in past research. Following a perceived lack of support, the first effect is likely to be a more personal and immediate reaction to employees' psychological well-being and may not necessarily involve immediate changes in affective commitment, job satisfaction, and intentions to quit. Preliminary evidence also suggests that psychological well-being dimensions are associated with affective commitment, job satisfaction, and intention to quit (e.g., Dallender & Nolan, 2002; Johnson & Johnson, 2000). These work-related outcomes may result from an enduring lowered level of psychological well-being. When employees feel supported by the organization and their supervisor, they may have greater well-being, and if employees are happier and healthier, they may become more committed to the organization, more satisfied with their job, and be more likely to remain with the organization. It is also important, however, to examine all six dimensions as a composite to determine the overall association of the full measure of psychological well-being with work-related variables. Findings based on the overall measure may provide some support that psychological well-being explains the underlying process by which social support in the workplace results in favourable work attitudes. In fact, Keyes et al. (2002) discussed the possibility of a mediating role for the psychological well-being construct that should be further explored. Therefore, the overall psychological well-being and the six dimensions will be tested as possible mediators.

Purpose of Study

The purpose of the present study was to examine whether support from one's organization and one's immediate supervisor contributed to employees' psychological

well-being and perceived stress, and whether higher levels of psychological well-being resulted in employees' greater affective commitment, job satisfaction, and lower intentions to quit (see Figure 1) and whether lower levels of stress resulted in greater affective commitment and job satisfaction, and lower intent to quit (see Figure 2). This research may help to understand the underlying process by which organizational support and supervisor support have beneficial effects on employees. Further, comparing the use of a positive index of well-being to a stress indicator may begin to explore previously neglected areas of research on the positive qualities of employees and the workplace, which may contribute to a greater understanding of how healthy organizations (i.e., supportive organizations and supervisors) may improve the work life of employees, who may then be happier, more committed to their job and more likely to put greater effort into meeting organizational objectives. Instead of focusing on the negative aspects in the workplace which lead to stress and distress in employees, a focus on the positive aspects, such as social support, may create a positive reinforcing cycle for both employees and organizations thereby making the negative aspects less salient (Fredrickson, 2003).

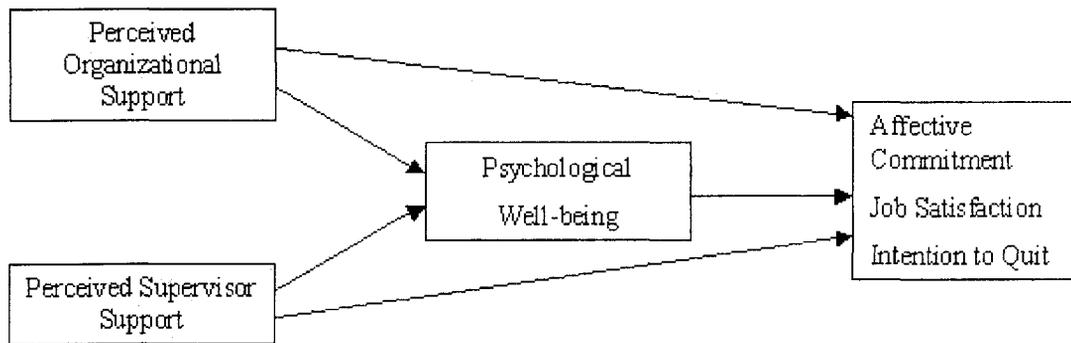


Figure 1. Hypothesized model of the effects of perceived organizational and supervisor support and psychological well-being on affective commitment, job satisfaction, and intention to quit.

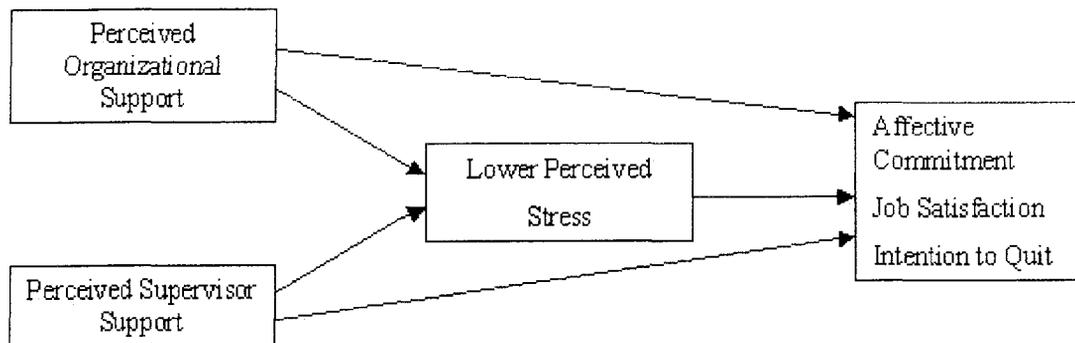


Figure 2. Hypothesized model of the effects of perceived organizational and supervisor support and perceived stress on affective commitment, job satisfaction, and intention to quit.

In addition to the direct associations between perceived organizational and supervisor support and affective commitment, job satisfaction, and intention to quit, it was expected that the global construct of psychological well-being and perceived stress

would mediate this association. This study also investigated whether the immediate supervisor was the most important contributor to employees' job attitudes relative to organizational support because supervisors are a more proximate and tangible source of support as opposed to support from the organization. Specifically, it was hypothesized that:

Hypothesis 1: There would be a direct positive association between perceived supervisor support and affective commitment and job satisfaction, and a direct negative association between supervisor support and intention to quit.

Hypothesis 2: There would be a direct positive association between perceived organizational support and affective commitment and job satisfaction, and a direct negative association between organizational support and intention to quit.

Hypothesis 3: Perceived supervisor support would be positively associated with employees' psychological well-being and negatively associated with perceived stress.

Hypothesis 4: Perceived organizational support would be positively associated with employees' psychological well-being and negatively associated with perceived stress.

Hypothesis 5: Employees' psychological well-being would be positively associated with affective commitment and job satisfaction and negatively associated with intention to quit.

Hypothesis 6: Employees' perceived stress would be negatively associated with affective commitment and job satisfaction and positively associated with intention to quit.

Hypothesis 7: Employees' psychological well-being would mediate the association between perceived organizational support and affective commitment, job satisfaction, and intention to quit.

Hypothesis 8: Employees' psychological well-being would mediate the association between perceived supervisor support and affective commitment, job satisfaction, and intention to quit.

Hypothesis 9: Employees' perceived stress would mediate the association between perceived organizational support and affective commitment, job satisfaction, and intention to quit.

Hypothesis 10: Employees' perceived stress would mediate the association between perceived supervisor support and affective commitment, job satisfaction, and intention to quit.

Hypothesis 11: Perceived supervisor support, relative to perceived organizational support, would have a stronger association to employees' well-being and work attitudes.

In summary, this study examined the possible mediating influence of psychological well-being and perceived stress on the relation between support from the organization and the supervisor and work attitudes, as well as determining whether supervisor support contributed more to employee job attitudes than organizational support.

Method

Description of Sample

The sample for the present study was drawn from employees working in the rehabilitation clinic, the oncology unit, and the genetics clinic of a children's hospital in Ontario. Surveys were sent to all of the approximately 275 employees from a variety of positions from these units; 122 completed surveys were returned (44% response rate). There were 29 respondents from the Genetics unit (64% response rate), 49 respondents from the Oncology unit (33% response rate), and 43 respondents from the Rehabilitation unit (54% response rate). One respondent did not indicate the unit in which she worked. There were no significant differences for demographic variables between respondents of different units.

The majority of respondents (94%) were female. The average age of respondents was 39 years. Respondents had worked for 10 years at the hospital, on average. Most respondents (74%) worked full-time and 26% worked on a part-time or casual basis. On average, full-time employees worked 38 hours per week, whereas part-time employees worked 22 hours per week. When asked what was the primary role in their job, 50% indicated they were allied health professionals (e.g., occupational therapist, physiotherapist), 28% were nursing staff, and 23% performed mostly administrative duties in their job (e.g., administrative functions, research, supervision).

Procedure

At the monthly meeting of each unit prior to the distribution of the survey, employees were told about this paper-based questionnaire assessing the effects of

supportive work environments on employee well-being and work attitudes. They were informed that completion of the survey was voluntary and anonymous and their responses would be kept confidential; all analyses and reports were based on aggregate data. One week prior to the distribution of the survey, an email from the researchers was sent by each of the unit directors to all their employees reminding them of the upcoming survey and inviting them to participate (Appendix A).

Data were collected in December 2004 and January 2005 following ethics review by the Carleton University Ethics Committee for Psychological Research and an expedited review by the hospital's Research Ethics Board. The survey packages were given to the unit directors for distribution to employees through the hospital's internal mail system. The survey package included a cover letter describing the survey and providing contact information for the researchers (Appendix B), consent information (Appendix C), the survey (Appendix D), and a postage-paid return envelope. A debriefing page was not included as the survey posed less than minimal risk; the consent information and the presentation of findings contained all necessary information generally found in a debriefing. The survey took approximately 15 minutes to complete. Because of the anonymous nature of the survey, completion of the survey implied consent. Participants returned their survey by mail in a postage-paid envelope directly to the researchers.

Following the initial survey distribution, two reminder emails were sent to employees by their unit directors thanking those who had already completed the survey and informing those who had not that they may still do so (Appendix E). After

completion of the study, the directors of the three units were provided a summary of the findings. During a monthly meeting of each unit, a presentation of the findings was given to employees, in which they were given an opportunity to also ask questions regarding the results pertaining to their units.

Measures

For all measures, higher scores indicate greater presence of the construct.

Correlations among the research variables can be found in Table 1. All scale reliabilities were acceptable (greater than .70) except for positive affectivity, which had a Cronbach's alpha of .61. Refer to Appendix D for all measures. Other measures were also included in the study at the request of the participating hospital units, but are not pertinent to the present study.

Perceived organizational support. The 16-item short form of the Survey of Perceived Organizational Support (SPOS; Eisenberger et al., 1986; Appendix D) was used to assess the degree to which respondents believed that the organization cared about them and valued their contribution to organizational objectives. Responses were made on 5-point Likert scales ranging from *Strongly disagree* (1) to *Strongly agree* (5). The index included positively and negatively worded statements (e.g., "The organization values my contribution to its well-being," "The organization shows very little concern for me [reverse scored]"). An overall mean score was used by averaging the responses to the items of the SPOS.

Table 1

Correlations and Internal Consistency Coefficients for Study Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Supervisor support	(.97)														
2. Organizational support	.43***	(.94)													
3. Psychological well-being	.05	.05	(.92)												
4. Autonomy	-.16	-.26**	.56***	(.71)											
5. Environmental mastery	-.02	.09	.76***	.31***	(.68)										
6. Personal growth	.06	.07	.76***	.22*	.49***	(.72)									
7. Positive relations with others	.07	.09	.81***	.34***	.53***	.59***	(.85)								
8. Purpose in life	.15	.11	.80***	.24**	.56***	.69***	.51***	(.81)							
9. Self-acceptance	.09	.13	.86***	.34***	.64***	.61***	.61***	.71***	(.84)						
10. Perceived stress	.06	-.09	-.57***	-.34***	-.61***	-.32***	-.39***	-.41***	-.49***	(.89)					
11. Affective commitment	.30***	.64***	-.05	-.15†	-.03	.00	-.08	.00	.02	.07	(.78)				
12. Job satisfaction	.62***	.75***	.21*	-.08	.18*	.13	.19*	.23*	.29***	-.25**	.54***	(.89)			
13. Intention to quit	-.14	-.36***	-.22*	.02	-.20*	-.20*	-.17†	-.28**	-.25**	.23*	-.30***	-.42***	(.77)		
14. Positive affectivity	.04	.03	.15	.02	.09	.17	-.01	.21*	.19*	-.01	.12	.14	-.05	(.61)	

15. Negative affectivity	-.07	-.05	-.41***	-.29***	-.44***	-.27**	-.20*	-.30***	-.38***	.50***	.07	-.13	.25**	.16†	(.70)
Mean	3.55	3.15	3.84	3.47	3.73	4.05	3.96	3.97	3.88	2.58	3.20	3.56	2.17	4.04	2.98
Standard deviation	.95	.69	.41	.56	.52	.54	.68	.51	.59	.58	.66	.69	.97	.38	.67

Note. Cronbach alpha coefficients are listed along the diagonal.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

This scale has demonstrated good psychometric properties. The original 36-item scale was unidimensional and had a reported reliability coefficient of .97 (Eisenberger et al., 1986). In a meta-analysis of 73 studies using an average of 13 items of the SPOS, the average internal reliability obtained was .90 (Rhoades & Eisenberger, 2002). In the current study, the alpha coefficient was .94.

Perceived supervisor support. The hospital where the research took place does not have supervisors as a defined role, but rather they have different supervisory positions with people who are responsible for delegating work and monitoring employees' performance. These positions include clinical leader, professional practice leader, and operations director. Therefore, in the items assessing supervisor support, the term *supervisor* was replaced by *leader* to more accurately reflect the organizational ranks (see Appendix D).

Two scales were used to measure perceived supervisor support because there is little uniformity in the choice of scales in the supervisor support literature. There is also little consensus as to what constitutes supervisor support and which behaviours are considered most supportive by employees. The first scale chosen was the most commonly used in the literature and measured general support from the supervisor, whereas the second scale measured specific types of supportive behaviours, which may more adequately represent the construct of supervisor support. It may be that the construct of supervisor support is multi-dimensional in nature and, as such, there may be a need to capture more specific types of supportive behaviours.

The first measure of supervisor support was the 4-item Social Support from Supervisor scale (Caplan et al., 1980; Appendix D), which assessed the extent to which respondents believed that their supervisor engages in general supportive behaviours such as listening to problems or being available if help is needed. An example of an item included “How much is your leader willing to listen to your personal problems.” The response options were 5-point Likert scales ranging from *Not at all* (1) to *Very much* (5). The Cronbach’s alpha coefficient for this scale has been reported to be .83 (Caplan et al., 1980) and was .91 in the present study.

The second measure of perceived supervisor support was 14 items from the 35-item Supervisor Support Scale (Kidd & Smewing, 2001; Appendix D). This scale assessed specific types of supportive behaviours. Ten items assessed the employee’s perception of the supervisor’s interpersonal skills and commitment to employees and four items assessed the degree of trust and respect given to the employee by the supervisor. Items were prefaced with “My leader...” and included statements such as “Encourages an atmosphere for open discussion” and “Respects me as an individual.” Anchors for the scale ranged from *Not at all* (1) to *As much as possible* (5). The reliability for the original 35-item scale was .96 (Kidd & Smewing, 2001). In this study, the alpha coefficient for this scale was .96.

The Caplan et al. (1980) scale is the most commonly used measure of social support; however, the more recent Kidd and Smewing (2001) scale may represent a more comprehensive indicator of supervisor social support. In order to determine if these two scales assessed the same construct, a factor analysis (oblique rotation; eigenvalues > 1)

was conducted. As indicated in Table 2, all items loaded strongly on a single factor, which explained 66% of the variance. This analysis indicates that the more recent scale by Kidd and Smewing appears to measure the same construct as the well-known Caplan et al. scale.

For the present study, because the items from both scales loaded on a single factor, all items were combined into a single scale to utilize the power of multiple items for subsequent analyses. The Cronbach's alpha coefficient for this overall scale of supervisor support was .97.

Table 2

Factor Loadings of Supervisor Support Items

Supervisor Support Items	Factor 1
Caplan et al. (1980) scale	
How much does this person go out of his or her way to make your work life easier for you?	.84
To what extent are you at ease when you are talking with this person?	.84
How much can this person be relied on when things get tough at work?	.84
How much is this person willing to listen to your personal problems?	.79
Kidd & Smewing (2001) scale	
Encourages an atmosphere for open discussion.	.86
Has good listening skills.	.81
Is available when needed.	.80
Arranges uninterrupted time to talk with me.	.79
Clearly and effectively interacts with me.	.93
Listens to and understands any real concerns I might have.	.87
Frequently holds formal and informal discussions with me.	.80
Encourages me to talk openly about my work anxieties / fears.	.82
Helps me meet deadlines or finish difficult jobs.	.75
Keeps me informed about events higher up or outside the organization.	.67
Demonstrates trust and confidence in me.	.80
Gives me the authority I need to do my job.	.81
Respects me as an individual.	.85
Supports me by letting others know of my effectiveness.	.76
% of total variance explained	66.11

Psychological well-being. The psychological well-being measure has six specific dimensions including positive relations with others, autonomy, environmental mastery, purpose in life, self-acceptance, and personal growth to evaluate positive functioning as assessed by the Scales of Psychological Well-being (Ryff, 1989; Appendix D).

Acceptable psychometric properties for the full scale and each dimension have been reported. Ryff (1989) reported Cronbach's alpha coefficients of greater than .80 for all of the dimensions and Keyes and Ryff (2003) reported a Cronbach's alpha coefficient of .95 for the overall scale.

The scales included positively and negatively worded items, for example "For me, life has been a continuous process of learning, changing, and growth" and "The demands of everyday life often get me down (reverse scored)." Responses were made on 5-point Likert scales with anchors of *Strongly disagree* (1) to *Strongly agree* (5). A mean score for each dimension (Ryff, 1989) and a mean overall score of psychological well-being (Keyes & Ryff, 2003) were computed for each participant.

Each dimension in the original index has 14 items, but in order to reduce the length of the questionnaire in the present study, each dimension was measured with a short form of six items that were suggested by Dierendonck (2004), who found these short forms to have good internal consistency and validity. Dierendonck (2004) reported that the correlations between his 6-item short form scales and the original 14-item scales were all greater than .90 and the Cronbach's alpha coefficients for his short form indices ranged from .72 (personal growth) to .95 (self-acceptance).

A factor analysis was conducted on the items in the present study to determine whether they would load on similar factors as proposed by Ryff (1989) or whether a more parsimonious factor structure would emerge. Results from the factor analysis (oblique rotation; eigenvalues > 1) indicated that the items loaded onto nine factors with eigenvalues greater than one (see Appendix F for pattern matrix and G for structure

matrix), which explained 58% of the total variance. However, there was considerable cross-loading of the items and on three of the factors only one or two items had loadings of .48 or greater. Indeed, the factor structure as provided by this analysis was not interpretable, therefore, it was decided to retain the original six dimensions. Both the overall scale and the dimensions are used in the analyses.

In the present research, the psychological well-being subscales were highly correlated with each other as demonstrated in Table 3. The Cronbach's alpha for the full scale of psychological well-being was .92. The reliability alphas for Ryff's hypothesized subscales were adequate, except for personal growth ($\alpha = .64$) and environmental mastery ($\alpha = .68$), which were somewhat low. The alpha for the subscale personal growth improved to .72 when two items were deleted ("I don't want to try new ways of doing things – my life is fine the way it is" and "I think it is important to have new experiences that challenge how you think about yourself and the world"). This abbreviated subscale was used for subsequent analyses.

Table 3

*Correlations Between Psychological Well-being Subscales and Internal Reliability**Coefficients of the Subscales*

	1	2	3	4	5	6	7
1. Psychological well-being	(.92)						
2. Autonomy	.53***	(.71)					
3. Environmental mastery	.81***	.31***	(.68)				
4. Personal growth	.72***	.22*	.49***	(.72)			
5. Positive relations with others	.78***	.34***	.53***	.59***	(.85)		
6. Purpose in life	.76***	.24**	.56***	.69***	.51***	(.81)	
7. Self-acceptance	.87***	.34***	.64***	.61***	.61***	.71***	(.84)

Note. Cronbach alpha coefficients are listed along the diagonal.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Perceived stress. Ten items from the Perceived Stress Scale (Cohen & Williamson, 1987; Appendix D) were used to assess participants' level of work stress. Items included "In the past month, how often have you felt that you were unable to control the important things in your life?" and "In the past month, how often have you been upset because of something that happened unexpectedly?" Participants responded on 5-point Likert scales ranging from *Never* (1) to *Very often* (5). The internal reliability coefficient reported for this scale was .78 (Cohen & Williamson, 1987). In the current study, the Cronbach's alpha coefficient was .89. For each participant, an average of items for this scale was obtained.

Affective commitment. The six-item affective commitment scale from Allen and Meyer (1990; Appendix D) was used to assess respondents' degree of emotional attachment to the organization. Statements included "I would be very happy to spend the rest of my career with this organization" and "I do not feel emotionally attached to this organization" (reverse coded). Response anchors ranged from *Strongly disagree* (1) to *Strongly agree* (5). Scores were obtained by averaging the items for each participant. Cronbach's alpha coefficients of .87 and .86 have been reported for this scale (Allen & Meyer, 1990). In the present research, there was an alpha coefficient of .78.

Job satisfaction. The 16-item scale of job satisfaction from Warr, Cook, and Wall (1979; Appendix D) was used in this study to assess respondents' level of satisfaction with their current job. This scale included a single item assessing overall job satisfaction and 15 items assessing satisfaction with various aspects of the job such as pay and recognition. Participants responded on 5-point Likert scales anchored by *Very dissatisfied* (1) to *Very satisfied* (5). A mean of the responses was computed for each participant. Reliability coefficients for the 16-item scale in two studies were .85 and .88, respectively (Warr et al., 1979). In the present study the alpha coefficient was .89.

Intention to quit. A modified 3-item scale from Cammann, Fichman, Jenkins, and Klesh (1983; Appendix D) was used to assess intention to quit. Items included "I will likely actively look for a new job in the next year," "If I had a chance, I would take a different job within this organization," and "I will probably look for a new job in the next year." Response anchors for the items were *Strongly disagree* (1) to *Strongly agree* (5). The reliability coefficient reported for this scale was .83 (Cammann et al., 1983). An

alpha coefficient of .77 was obtained in this study. A mean of the intention to quit items was computed for each participant.

Negative affectivity. Negative affectivity was used as a control variable because it has been found to covary with job satisfaction, organizational commitment, turnover intentions (Cropanzano, James, & Konovsky, 1993), and well-being (Payne & Morrison, 2002). Negative affectivity was measured using 5 items from the Strain-Free Negative Affectivity Scale (Fortunato & Stone-Romero, 1999; Appendix D), which evaluates individuals' emotional reactivity. Items included "I tend to become very distressed when I have too much work to do" and "Whenever I encounter a difficult problem, I usually worry about it a lot." Responses were made on 5-point Likert scales ranging from *Strongly disagree* (1) to *Strongly agree* (5). Fortunato and Goldblatt (2002) reported reliability coefficients of .86 and .88 in two samples for their 20-item scale. In this research, a Cronbach's alpha coefficient of .70 was obtained for the 5-item short form. A mean negative affectivity score was computed for each participant.

Positive affectivity. Participants' level of positive affectivity was also used as a control variable. Five items from the Sociability-Free Positive Affectivity Scale (Fortunato & Mincy, 2003; Appendix D) was used to assess people's general tendency to experience positive emotions. Items included "When I hear good news, I tend to get very excited" and "I tend to be very active when I have a lot of tasks to complete." Items were scored on 5-point Likert scales ranging from *Strongly disagree* (1) to *Strongly agree* (5). A reliability coefficient of .91 was reported for the full version of this scale (Fortunato & Mincy, 2003). In this study, a Cronbach's alpha coefficient of .61 was obtained.

Demographic variables. Demographic variables included gender, age, education, marital status, and number of dependent children. Additionally, organizational tenure, unit tenure, supervisor gender, job status (full-time, part-time, casual), and hours worked per month on average were assessed. One additional item asked whether they worked in the Rehabilitation, Oncology, or Genetics unit. Specific job position was not assessed because respondents may have felt that they could be identified too easily from their responses; however they were asked the type of role they fulfilled in their work (i.e., administrative, allied health profession, medical, nursing, research, or supervisory). The survey also included a final section where respondents could provide additional comments (Appendix D).

Results

Associations Between Support at Work and Job Attitudes

The correlation between supervisor support and organizational support was significant but not large, $r(117) = .43, p < .001$, indicating that although these types of social support were related, they were distinct types of support. It was expected that perceived supervisor support would be positively related to affective commitment and job satisfaction, and negatively related to intention to quit. This hypothesis was partially supported; perceived supervisor support was positively correlated with affective commitment, $r(120) = .30, p < .001$, and job satisfaction, $r(121) = .62, p < .001$, however, it was not correlated with employees' intention to quit, $r(121) = -.14, ns$. Similarly, it was expected that perceived organizational support would be positively related to affective commitment and job satisfaction, and negatively related to intention

to quit. This hypothesis was fully supported; perceived organizational support was positively correlated with affective commitment, $r(117) = .64, p < .001$, and job satisfaction, $r(118) = .75, p < .001$, and negatively correlated with intention to quit, $r(118) = -.36, p < .001$. Specifically, respondents who reported greater support from the hospital were more likely to be committed to the hospital and satisfied with their job, and less likely to be thinking of quitting.

Associations Between Support at Work and Well-being

It was expected that greater supervisor and organizational support would be associated with employees' psychological well-being and lower reported stress. As demonstrated in Table 4, however, neither support variable was significantly correlated with overall psychological well-being, dimensions of well-being, or perceived stress. The only exception was for organizational support and the autonomy subscale: people who reported more autonomy were less likely to feel like they were supported by hospital management.

Table 4

Correlations Between Well-being Variables and Support at Work

Well-being	Supervisor support	Organizational support
Perceived stress	.06	-.09
Psychological well-being	.05	.05
Autonomy	-.15	-.26*
Environmental mastery	-.02	.09
Personal growth	.06	.07
Positive relations with others	.07	.09
Purpose in life	.15	.11
Self-acceptance	.09	.13

* $p < .01$.

Associations Between Well-being and Job Attitudes

As expected, overall psychological well-being was positively associated with job satisfaction, $r(121) = .21, p < .05$, and negatively associated with intent to quit, $r(121) = -.22, p < .05$. Psychological well-being, however, was not associated with affective commitment, $r(121) = -.05, ns$. Respondents who had greater psychological well-being were more likely to report being satisfied with their job and less likely to be thinking of quitting. As for the associations between psychological well-being dimensions and job attitudes, the majority of dimensions (except autonomy) were associated with job satisfaction and intention to quit, whereas only autonomy was marginally associated with affective commitment (see Table 1, p. 34).

Similarly, it was hypothesized that perceived stress would be correlated with employees' job attitudes. This hypothesis was partially supported; stress was correlated with job satisfaction, $r(121) = -.25, p < .01$, and intent to quit, $r(121) = .23, p < .05$, however it was not correlated with affective commitment, $r(121) = .07, ns$. Specifically, employees who indicated they were feeling more stressed reported being less satisfied with their jobs and more likely to want to quit.

Mediation Analyses

It was hypothesized that psychological well-being and perceived stress would mediate the association between support at work (both from the supervisor and from the organization) and affective commitment, job satisfaction, and intention to quit. According to Baron and Kenny (1986), three conditions must be met to establish mediation. The first condition is that the predictor (i.e., perceived organizational support; perceived

supervisor support) is correlated with the outcomes (i.e., affective commitment, job satisfaction, intention to quit). The second condition is that the predictor variable is correlated with the proposed mediator (i.e., psychological well-being, perceived stress). The third condition is that the mediator is correlated with the outcomes. In the present study, the second condition of mediation was not met: supervisor and organizational support were not significantly associated with the proposed mediating variables, psychological well-being and perceived stress (see Table 4). Further, even among the dimensions of psychological well-being, only autonomy was associated with organizational support, however, it was not significantly correlated with any of the job attitudes. Therefore the planned mediation analyses could not be performed. In sum, for the full sample, psychological well-being and perceived stress were not mediators of the relation between work support and attitudes toward one's job and organization.

Associations Between Support at Work, Well-being, and Job Attitudes by Occupational Groups

There were three distinct occupational groups in the sample including allied health professionals (n = 54), nurses (n = 32), and professional and administrative positions (n = 25). This last category included employees with fewer front-line duties and who were more involved with the administrative side of the hospital (e.g., administrative clerks, physicians, researchers, supervisors). The physicians in the sample mostly conducted research as their primary role, hence they were included in this category.

A multivariate analysis of variance (MANOVA) was conducted to determine if there were differences between occupational groups on affective commitment, job

satisfaction, and intention to quit, Wilks $\Lambda = .85$, $F(6, 220) = 3.15$, $p < .01$. The occupational groups differed only on job satisfaction. Post hoc tests revealed that nurses reported significantly less job satisfaction ($M = 3.20$, $SD = .68$) than either allied health professionals ($M = 3.79$, $SD = .59$), or professional and administrative employees, ($M = 3.61$, $SD = .67$).

A MANOVA was also conducted to determine whether significant differences were present between occupational groups for support variables. Results indicated that the groups differed on supervisor and organizational support, Wilks $\Lambda = .90$, $F(4, 214) = 3.05$, $p < .05$. Post-hoc tests demonstrated that nurses reported less supervisor support ($M = 3.16$, $SD = 1.06$) than allied health professionals ($M = 3.78$, $SD = .84$). Nurses were also less likely to report organizational support ($M = 2.95$, $SD = .65$) than allied health professionals ($M = 3.33$, $SD = .59$). A third MANOVA indicated that there were no significant differences in stress, overall psychological well-being or any of the six dimensions of well-being, Wilks $\Lambda = .88$, $F(16, 210) = .85$, *ns*.

The lack of mean level differences between the groups for the well-being variables, however, does not preclude differences between the groups for associations among the variables. The need for, and the role played by, work-related social support may depend on the worker's level of contact with administration or differing job challenges. To investigate this possibility, we examined the correlations between support at work, psychological well-being, stress, and job attitudes to determine whether the patterns of associations differed by occupational group (see Table 5).

Table 5

Correlations of Work Support with Research Variables

	Allied health professionals (n = 54)		Nurses (n = 32)		Professional and administrative staff (n = 25)	
	PSS	POS	PSS	POS	PSS	POS
Affective commitment	.16	.61***	.32†	.55**	.32	.73***
Job satisfaction	.50***	.72***	.68***	.68***	.52**	.85***
Intention to quit	.06	-.24†	-.29	-.37*	-.06	-.37†
Perceived stress	.09	-.07	.15	.20	-.08	-.50*
Psychological well-being	-.06	.11	-.13	-.29	.48*	.36†
Autonomy	-.16	.04	-.18	-.44*	-.14	-.50*
Environmental mastery	.00	.04	-.39*	-.36*	.52**	.55**
Personal growth	.09	.17	-.23	-.31†	.49*	.40*
Positive relations with others	-.13	.15	.13	-.08	.36†	.26
Purpose in life	.03	-.03	-.10	-.23	.55**	.50*
Self-acceptance	-.02	.08	-.01	-.08	.27	.34†

Note. PSS = Perceived supervisor support; POS = Perceived organizational support.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Associations between support at work and job attitudes. Allied health professionals who reported more support from their supervisor were more likely to report being more satisfied with their job. They were also more likely to be committed to the hospital, satisfied with their job, and less likely to be thinking of quitting when they reported more support from the hospital.

Nurses who reported more supervisor support were more likely to report greater job satisfaction and affective commitment to the hospital. Nurses who indicated greater organizational support were more likely to be committed, satisfied with their job, and less likely to be thinking of quitting.

For professional and administrative employees, reporting greater supervisor support was related to greater job satisfaction. Those who indicated more organizational support were more likely to also report greater commitment, job satisfaction, and lower intent to quit.

Associations between support at work and well-being. For allied health professionals, support was not significantly related to psychological well-being or stress. For nurses, a different pattern emerged. The more that nurses reported feeling supported by their supervisor, the less they felt in control of their environment. Additionally, nurses who reported greater organizational support were less likely to report feeling autonomous, in control of their environment, and in a state of personal growth.

In contrast, the professional and administrative group was more likely to report greater feelings of environmental mastery, personal growth, positive relations with others, purpose in life, and overall psychological well-being when they felt supported by their supervisor. They were also more likely to report greater environmental mastery, personal growth, having a purpose in life, self-acceptance, overall well-being, and less stress when they had more support from the hospital. Similar to the nurses, those who reported less organizational support also reported feeling more autonomous.

Associations between well-being and job attitudes. Allied health professionals who reported greater overall psychological well-being, greater levels of most of the dimensions of psychological well-being, and lower stress were less likely to be thinking of quitting (see Table 6). Those who experienced higher stress were also less likely to be satisfied with their job. Nurses who indicated greater well-being, environmental mastery,

personal growth, and purpose in life were less likely to be committed to the hospital. Their stress levels were unrelated to job attitudes. For professional and administrative employees, indicating greater levels of psychological well-being and most of its dimensions was associated with greater job satisfaction and less intent to quit, however only autonomy was marginally related to lower commitment to the organization. Those who reported experiencing greater stress were less likely to be satisfied with their job and were more likely to be thinking of quitting.

Overall, there were only a few differences in mean reported levels (e.g., nurses reported less job satisfaction and support at work), but the pattern of associations revealed considerable differences between the groups. For allied health professionals, there were not many significant associations, although those who reported greater psychological well-being were significantly less likely to be thinking of quitting. For nurses, a negative pattern emerged. For this group, reporting more support was associated with less psychological well-being. For professional and administrative employees, the pattern of association appeared to be consistent with the research hypotheses: support at work was significantly associated with well-being and well-being was associated with job satisfaction and intention to quit.

Table 6

Correlations Between Well-being and Job Attitudes by Occupational Group

	Allied health professionals (n = 54)			Nurses (n = 32)			Professional and administrative employees (n = 25)		
	Affective commitment	Job satisfaction	Intention to quit	Affective commitment	Job satisfaction	Intention to quit	Affective commitment	Job satisfaction	Intention to quit
Stress	.13	-.30*	.29*	.30	-.09	.05	-.23	-.44*	.39*
Psychological well-being	-.04	.14	-.35**	-.35*	.03	.00	.18	.56**	-.48*
Autonomy	.03	.15	-.28*	-.21	-.24	.15	-.38†	-.30	.30
Environmental mastery	-.08	.14	-.30*	-.31†	-.11	.07	.20	.68***	-.44*
Personal growth	.05	.09	-.33*	-.33†	.01	.12	.20	.40*	-.47*
Positive relations with others	-.05	.04	-.07	-.22	.24	-.16	.08	.40*	-.50**
Purpose in life	-.09	-.01	-.34**	-.39*	.06	-.07	.33	.63***	-.46*
Self- acceptance	-.04	.15	-.24†	-.25	.19	-.12	.23	.56**	-.51**

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Mediation analyses. The correlations by occupational group suggest that there may be some evidence for mediation of well-being on the relation between support at work and job attitudes, but only for the professional and administrative employees; psychological well-being and some of its dimensions may mediate the relation between support at work and job satisfaction, and the relation between organizational support and intent to quit. The sample size in each occupational group, however, was too small to conduct mediation analyses. In order to have adequate power for mediation analyses, the recommended sample size should be approximately 65 in each group (Tabachnick & Fidell, 2001).

Unique Contributions of Work Support to Job Attitudes

Despite some of the strong correlational results between work support, well-being, and job attitudes, a predictor variable may be unimportant when included with all other potential predictors of job attitudes. For this reason, it is necessary to determine whether supervisor support, organizational support, psychological well-being, and stress can explain additional variance in job attitudes over and above that accounted for by the other predictors. A series of hierarchical regressions were run to examine the unique contribution of supervisor support, organizational support, psychological well-being, and stress to employees' job attitudes. Because negative affectivity and positive affectivity were significantly associated with some of the research variables (see Table 1, p. 34), negative and positive affectivity were controlled in the regression analyses. Three hierarchical regression analyses were performed regressing each outcome measure (affective commitment, job satisfaction, and intention to quit) on the control variables of

positive and negative affectivity in the first step and organizational support, supervisor support, psychological well-being, and perceived stress in the second step. The regression analyses were conducted with the full sample only. They could not be conducted by occupational groups because of the small number of people in each group.

For the affective commitment regression, positive and negative affectivity were not significant predictors, $F(2,113) = .82, ns$. Of the four predictor variables, only perceived organizational support was a unique significant predictor of affective commitment, $F(6,109) = 15.01, p < .001$ (see Table 7). Specifically, employees who reported more organizational support were more likely to report greater affective commitment to the hospital.

For the job satisfaction regression, again negative and positive affectivity were not significant predictors, $F(2,113) = 2.28, ns$ (see Table 7), although in the second step, after taking into account shared variance, positive affectivity had a significant unique association with job satisfaction. As expected, organizational support, supervisor support, and stress were all unique significant predictors of job satisfaction. In short, employees who reported generally being more positive, feeling more supported by the organization and their supervisors, and having lower stress were more likely to be satisfied with their jobs. Although psychological well-being was significantly correlated with job satisfaction, there was no unique contribution of psychological well-being after taking into account the other predictors. To determine the relative importance of the significant predictors to job satisfaction, squared semipartial correlations (sr^2) were used. Squared semipartial correlations convey the unique variance accounted by the predictor, that is

variance that is not explained by other predictors (Tabachnick & Fidell, 2001). As indicated in Table 7, organizational support was the most important predictor, $sr^2 = .26$; it accounted for more unique variance than supervisor support, $sr^2 = .11$ and stress, $sr^2 = .03$.

Table 7

Hierarchical Regression Analyses for Affective Commitment, Job Satisfaction, and Intention to Quit

Variables	Affective Commitment		Job satisfaction		Intention to Quit	
	β	sr^2	β	sr^2	β	sr^2
Step 1						
Negative affectivity	.03	.00	-.14	.02	.28**	.07
Positive affectivity	.11	.01	.16	.03	-.09	.01
ΔR^2	.01		.04		.08	
Step 2						
Negative affectivity	-.01	.00	.03	.00	.18	.02
Positive affectivity	.12	.01	.10*	.01	-.06	.00
Organizational support	.64***	.33	.56***	.26	-.32***	.08
Supervisor support	.04	.00	.38***	.11	-.03	.00
Stress	.11	.01	-.21**	.03	.06	.00
Psychological well-being	-.06	.00	.04	.00	-.09	.01
ΔR^2	.44		.69		.13	
R^2	.45		.73		.20	
$F(6, 109)$	15.01***		49.12***		4.57***	

* $p < .05$. ** $p < .01$. *** $p < .001$.

For intention to quit, after controlling for negative affectivity and positive affectivity, only organizational support was a unique significant predictor, $F(6,109) = 4.57, p < .001$, indicating that employees who reported less support from the organization were more likely to be thinking of quitting. After taking into account organizational support, psychological well-being and perceived stress did not have unique associations with intention to quit despite their simple correlations with this outcome.

The same pattern of results was obtained when the same regression analyses were performed using the six dimensions of psychological well-being, rather than the overall psychological well-being measure, as additional predictors. The well-being dimensions did not significantly predict any of the job attitudes (see Table 8), except for self-acceptance, which had a marginally significant association with job satisfaction.

Table 8

Hierarchical Regression Analyses for Affective Commitment, Job Satisfaction, and Intention to Quit Using Well-being Dimensions as Predictors

Variables	Affective Commitment		Job satisfaction		Intention to Quit	
	β	sr^2	β	sr^2	β	sr^2
Step 1						
Negative affectivity	.03	.00	-.14	.02	.28*	.07
Positive affectivity	.11	.01	.16†	.03	-.09	.01
ΔR^2	.01		.04		.08	
Step 2						
Negative affectivity	.02	.00	.04	.00	.21†	.03
Positive affectivity	.09	.01	.10†	.01	-.05	.00
Organizational support	.67**	.33	.58**	.24	-.29*	.06
Supervisor support	.06	.00	.38**	.11	.00	.00
Stress	.11	.01	-.20*	.02	.08	.00
Autonomy	.09	.01	.06	.00	.08	.00
Environmental mastery	-.01	.00	-.04	.00	.06	.00
Personal growth	.07	.00	-.08	.00	.00	.00
Positive relations with others	-.15	.01	.01	.00	-.05	.00
Purpose in life	-.04	.00	-.03	.00	-.21	.02
Self-acceptance	.01	.00	.15†	.01	.05	.00
ΔR^2	.45		.70		.15	
R^2	.47		.74		.23	
$F(11, 104)$	8.28**		27.37**		2.77*	

† $p < .10$. * $p < .01$. ** $p < .001$.

Additional Influences on Intention to Quit

It is likely that intention to quit is influenced not only by organizational support, but also by the level of affective commitment and by job satisfaction. To further examine

the association between organizational support and intention to quit, employees' job satisfaction and affective commitment were investigated as possible mediators. Affective commitment and job satisfaction could not be tested as mediators in the relation between supervisor support and intention to quit because these analyses did not meet the first condition of mediation; supervisor support was not significantly related to intention to quit.

For the first mediation analysis, affective commitment was regressed on organizational support in the first step, $F(1,115) = 81.51, p < .001$. In the second step, intention to quit was regressed on organization support, $F(1,115) = 16.11, p < .001$. In the third step, intention to quit was regressed on organizational support and affective commitment, which was significant, $F(2,114) = 8.73, p < .001$, however affective commitment did not uniquely contribute to intention to quit (see Table 9 and Figure 3). Hence, affective commitment was not a mediator in the relation between organizational support and intention to quit.

Table 9

Affective Commitment as a Mediating Variable in the Organizational Support-Intention to Quit Relation

Variables	<i>B</i>	SE <i>B</i>	β	<i>sr</i> ²
Step 1				
Organizational support	-.49	.12	-.35**	.12
ΔR^2	.12			
Step 2				
Organizational support	-.37	.16	-.27*	.04
Affective commitment	-.19	.17	-.13	.01
ΔR^2	.01			
<i>R</i> ²	.13			
<i>F</i> (2, 114)	8.73**			

* $p < .05$. ** $p < .001$.

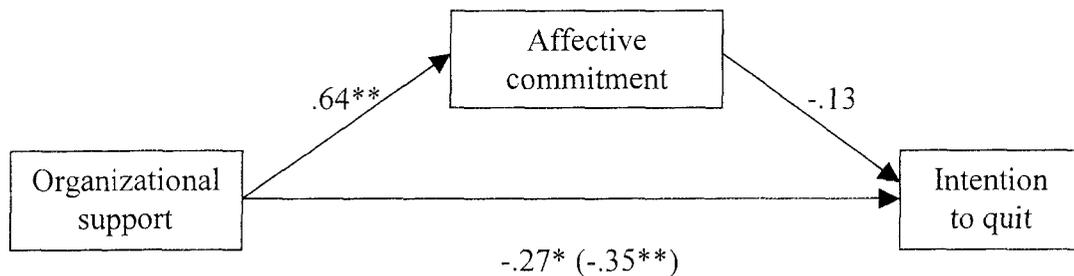


Figure 3. Affective Commitment as a Mediator in the Organizational Support-Intention to Quit Relation

Note. Standardized betas are reported. Values in parentheses are standardized betas without the mediator in the equation.

* $p < .05$. ** $p < .001$.

For the second mediation analysis, job satisfaction was regressed on organizational support, $F(1,116) = 150.93, p < .001$. In the second step, intent to quit was regressed on organizational support, which indicated that organizational support significantly predicted intent to quit, $F(1,116) = 16.69, p < .001$. In the third step, intent to quit was regressed on both job satisfaction and organizational support. This analysis was significant, $F(2,115) = 13.83, p < .001$, however only job satisfaction significantly predicted intent to quit. Partial mediation occurs when the effect of the predictor on the dependent variable is smaller when the mediator is controlled. Complete mediation occurs when the effect of the predictor on the dependent variable is no longer significant when the mediator is controlled (Baron & Kenny, 1986). Because the effect between organizational support and intent to quit was no longer significant when job satisfaction was controlled, job satisfaction was a complete mediator (see Table 10 and Figure 4). The Sobel test (Preacher & Leonardelli, 2001) was used to test the significance of the effect of the mediator on the predictor and outcomes, which was significant, $Z = -3.73, p < .001$. Therefore, although perceived organizational support had an influence on people's intention to remain with an organization, this influence was completely mediated by job satisfaction. Perceived organizational support increased job satisfaction, which in turn influenced intent to remain.

Table 10

Job Satisfaction as a Mediating Variable in the Organizational Support-Intention to Quit Relation

Variables	<i>B</i>	SE <i>B</i>	β	sr^2
Step 1				
Organizational support	-.50	.12	-.36**	.13
ΔR^2	.13			
Step 2				
Organizational support	-.08	.18	-.06	.00
Job satisfaction	-.56	.18	-.40*	.07
ΔR^2	.07			
R^2	.19			
$F(2, 115)$	13.83**			

* $p < .01$. ** $p < .001$.

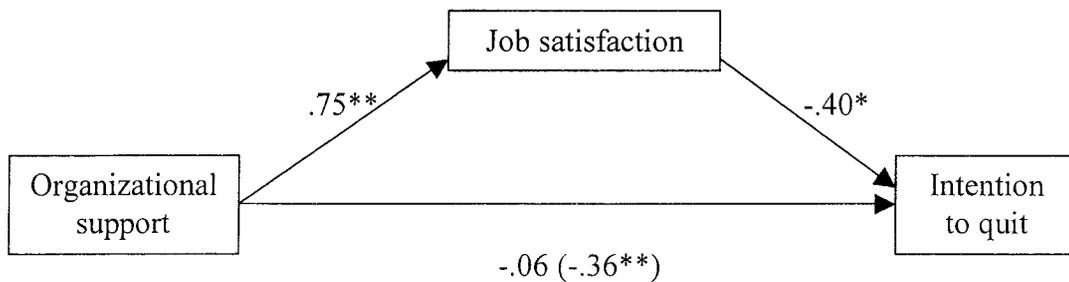


Figure 4. Job Satisfaction as a Mediator in the Organizational Support-Intention to Quit Relation

Note. Standardized betas are reported. Values in parentheses are standardized betas without the mediator in the equation.

* $p < .01$. ** $p < .001$.

Discussion

Support at Work and Job Attitudes

Consistent with the considerable research that support at work positively influences employee affective commitment, job satisfaction, and intention to remain with the organization (Baruch-Feldman et al., 2002; Kidd & Smewing, 2001; Mathieu & Zajac, 1990; Rhoades & Eisenberger, 2002), in the present study, employees who reported greater support from their supervisor and the hospital were more likely to be committed to the hospital and satisfied with their job. Additionally, employees who felt supported by the hospital were less likely to be thinking of quitting. The expected associations between support at work and job attitudes were also found when analyses were repeated by occupational groups (i.e., allied health professionals, nurses, and professional and administrative employees), except for the association of supervisor support with affective commitment. The non-significant association of supervisor support and affective commitment at the small group level was likely due to the lack of power associated with the smaller sample sizes.

When the unique contributions of each type of support to job attitudes were examined, organizational support, rather than supervisor support, was the most important predictor of affective commitment, job satisfaction, and intention to quit, explaining significantly more variance than the other predictors. Bradley and Cartwright (2002) also found that organizational support was more important than supervisor support in determining employees' job satisfaction. In their study, however, the only dependent

variable was job satisfaction; the current study extended the finding of the importance of organizational support to affective commitment and intention to quit.

Other studies have found that supervisor support is more important than organizational support in shaping employees' job attitudes, possibly because employees may be able to identify with and develop a working relationship more readily with their supervisor than with senior managers or the 'organization' (Eisenberger et al., 2002; Stinglhamber & Vandenberghe, 2003). In those studies, however, the measure for supervisor support was the Scale of Perceived Organizational Support with the word "supervisor" replacing "organization" in the items. However, organizational and supervisor support may represent different behaviours of support toward employees. Organizational support may be a general sense of supportive work environment, whereas the supervisor may provide more specific support that is focused on employees' needs. Using an independent measure of supervisor support, the current study revealed the importance of organizational support in determining job attitudes.

It is possible that the elevated importance of organizational support in the present study was, in part, due to the work conditions in the hospital at the time of the research, which followed an unsuccessful union drive. The union drive may have been precipitated by a general sense of unhappiness for a large proportion of employees within the hospital because of the human resource practices that were in place. In this context, many respondents may have already been thinking of ways that the hospital could increase its support to improve the well-being and job attitudes of employees (e.g., family leave, job sharing). Even so, the union drive may have been unsuccessful because employees may

have possessed a strong organizational identity, defined as the perception of oneness and belonging to an organization (Ashforth & Mael, 1989). Although employees may have been unhappy with some hospital policies and practices, employees may not have wanted union representation because of other positive working conditions and the good reputation of the hospital within the community.

It is also possible that the support from hospital management rather than supervisors may be much more personally relevant for employees in this context because employees were concerned about or needed the discretionary rewards that only the hospital could provide them. A number of respondents commented that the lack of family leave and the lack of alternative work arrangements for employees, both of which were under hospital management control, influenced their view of the organization and their job. If the hospital offered better family-friendly policies, it may increase the perception that hospital managers care and value employees. Similarly, in a study of people employed in various organizations (Allen, 2001), the perception that the organization was family supportive was significantly associated with lower work-family conflict and intention to quit, and greater job satisfaction and organizational commitment.

Contrary to expectations, for both the full sample and the three occupational groups, supervisor support was not significantly associated with intention to quit. Although some studies (e.g., Rinfret & Lortie-Lussier, 2003; Tepper, 2000) have found that support from a supervisor is directly associated with lower intentions of quitting, it may be possible that respondents in this sample were in highly specialized positions (e.g., the genetics unit) that may be unavailable in other hospitals and thus did not want to

leave their job even though they may have perceived their supervisor as unsupportive. In such cases, they may only consider leaving their job if they feel that hospital management does not care and value them. This is substantiated by the findings that organizational support appears to be the most important factor in determining employee work attitudes. Future research needs to examine other situations where support from the organization becomes more important than that from immediate supervisors in influencing employee responses to the organization.

Support at Work and Well-being

The present research also examined the relation between support at work and well-being. Past research has found that a lack of both organizational and supervisor support at work is related to increased reported stress and reduced levels of well-being (Bailey et al., 1994; Carayon, 1995; Jones et al., 1995; Lu, 1999; Richardsen et al., 1999). In the present study, however, there was no significant relation between support and perceived stress for the full sample. It is possible that other factors such as workload may have been responsible for producing stress for employees. It is equally possible that the lack of association of support with stress may be an effect of the particular sample used. In particular, the results for the administrative and professional group were consistent with those of previous research, such that the more support from the organization, the less stress the employees reported. By contrast, for the allied health professionals and nurses, this association was not significant. It is likely that the association between support at work and stress depends on particular characteristics, perhaps based on variables that are germane to some occupational groups.

One of the aims of the present study was to examine well-being from a positive perspective rather than simply including stress and depression (Baba et al., 1998). Previous studies have reported that support at work was positively associated with well-being; however, in the majority of these studies, well-being was operationalized in negative terms such as stress or distress (Carayon, 1995; Cropanzano et al., 1997). In keeping with the World Health Organization's (1948) definition, health includes physical, social, and mental well-being, and is more than the absence of disease. It is important to examine both negative and positive indicators of well-being because psychological well-being is not simply the inverse of distress (Rafanelli et al., 2000; Huppert & Whittington, 2003). In fact, mental health and illness form two separate but correlated dimensions (Keyes, 2005). In support of this, in the current study, psychological well-being was negatively correlated with perceived stress ($r = -.57, p < .001$) but if psychological well-being was equivalent to perceived stress, the correlation between the two would have been much stronger.

In order to fully examine psychological well-being, it was considered to be a multi-dimensional construct that reflected the realization of a person's true potential through meaning and growth (Ryan & Deci, 2001; Waterman, 1993). Given the influence of social support in decreasing negative outcomes in past research, we anticipated that support would also increase positive outcomes. Others such as Fredrickson (2001) and Staw et al. (1994) have reported that experiencing positive emotions leads to positive outcomes, such as better job performance and a more supportive social environment. Contrary to expectations, however, supervisor and organizational support and

psychological well-being were unrelated in the full sample. But again, for the administrative and professional group, support at work and psychological well-being were positively related, consistent with previous research, whereas they were unrelated for the nurses and the allied health professionals group.

The lack of significant relation between support and well-being for two of the occupational groups may be due the fact that previous studies used negative operationalizations of well-being and the current study used a positive indicator of well-being. Nevertheless, using a commonly used and validated measure of perceived stress (Cohen & Williamson, 1987), the support-stress association was also not significant for these two groups. This indicates that the lack of association between support at work and well-being may not attributable to the specific measures that were used, but rather that there may be something unique to some professions for which supportive environments are not useful in improving their well-being.

Differences in employee well-being by occupation. Although there was an insignificant association between support and well-being for the full sample, it may be possible that some employees benefit more from support at work depending on their work duties or their role within the hospital. They may have different relationships with supervisors and hospital administrators, which affects their well-being differently.

There were considerable differences when we examined the association of support and well-being by occupational groups. For the professional and administrative employees, there was a positive relation between support at work and psychological well-being and a negative relation between support and stress, which is consistent with

previous research (Bailey et al., 1994; Richardsen et al., 1999). Employees in administrative positions may be more likely to have their work structured by a supervisor, who also likely works in the same area as these employees and as such, they are likely to have more interactions with the supervisor, and thus more opportunities to assess their supportiveness. This characterizes the jobs for the group of professional and administrative employees, which was comprised of mostly clerical and administrative employees. Having a supportive environment likely has a spillover effect for these employees, who may then be more likely to feel positively about themselves and their job (Dierendonck, Haynes, Borrill, & Stride, 2004; Lowe et al., 2003).

For allied health professionals, there was no significant association between support at work and their psychological well-being or their stress levels. Allied health professionals are trained to be a part of a health care team that may include other allied health professionals, nurses, and physicians, and their work fosters a more consultative culture. As such, they may not need a supervisor to make decisions, but rather decisions are made with other team members. It is likely that their role within a health care team makes supervisors and managers less influential on their well-being; they may obtain support from other people on the team.

A different pattern of association emerged for nurses. Although their overall psychological well-being and perceived stress were unrelated to support at work, two dimensions of psychological well-being, autonomy and environmental mastery, were negatively related to support at work. Specifically, nurses who reported higher levels of autonomy and environmental mastery reported receiving less support, or conversely,

nurses who reported feeling less supported were more likely to report more autonomy and environmental mastery. These results are contrary to previous studies with nurses, in which social support at work was found to be beneficial to the well-being of nurses (as measured by psychological burnout and perceived stress) (Burke & Greenglass, 2001; Tyler & Cushway, 1992).

Although nurses in the present study reported less supervisor and organizational support, on average, than allied health professionals, it may be that these nurses did not fully trust the hospital management to meet the demands of the nursing profession. Amid recent budgetary and human resources cutbacks, nurses appear to view hospital management with cynicism. Some respondents alluded to this in their comments. One nurse in particular stated that:

Our [leader] lacks integrity, honesty and the professional leadership and communication skills required for this position. One can cope with mediocre physical working conditions (i.e., lack of space and equipment), but it is extremely demoralizing to work with [a leader] whose workplace behaviours and poor judgment repeatedly demoralize staff. [This person] does not dispense trust and respect and we therefore cannot respect and trust [this person].... [this person] lacks listening / comprehension skills and the ability to make change. We talk but no one seems to truly believe what we have to say.

Although it is possible that this result is due to particular characteristics of the nursing supervisor, given that most nurses worked in the Oncology unit, respondents referred to more than one supervisor, which indicates that this issue may be more pervasive. It may be that after some time of not obtaining enough support from supervisors and the hospital, promises of future support are viewed with skepticism.

In addition, for nurses who report being autonomous and feeling in control of their environment, support at work may also not seem necessary. Generally, nurses are trained to be research oriented and to work independently. They tend to be keenly aware of their responsibility for the health and welfare of their clients because they have more contact with them than other health care professionals in the hospital. Because of their training and experience, support by supervisors and managers may be perceived by nurses as limiting their decision authority over the care of their clients and the control they have over their job.

Employees who typically work more independently may not need or seek out support from their supervisor or managers and thus support does not influence how people feel about themselves. This characterizes the group of allied health professionals and nurses as, although they have a direct supervisor to whom they report to, they may have greater flexibility in carrying out the tasks of their job. As such, they may have more control over the pace and direction of their work. Some studies have found that having control over one's work is beneficial to health (Karasek & Theorell, 1990). Allied health professionals and nurses may not need support, above what they are currently receiving, to feel good about themselves. Instead they may rely more heavily on their colleagues and as such, they may benefit more from coworker support (De Jonge, Janssen, & Van Breukelen, 1996), particularly colleagues who understand the challenges and stresses associated with their jobs.

Association Between Autonomy and Organizational Support

An unexpected finding from this research was the negative association between autonomy and organizational support for the full sample. Respondents who reported being more autonomous were less likely to feel that they were supported by the hospital. Although additional research needs to support this finding, it is possible that autonomous employees (e.g., people who are independent and are able to resist social pressure; Ryff, 1989) may find that support from the organization or their managers to be interfering with the way they do their job. Although there were not any significant differences in personal sense of autonomy across occupational groups, employees may have generally felt more autonomous in their occupation. Autonomous employees may take it upon themselves to obtain what they need to develop in their profession (e.g., training opportunities) and may rely less on the hospital to provide them with these developmental experiences. Of course, given that this result is correlational, it is equally possible that employees who work more autonomously do not seek out support, hence they do not receive it.

For many people, having senior managers who provide discretionary material and social rewards (e.g., recognition, training opportunities) indicates that management cares about the well-being of their employees and values their contribution (Eisenberger et al., 1997), which helps to meet the emotional needs of employees such as providing a sense of worth, esteem, and belonging (Eisenberger et al., 2001). In contrast, for people who are autonomous or people who have been trained to practice autonomously, such support may feel like micromanaging, it may feel like senior managers do not trust the employees

to do their jobs effectively. Future research may need to examine how organizations may support employees who have a high sense of autonomy and those who have autonomous jobs.

Mediation Analyses

It was hypothesized that perceived stress and overall psychological well-being would mediate the association between supervisor and organizational support and job attitudes. For the full sample, planned mediation analyses could not be performed as perceived stress and psychological well-being were unrelated to supervisor and organizational support, thus the second condition of mediation (Baron & Kenny, 1986) was not met. For occupational group analyses, findings indicated possible mediators in the relation between support at work and job attitudes particularly for professional and administrative employees, however, this hypothesis could not be tested as the group sample size was too small to perform valid mediation analyses. It remains possible that perceived stress and psychological well-being are mediating variables, given that other researchers have found that well-being, particularly perceived stress, mediated the relation between support and job attitudes (Lee & Ashforth, 1993; Parker & Kulik, 1995; Scheck et al., 1997). However, it is also possible that such mediation is important to some groups, such as people in administrative functions, and not important to other groups, such as people in more autonomous positions. Future research should investigate this possibility.

Associations Between Well-being and Job Attitudes

Consistent with past research (e.g., Blegen, 1993; Dallender & Nolan, 2002; Flanagan & Flanagan, 2002; Griffeth, Hom, & Gaertner, 2000; Johnson & Johnson, 2000; Purvis & Crompton, 2003), psychological well-being and lower levels of stress were related to job satisfaction and intention to remain for the overall sample and two of the subgroups. For the subsample of nurses, however, stress levels were unrelated to their job satisfaction and intention to quit.

It is likely that having greater psychological well-being and lower stress would lead to positive work outcomes because employees may be more likely to appraise features of the work environment in a more positive light and to develop better coping skills that would enable them to manage challenges at work more effectively (Edwards & Cooper, 1988). These positive feelings about one's self may then broaden to include positive attitudes about the job and may benefit the organization through employees' greater willingness to perform organizational citizenship behaviours (Fredrickson, 2003).

Despite previous findings of a positive association between well-being and affective commitment (Riordan & Griffeth, 1995; Wiener, Muczyk, & Gable, 1987) and a negative association between stress and affective commitment (Meyer et al., 2002), in the present study, neither perceived stress nor psychological well-being were significantly related to affective commitment for allied health professionals or professional and administrative employees. For nurses, however, those who reported greater overall psychological well-being and purpose in life also reported being less affectively committed to the hospital.

For this sample, it is also possible that commitment to the organization was less important than other kinds of commitment, in particular professional commitment.

Vandenberghe, Bentein, and Stinglhamber (2004) demonstrated that employees' affective commitment to the organization, their supervisor, and their work group are distinct and the relation between the type of commitment and work-related variables depends on the salience of the variable to employees. For example, variables that were primarily relevant for the organization (e.g., perceived organizational support) are more likely to have an effect on employees' affective organizational commitment because these organizational features become more salient in employees' minds, whereas variables that are more relevant to the supervisor (e.g., quality of leader-member exchange) exert a stronger influence on employees' commitment to the supervisor, presumably because this is more salient for employees (Vandenberghe et al., 2004).

Wallace (1993, 1995) also found that organizational commitment and professional commitment had different antecedents, indicating that they are different constructs. Moreover, work-related variables explained significantly more variance in organizational commitment compared to professional commitment (Wallace, 1995) and it has been argued that non-work-related factors may be more responsible for variation in professional commitment (Lee, Carswell, & Allen, 2000). Respondents in the current study may be more affectively committed to their profession rather than to the hospital. Some respondents' qualitative comments reflected this view: "I feel a strong commitment to the children that I treat but not necessarily to [the hospital] as an institution" and "I feel a very strong attachment to my department and feel a great sense of community, less so

with [the hospital] as a whole.” Future research needs to clarify this issue because it may be that affective commitment is a more organizational-related outcome and is influenced by organizational factors, whereas person-related variables influence it to a lesser extent. On the other hand, psychological well-being (a personal dimension) may affect personal outcomes to a greater degree, such as employees’ job satisfaction and commitment to their profession.

Mediators in the Organizational Support-Intention to Quit Association

Although intention to quit was low, relative to similar studies, some participants indicated that they were thinking of quitting and, therefore, it is important to examine the process through which intention to leave develops. It is possible that employees begin considering leaving their jobs only after dissatisfaction with their jobs builds to a certain point and their affective commitment declines to a level that is no longer tolerable. Some studies have found that affective commitment and job satisfaction are mediating variables between organizational support and intention to quit (Allen et al., 2003; Firth et al., 2004), although others have not supported this process (Stinglhamber & Vandenberghe, 2003). To address this issue, affective commitment and job satisfaction were tested as possible mediators in the association between organizational support and intention to quit. Only organizational support was tested because supervisor support and intention to leave were unrelated in the present study.

Contrary to Allen et al. (2003) and Firth et al. (2004), affective commitment did not mediate the relation of organizational support on intention to quit. It may be possible that, in this study, employees may have been committed to the hospital for other reasons.

For instance, employees may have felt that they have too much invested in the hospital to be able to leave it, in terms of salary, pension, or tenure (i.e., continuance commitment) or that they should remain with the hospital because of some moral obligations (i.e., normative commitment) (Allen & Meyer, 1990). Employees may also have felt that there were few other job opportunities in their field to change jobs. In fact, one respondent commented, "I stay because of the years that I have invested here and earned. Other full-time jobs with benefits are not plentiful." As such, employees may have been remaining at their job because of the lack of external job opportunities and their investments in the hospital, but they may not have been particularly affectively committed to the hospital. In such cases, other types of commitment may be involved in the association between organizational support and intention to quit.

By contrast, job satisfaction fully mediated the association between organizational support and intention to quit. This indicates that support from the hospital influences employees' job satisfaction, which leads to greater intention to remain. Therefore it is essential to also focus on factors that may enhance job satisfaction (Spector, 1997). And indeed, although there was no direct association of supervisor support to intention to quit, supervisor support had a strong effect on job satisfaction, indicating that supervisor support is also a very important influence on employees and has indirect implications for employee retention.

Limitations

There were some limitations associated with this study. First, the sample consisted of mostly female respondents. Because there were few men in the sample, it

was not possible to verify if results were related to the way that women view support in the workplace or if it is typical of both men and women. However, Fusilier, Ganster, and Mayes (1986) found that there were few gender differences in perceptions of social support, suggesting that these results would be similar if there were more men in the sample.

Moreover, the gender breakdown in the sample approximates the gender breakdown in the Canadian health care industry (Statistics Canada, 2001). Therefore, regardless of whether these results are based on gender-role perceptions, findings may be reflective of the work experience of a large proportion of health care workers.

Second, the sample size was relatively small, particularly for the three occupational groups, limiting some analyses. Despite the small numbers, however, significant results were still obtained. The differences between occupational groups are suggestive and future research needs to specifically target various professions individually rather than aggregating all health care workers together.

Third, there may have been a selection bias for participating. It is possible that employees who were particularly satisfied or dissatisfied may have responded to the survey to a higher degree than those who were neutral. Because this was an anonymous survey, it could not be ascertained whether significant differences existed between those who participated in the survey and those who did not. Recent research, however, suggests that survey non-responders are not substantially different than responders in this type of survey (Rogelberg et al., 2003). Moreover, the response rate of 44% is typical of this kind

of survey research in organizations indicating that the results would be consistent with results obtained in a similar study.

Another limitation of the study was that it was cross-sectional and, as such, causal effects cannot be determined. For instance, employees' level of well-being may have an influence on the level of support they receive from their supervisor. Thus, happy employees may be friendlier and easier to get along with and, as a result, they receive more support from their supervisor. This explanation is unlikely, however, as DeLange, Taris, Kompier, Houtman, and Bongers (2004) tested normal, reversed, and reciprocal associations between supervisor support and well-being in a longitudinal study and they found that although significant reciprocal relations were present, the effects were stronger for the normal relations in which supervisor support determined employee well-being.

Some respondents also indicated that they had more than one person who they would consider their immediate supervisor. Some participants responded according to who they felt was their most supportive supervisor whereas others responded according to who they identified as their direct supervisor. Results may have differed if all participants had used their direct supervisor.

The Psychological Well-being Scale also may have limitations. The current research did not produce the same factor structure as Ryff and her colleagues (Keyes et al., 2002; Ryff, 1989; Ryff & Keyes, 1995). It is possible that the inconsistent factor structure was a result of using a short form of the scale (the short form was required due to length restrictions in the questionnaire) or that there were too few participants for the

power required for a factor analysis. However, others (e.g., Kafka & Kozma, 2002) have also found that the factor structure hypothesized by Ryff has not been supported.

It is also possible that the psychological well-being measure assesses personality-level well-being rather than state well-being. Previous research has reported that the test-retest reliability of the dimensions of psychological well-being over a six-week period were all over .80, indicating that the dimensions are fairly stable (Ryff, 1989). Given the stability of the psychological well-being construct, it may not be directly influenced by more transient factors such as support from a supervisor or the hospital. Indeed, there is a lack of consensus as to whether this index assesses a state or a trait. Some authors have used the psychological well-being construct as a personality trait (e.g., Staudinger, Fleeson, & Baltes, 1999), whereas others have used it as a state characteristic (e.g., Carr, 1997; Marmot, Ryff, Bumpass, Shipley, & Marks, 1997). It is possible that this construct may have both state and trait characteristics because there is both evidence that well-being is influenced by situational conditions and that it has stable qualities (Ruini et al., 2003; Schmutte & Ryff, 1997). Additional research is required to clarify the construct definition and measurement of psychological well-being.

Implications and Future Directions

Previous research (e.g., Lu, 1999; Rhoades & Eisenberger, 2002; Richardson et al., 1999) has found that social support in the workplace is generally beneficial to employees' well-being and contributes to more positive job attitudes. The findings from the current study are significant because it is likely that there are differences in the relation between support at work and well-being among various occupational groups.

Further studies are needed to investigate these possible differences with samples of larger size to determine whether some groups of employees may benefit more from feeling supported by their employer. Although the results did not support the mediating role of psychological well-being and perceived stress in the relation between support at work and job attitudes, these constructs may be important for some professions, particularly professional and administrative employees.

An interesting finding from this study was the negative association between organizational support and autonomy. This result needs to be replicated in future studies to investigate whether there are between-groups differences in other organizations, such that more autonomous employees may not require or desire as much support at work than less autonomous employees. Likewise, it would be important to examine people who are autonomous and people who have autonomous jobs to determine under which the conditions organizational support has a helpful or detrimental influence.

The current study also identified that managers and supervisors have an important role to play in how employees view their job and the organization. As such, managers may try to determine the importance and relevance of various rewards before they are implemented to increase the perception of support from the organization. In addition, even though organizational support was identified as the more important predictor of job attitudes, it would be important to determine when support from supervisors plays a greater role in influencing employees' attitudes about their work. It may be that given certain circumstances, supervisor support may be more important.

The current study also adds to the literature of supervisor support and its measurement. We utilized two measures of supervisor support, as there is not one that is widely accepted in the literature. The factor analysis conducted on the items of the two supervisor support scales indicated that the more specific types of supportive behaviours as measured by Kidd and Smewing (2001) appears to measure the same construct as the more general scale of supervisor support, measured by Caplan et al. (1980). For future research, it may be worthwhile to continue using the Caplan et al. (1980) scale because it is more parsimonious.

Future research may also use a more specific work-related well-being measure, which may better detect the relation between psychological well-being and support at work. In fact, Warr (1994, 1999) argued that the association between job features and a general sense of well-being is mediated by job-specific well-being. As such, the association would be much stronger between job features, such as social support, and job-specific well-being than general well-being, which is not only influenced by work, but also by family and other life factors (Warr, 1999). In general, a job-specific well-being measure may be more effective for working populations. Current job-related well-being scales (e.g., Job-related Affective Well-being Scale, VanKatwyk, Fox, Spector, and Kelloway, 2000) mostly assess the hedonic component of well-being. As was stated by Ryan and Deci (2001), however, well-being includes hedonic (i.e., happiness) and eudaimonic (i.e., meaning and self-realization) dimensions. For instance, Warr (1998) and van Horn, Taris, Schaufeli, and Schreurs (2004) have proposed job-related well-being measures which include the eudaimonic component of well-being. These job-

related well-being measures may be more effective in understanding the associations between workplace characteristics, such as support at work and well-being.

A strength of the current study was that both positive and negative indicators of well-being were examined. Future studies should continue to explore the value of positive indicators of psychological well-being, as well as other positive dimensions of health and well-being, such as physical and social well-being in the workplace. In this process, it may also be useful to compare the predictive value of hedonic (i.e., subjective well-being), eudaimonic (i.e., psychological well-being), and job-related well-being measures in determining employees' job attitudes. Another line of potential inquiry may also seek to refine the construct of psychological well-being and to determine whether it should more appropriately be examined as an individual trait or a state as there is evidence for both of these conceptualizations.

Conclusions

The purpose of this study was to determine whether psychological well-being and perceived stress would mediate the association between organizational support and job attitudes and between supervisor support and job attitudes. Although support at work was not significantly related to well-being in the full sample, it appears that the support-well-being connection is likely influenced by job or profession characteristics and these should be further explored in future studies. For instance, differences in the type and features of the job (i.e., job control, autonomy, job demands) may render supervisor and organizational support more or less important to employee well-being. A mediational role may indeed be present, but only for groups with select characteristics. Moreover, because

this study used a positive and a negative indicator of well-being, it demonstrated a more holistic view of employee well-being. The second goal of the research was to determine the relative importance of organizational and supervisor support to affective commitment, job satisfaction, and intention to quit. In all cases, organizational support was the most significant influence on job attitudes. Thus, hospital managers and administrators have an important role in creating and maintaining a supportive work environment.

References

- Achat, H., Kawachi, I., Levine, S., Berkey, C., Coakley, E., & Colditz, G. (1998). Social networks, stress and health-related quality of life. *Quality of Life Research*, 7, 735-750.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29, 99-118.
- 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, T. D. (2001). Family-supportive work environments: The role of organizational perceptions. *Journal of Vocational Behavior*, 58, 414-435.
- Argyle, M. (2001). *The psychology of happiness*. New York: Routledge.
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Journal*, 14, 20-39.
- Baba, V. V., Jamal, M., & Tourigny, L. (1998). Work and mental health: A decade in Canadian research. *Canadian Psychology*, 39, 94-107.
- Bailey, D., Wolfe, D. M., & Wolfe, C. R. (1994). With a little help from our friends: Social support as a source of well-being and of coping with stress. *Journal of Sociology and Social Welfare*, 21, 127-152.

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Baruch-Feldman, C., Brondolo, E., Ben-Dayana, D., & Schwartz, J. (2002). Sources of social support and burnout, job satisfaction, and productivity. *Journal of Occupational Health Psychology, 7*, 84-93.
- Berkman, L. F. (1985). The relationship of social networks and social support to morbidity and mortality. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 241-262). Orlando, FL: Academic Press.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley & Sons.
- Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research, 42*, 36-41.
- Bradley, J. R., & Cartwright, S. (2002). Social support, job stress, health, and job satisfaction among nurses in the United Kingdom. *International Journal of Stress Management, 9*, 163-182.
- Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring and nursing staff well-being: The role of perceived hospital and union support. *Anxiety, Stress and Coping: An International Journal, 14*, 93-115.
- Cammann, C., Fichman, M., Jenkins, G. D., Jr., & Klesh, J. R. (1983). Assessing the attitudes and perceptions of organizational members. In S. E. Seashore, I. Edward E. Lawler, P. H. Mirvis, & C. Cammann (Eds.), *Assessing organizational change:*

A guide to methods, measures, and practices (pp. 71-138). New York: Wiley-Interscience Publication.

Caplan, R. D., Cobb, S., French, J. R. P., Jr., Harrison, R. V., & Pinneau, S. R., Jr.

(1980). *Job demands and worker health: Main effects and occupational differences*. Ann Arbor, Michigan: The Institute for Social Research.

Carayon, P. (1995). Chronic effects of job control, supervisor social support, and work

pressure on office worker stress. In S. L. Sauter & L. R. Murphy (Eds.),

Organizational risk factors for job stress (pp. 357-370). Washington, DC:

American Psychological Association.

Carr, D. (1997). The fulfillment of career dreams at midlife: Does it matter for women's

mental health? *Journal of Health and Social Behavior*, 38, 331-344.

Cohen, S., & Williamson, G. M. (1987). Perceived stress in a probability sample of the

United States. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of*

health (pp. 31-67). Newbury, CA: Sage Publications.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis.

Psychological Bulletin, 98, 310-357.

Cooper, C. L. (1999). Can we live with the changing nature of work? *Journal of*

Managerial Psychology, 14, 569-572.

Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of

organizational politics and support to work behaviors, attitudes, and stress.

Journal of Organizational Behavior, 18, 159-180.

- Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior, 14*, 595-606.
- Dallender, J., & Nolan, P. (2002). Mental health work observed: A comparison of the perceptions of psychiatrists and mental health nurses. *Journal of Psychiatric and Mental Health Nursing, 9*, 131-137.
- De Jonge, J., Janssen, P. P. M., & Van Breukelen, G. J. P. (1996). Testing the Demand-Control-Support Model among health-care professionals: A structural equation model. *Work and Stress, 10*, 209-224.
- DeLange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D., & Bongers, P. M. (2004). The relationship between work characteristics and mental health: Examining normal, reversed and reciprocal relationships in a 4-wave study. *Work and Stress, 18*, 149-166.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*(3), 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffen, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment, 49*, 71-75.
- Dierendonck, D. V. (2004). The construct validity of Ryff's scales of psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences, 36*, 629-643.
- Dierendonck, D. V., Haynes, C., Borrill, C., & Stride, C. (2004). Leadership behavior and subordinate well-being. *Journal of Occupational Health Psychology, 9*, 165-175.

- Duxbury, L., & Higgins, C. (1997). Supportive managers: What are they? Why do they matter? *HRM Research Quarterly*, *1*, 1-4.
- Edwards, J. R., & Cooper, C. L. (1988). The impacts of positive psychological states on physical health: A review and theoretical framework. *Social Science Medicine*, *27*, 1447-1459.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, *86*, 42-51.
- Eisenberger, R., Cummings, J., Armeli, S., & Lynch, P. (1997). Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology*, *82*, 812-820.
- 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., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, *71*, 500-507.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, *87*, 565-573.
- Firth, L., Mellor, D. J., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee intention to quit? *Journal of Managerial Psychology*, *19*, 170-187.

- Flanagan, N. A., & Flanagan, T. J. (2002). An analysis of the relationship between job satisfaction and job stress in correctional nurses. *Research in Nursing & Health*, 25, 282-294.
- Ford, D. L. (1985). Facets of work support and employee work outcomes: An exploratory analysis. *Journal of Management*, 11, 5-20.
- Fortunato, V. J., & Goldblatt, A. M. (2002). Construct validation of a revised Strain-Free Negative Affectivity Scale. *Educational and Psychological Measurement*, 62, 45-63.
- Fortunato, V. J., & Mincy, M. D. (2003). The interactive effects of dispositional affectivity, sex, and a positive mood induction on student evaluations of teachers. *Journal of Applied Social Psychology*, 33, 1945-1972.
- Fortunato, V. J., & Stone-Romero, E. F. (1999). Taking the strain out of negative affectivity: Development and initial validation of scores on a strain-free measure of negative affectivity. *Educational and Psychological Measurement*, 59, 77-97.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Fredrickson, B. L. (2003). Positive emotions and upward spirals in organizations. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 163-175). San Francisco: Berrett-Koehler Publishers.

- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13*, 172-175.
- Fusilier, M. R., Ganster, D. C., & Mayes, B. T. (1986). The social support and health relationship: Is there a gender difference? *Journal of Occupational Psychology, 59*, 145-153.
- Gottlieb, B. H. (1978). The development and application of a classification scheme of informal helping behaviours. *Canadian Journal of Behavioural Science, 10*, 105-115.
- Grant-Vallone, E. J., & Ensher, E. A. (2001). An examination of work and personal life conflict, organizational support, and employee health among international expatriates. *International Journal of Intercultural Relations, 25*, 261-278.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463-488.
- Griffin, M. A., Patterson, M. G., & West, M. A. (2001). Job satisfaction and teamwork: The role of supervisor support. *Journal of Organizational Behavior, 22*, 537-550.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*, 268-279.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. M.

- Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 205-224). Washington, DC: American Psychological Association.
- Higgins, C., & Duxbury, L. (2002). *The 2001 national work-life conflict study*. Ottawa, ON: Health Canada.
- Hochwarter, W. A., Kacmar, C., Perrewe, P. L., & Johnson, D. (2003). Perceived organizational support as a mediator of the relationship between politics perceptions and work outcomes. *Journal of Vocational Behavior, 63*, 438-456.
- Hom, P. W., & Griffeth, R. W. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. *Journal of Applied Psychology, 76*, 350-366.
- Hopkins, K. M. (1997). Supervisor intervention with troubled workers: A social identity perspective. *Human Relations, 50*, 1215-1238.
- House, J. S. (1981). *Work stress and social support*. Reading, Massachusetts: Addison-Wesley Publishing.
- House, J. S., Umberson, D., & Landis, K. R. (1988). Structures and processes of social support. *Annual Review of Sociology, 14*, 293-318.
- Huppert, F. A., & Whittington, J. E. (2003). Evidence for the independence of positive and negative well-being: Implications for quality of life assessment. *British Journal of Health Psychology, 8*, 107-122.
- Jahoda, M. (1958). *Current concepts of positive mental health*. New York: Basic Books.

- Johnson, G. J., & Johnson, W. R. (2000). Perceived overqualification, positive and negative affectivity, and satisfaction with work. *Journal of Social Behavior and Personality, 15*, 167-184.
- Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P., & Millet, C. (2005). The experience of work-related stress across occupations. *Journal of Managerial Psychology, 20*, 178-187.
- Jones, B., Flynn, D. M., & Kelloway, E. K. (1995). Perception of support from the organization in relation to work stress, satisfaction, and commitment. In S. L. Sauter & L. R. Murphy (Eds.), *Organizational risk factors for job stress* (pp. 41-52). Washington, DC: American Psychological Association.
- Judge, T. A., & Watanabe, S. (1993). Another look at the job satisfaction-life satisfaction relationship. *Journal of Applied Psychology, 78*, 939-948.
- Kafka, G. J., & Kozma, A. (2002). The construct validity of Ryff's scales of psychological well-being (SPWB) and their relationship to measures of subjective well-being. *Social Indicators Research, 57*, 171-190.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basics Books.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Counseling and Clinical Psychology, 73*, 539-548.

- Keyes, C. L. M., & Grzywacz, J. G. (2005). Health as a complete state: The added value in work performance and healthcare costs. *Journal of Occupational and Environmental Medicine, 47*, 523-532.
- Keyes, C. L. M., Hysom, S. J., & Lupo, K. L. (2000). The positive organization: Leadership legitimacy, employee well-being, and the bottom line. *The Psychologist-Manager Journal, 4*, 143-153.
- Keyes, C. L. M., & Ryff, C. D. (2003). Somatization and mental health: A comparative study of the idiom of distress hypothesis. *Social Science and Medicine, 57*, 1833-1845.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*, 1007-1022.
- Kidd, J. M., & Smewing, C. (2001). The role of the supervisor in career and organizational commitment. *European Journal of Work and Organizational Psychology, 10*, 25-40.
- Kottke, J. L., & Sharafinski, C. E. (1988). Measuring perceived supervisory and organizational support. *Educational and Psychological Measurement, 48*, 1075-1079.
- Lee, K., Carswell, J. J., & Allen, N. J. (2000). A meta-analytic review of occupational commitment: Relations with persons- and work-related variables. *Journal of Applied Psychology, 85*, 799-811.

- Lee, R. T., & Ashforth, B. E. (1993). A further examination of managerial burnout: Toward an integrated model. *Journal of Organizational Behavior, 14*, 3-20.
- Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well-being and psychological adjustment. *Journal of Consulting Psychology, 51*, 482-509.
- Likert, R. (1961). *New patterns of management*. New York: McGraw-Hill.
- Lindfors, P. (2002). Positive health in a group of Swedish white-collar workers. *Psychological Reports, 91*, 839-845.
- Loscocco, K. A., & Spitze, G. (1990). Working conditions, social support, and the well-being of female and male factory workers. *Journal of Health and Social Behavior, 31*, 313-327.
- Lowe, G. S., Schellenberg, G., & Shannon, H. S. (2003). Correlates of employees' perceptions of a healthy work environment. *American Journal of Health Promotion, 17*, 390-399.
- Lu, L. (1999). Personal or environmental causes of happiness: A longitudinal analysis. *The Journal of Social Psychology, 139*, 79-90.
- Marmot, M., Ryff, C. D., Bumpass, L. L., Shipley, M., & Marks, N. F. (1997). Social inequalities in health: Next questions and converging evidence. *Social Science and Medicine, 44*, 901-910.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin, 108*, 171-194.

- Meyer, J. P., Paunonen, S. V., Gellatly, I. R., Goffin, R. D., & Jackson, D. N. (1989). Organizational commitment and job performance: It's the nature of the commitment that counts. *Journal of Applied Psychology, 74*, 152-156.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52.
- Parker, P. A., & Kulik, J. A. (1995). Burnout, self- and supervisor-rated job performance, and absenteeism among nurses. *Journal of Behavioral Medicine, 18*, 581-599.
- Payne, R. L., & Morrison, D. (2002). The differential effects of negative affectivity on measures of well-being versus job satisfaction and organizational commitment. *Anxiety, Stress and Coping: An International Journal, 15*, 231-244.
- Preacher, K. J., & Leonardelli, G. J. (2001). *Calculation for the Sobel test*. Accessed August 24, 2005, from <http://www.unc.edu/~preacher/sobel/sobel.htm>.
- Purvis, L. J., & Cropley, M. (2003). The psychological contracts of National Health Service nurses. *Journal of Nursing Management, 11*, 107-120.
- Rafanelli, C., Park, S. K., Ruini, C., Ottolini, F., Cazzaro, M., & Fava, G. A. (2000). Rating well-being and distress. *Stress Medicine, 16*, 55-61.
- Randall, M. L., Cropanzano, R., Bormann, C. A., & Birjulin, A. (1999). Organizational politics and organization support as predictors of work attitudes, job performance, and organizational citizenship behavior. *Journal of Organizational Behavior, 20*, 159-174.

- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*, 698-714.
- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of Applied Psychology, 86*, 825-836.
- Richardson, A. M., Burke, R. J., & Mikkelsen, A. (1999). Job pressures, organizational support, and health among Norwegian women managers. *International Journal of Stress Management, 6*, 167-177.
- Rinfret, N., & Lortie-Lussier, M. (2003). Les déterminants des intentions de départ des femmes cadres: Différents ou non de ceux de leurs collègues masculins? *Canadian Journal of Administrative Sciences, 20*, 320-333.
- Riordan, C. M., & Griffeth, R. W. (1995). The opportunity for friendship in the workplace: An underexplored construct. *Journal of Business and Psychology, 10*, 141-154.
- Rogelberg, S. G., Conway, J. M., Sederburg, M. E., Spitzmuller, C., Aziz, S., & Knight, W. E. (2003). Profiling active and passive nonrespondents to an organizational survey. *Journal of Applied Psychology, 88*, 1104-1114.
- Ruini, C., Ottolini, F., Rafanelli, C., Tossani, E., Ryff, C. D., & Fava, G. A. (2003). The relationship of psychological well-being to distress and personality. *Psychotherapy and Psychosomatics, 72*, 268-275.

- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonics and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719-727.
- Ryff, C. D., Schmutte, P. S., & Lee, Y. H. (1996). How children turn out: Implications for parental self-evaluation. In C. D. Ryff & M. M. Seltzer (Eds.), *The parental experience in midlife*. Chicago: University of Chicago Press.
- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1-28.
- Scheck, C. L., Kinicki, A. J., & Davy, J. A. (1997). Testing the mediating processes between work stressors and subjective well-being. *Journal of Vocational Behavior*, 50, 96-123.
- Schmutte, P. S., & Ryff, C. D. (1997). Personality and well-being: Reexamining methods and meanings. *Journal of Personality and Social Psychology*, 73, 549-559.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Seltzer, J., & Numerof, R. E. (1988). Supervisory leadership and subordinate burnout. *Academy of Management Journal*, 31, 439-446.

- Shore, L. M., & Wayne, S. J. (1993). Commitment and employee behavior: Comparison of affective commitment and continuance commitment with perceived organizational support. *Journal of Applied Psychology, 78*, 774-780.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, cause, and consequences*. Thousand Oaks, CA: Sage Publications.
- Statistics Canada (2001). *2001 National occupational classification for statistics, Canada's Workforce: Paid Work*. Accessed November 14, 2005, from <http://www12.statcan.ca/english/census01/Products/standard/themes/RetrieveProductTable.cfm?Temporal=2001&PID=60937&GID=431515&METH=1&APATH=3&PTYPE=55496&THEME=46&AID=0&FREE=0&FOCUS=0&VID=0&GC=99&GK=NA&SC=1&SR=1&RL=0&CPP=99&RPP=9999&D1=517&D2=0&D3=0&D4=0&D5=0&D6=0&d1=242>.
- Staudinger, U. M., Fleeson, W., & Baltes, P. B. (1999). Predictors of subjective physical health and global well-being: Similarities and differences between the United States and Germany. *Journal of Personality and Social Psychology, 76*, 305-319.
- Staw, B. M., Sutton, R. I., & Pelled, L. H. (1994). Employee positive emotion and favorable outcomes at the workplace. *Organization Science, 5*, 51-71.
- Stinglhamber, F., & Vandenberghe, C. (2003). Organizations and supervisors as sources of support and targets of commitment: A longitudinal study. *Journal of Organizational Behavior, 24*, 251-270.
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4 ed.). Boston: Allyn & Bacon.

- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*, 178-190.
- Terry, D. J., Nielsen, M., & Perchard, L. (1993). Effects of work stress on psychological well-being and job satisfaction: The stress-buffering role of social support. *Australian Journal of Psychology, 45*, 168-175.
- Tetrick, L. E., & LaRocco, J. M. (1987). Understanding, prediction, and control as moderators of the relationships between perceived stress, satisfaction, and psychological well-being. *Journal of Applied Psychology, 72*, 538-543.
- Tyler, P., & Cushway, D. (1992). Stress, coping and mental well-being in hospital nurses. *Stress Medicine, 8*, 91-98.
- Uden, A.-L. (1996). Social support at work and its relationship to absenteeism. *Work and Stress, 10*, 46-61.
- United States Public Health Service (1999). *Mental health: A report of the Surgeon General*. Accessed November 2, 2005, from <http://www.surgeongeneral.gov/library/mentalhealth/home.html>.
- Vandenberghe, C., Bentein, K., & Stinglhamber, F. (2004). Affective commitment to the organization, supervisor, and work group: Antecedents and outcomes. *Journal of Vocational Behavior, 64*, 47-71.
- van Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology, 77*, 365-375.

- VanKatwyk, P. T., Fox, S., Spector, P. E., & Kelloway, E. K. (2000). Using the Job-related Affective Well-being Scale (JAWS) to investigate affective responses to work stressors. *Journal of Occupational Health Psychology, 5*, 219-230.
- Wallace, J. E. (1993). Professional and organizational commitment: Compatible or incompatible? *Journal of Vocational Behavior, 42*, 333-349.
- Wallace, J. E. (1995). Organizational and professional commitment in professional and nonprofessional organizations. *Administrative Science Quarterly, 40*, 228-255.
- Warr, P. (1994). A conceptual framework for the study of work and mental health. *Work & Stress, 8*, 84-97.
- Warr, P. (1998). Age, work, and mental health. In K. W. Schaie & C. Schooler (Eds.), *Impact of work on older adults* (pp. 252-296). New York: Springer Publishing Company.
- Warr, P. (1999). Well-being and the workplace. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 392-412). New York: Russell Sage Foundation.
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some attitudes and aspects of psychological well-being. *Journal of Occupational Psychology, 52*, 129-148.
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 64*, 678-691.

- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82-111.
- World Health Organization (1948). *Constitution of the World Health Organization*. Accessed July 4, 2004, from <http://www.who.int/about/definition/en/>.
- Wiener, Y., Muczyk, J. P., & Gable, M. (1987). Relationships between work commitments and experience of personal well-being. *Psychological Reports*, 60, 459-466.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5, 84-94.

Appendix A

Introduction Email

Hello!

I have met some of you during a brief presentation made earlier this month regarding a project entitled “Organizational Life and Well-being Survey.” For those of you who were not present, let me introduce myself. I am a Masters student in organizational psychology at Carleton University and as part of my M.A. thesis, I am conducting a study regarding the effects of organizational life on employee well-being and job-related attitudes of staff in the Genetics, Rehabilitation, and Oncology/Medical day units at [the hospital]. I would like to invite you to express your opinion about your perceptions of the work environment by participating in this survey.

If you would like to participate in this survey, it will be distributed to you via internal mail within the next week. This survey should only take about 15 minutes and it is completely anonymous and confidential. There will be questions regarding your perceptions of organizational life, job satisfaction, and organizational commitment as well as some questions about the way that you generally think about yourself and the world.

Thank you for your help. If you have any questions or comments, please do not hesitate to contact me at aobrien4@connect.carleton.ca or by phone at (613) 520-2600, extension 1034.

Annik O’Brien
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Appendix B

Cover Letter

Hello!

We are interested in understanding some of the work experiences and perceptions of the work environment of staff from the Genetics, Oncology/Medical day unit, and Rehabilitation programs at [the hospital]. We are sending you the enclosed survey entitled “Organizational Life and Well-being Survey” because the [hospital] has identified you as working in one of these programs. Specifically, we are interested in how organizational influences, such as support from one’s hospital or leader, affect the well-being and job attitudes of staff.

We hope that you will assist us by completing the enclosed questionnaire, which should take only about 15 - 20 minutes. Simply read the participant information, complete the survey, and return it to us in the postage-paid reply envelope.

Completion of this survey is voluntary and anonymous and your responses will be kept confidential. All analyses and reports will be based on aggregate data.

We believe that you have important insights to share regarding the work experiences and perceptions of the work environment. Thank you for your help with this project. If you have any questions or comments, please do not hesitate to contact me at the above address or by phone at (613) 520-2600, ext. 1034, or my supervisor Dr. Janet Mantler at (613) 520-2600, ext. 4173.

Sincerely,

Annik O’Brien
Department of Psychology
Carleton University
aobrien4@connect.carleton.ca

Appendix C

Participant Information

**Organizational Life and Well-being Survey
Participant Information*****The research***

We believe that this survey will be important in understanding the work experiences and perceptions of the work environment of staff at the Genetics, Oncology/Medical day unit, and Rehabilitation programs at [the hospital] and how these experiences affect the well-being and job attitudes of staff. The questions in this survey ask about your perceptions about the support you receive from [the hospital] and from your leader. Additional questions ask about whether you feel that [the hospital] is supportive of work-life balance. Next, there are questions that assess your level of well-being in general. Finally, there are questions about how you feel about your job at present, your career plans (e.g., if you plan to look for work in the near future) and general demographic questions (e.g., age).

It should take 15 - 20 minutes to complete the survey. We have sent out this survey to all staff in the Genetics, the Oncology/Medical day unit, and the Rehabilitation programs at [the hospital].

Anonymity and confidentiality

Your survey responses are anonymous and will be kept confidential. Only the research team will see individual responses. Grouped data will be reported and individual responses will not be identified in any reports.

Your rights

You are being asked to participate in this survey as part of a research project. This project does not involve quality assurance/improvement, and as such, participation is entirely voluntary and not work-related. Full anonymity is assured and the decision to participate or not will in no way be shared with others.

You are under no obligation to complete this survey. Completion of the survey implies consent. If there are questions that you do not wish to answer, please skip them. Your data will be stored at Carleton University for a minimum of 5 years and will be made available to Carleton Ethics Committee for Psychological Research if required for their review process.

The results

If you would like to know the results of the survey, a report will be available to [the hospital] and a presentation of the findings will be given to the staff in Spring 2005. Reports of this research will also be submitted to professional journals and academic conferences.

For more information

For more information about the study, please contact [name of Operations Director], Operations Director, Rehabilitation, [telephone number] or by email at [email], or Annik O'Brien at Carleton University, 520-2600, ext. 1034 or by email at aobrien4@connect.carleton.ca. You may also contact Dr. Janet Mantler, Assistant Professor, Carleton University at 520-2600, ext. 4173 or by email at janet_mantler@carleton.ca.

This study has been approved by the Carleton Ethics Committee for Psychological Research and [the hospital] Research Ethics Board. If you have ethical concerns or questions about your rights as a participant, please call Dr. Chris Davis, Chair of the Carleton University Ethics Committee for Psychological Research at 520-2600 ext. 2251 or Dr. Mary Gick, Acting Chair, Department of Psychology at 520-2600 ext. 2648, or you may contact [name of Chair of Research Ethics Board], Chair of [the hospital] Research Ethics Board for information regarding participants' rights in research studies at [telephone number], although this person cannot provide any health-related information about the study.

If this survey causes you any discomfort or if you are feeling stressed, you can contact the Employee Assistance Program at [the hospital].

Appendix D

Organizational Life and Well-being Survey

Organizational Life and Well-being Survey

December 2004

Section A: Organizational life

The following questions concern your relationship with your leader at work and the support that you receive from this person. Your leader at work would be the person that you go to for feedback on your work, who assigns tasks to you, and helps you develop your skills (e.g., Operations Director or Clinical Leader or Professional Practice Leader).

	Not at all	A little	Somewhat	Quite a bit	Very much
1. How much does this person go out of his or her way to make your work life easier for you?	1	2	3	4	5
2. To what extent are you at ease when you are talking with this person?	1	2	3	4	5
3. How much can this person be relied on when things get tough at work?	1	2	3	4	5
4. How much is this person willing to listen to your personal problems?	1	2	3	4	5

My leader	Not at all	A little	Somewhat	Quite a bit	As much as possible
1. Encourages an atmosphere for open discussion.	1	2	3	4	5
2. Has good listening skills.	1	2	3	4	5
3. Is available when needed.	1	2	3	4	5
4. Arranges uninterrupted time to talk with me.	1	2	3	4	5
5. Clearly and effectively interacts with me.	1	2	3	4	5
6. Listens to and understands any real concerns I might have.	1	2	3	4	5
7. Frequently holds formal and informal discussions with me.	1	2	3	4	5
8. Encourages me to talk openly about my work anxieties / fears.	1	2	3	4	5
9. Helps me meet deadlines or finish difficult jobs.	1	2	3	4	5
10. Keeps me informed about events higher up or outside [the hospital].	1	2	3	4	5
11. Demonstrates trust and confidence in me.	1	2	3	4	5
12. Gives me the authority I need to do my job.	1	2	3	4	5

13. Respects me as an individual.	1	2	3	4	5
14. Supports me by letting others know of my effectiveness.	1	2	3	4	5

Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they work. With respect to your own feelings about [the hospital], indicate the degree of your agreement or

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. [The hospital] values my contributions to its well-being.	1	2	3	4	5
2. If [the hospital] could hire someone to replace me at a lower salary it would do so.	1	2	3	4	5
3. [The hospital] fails to appreciate any extra effort from me.	1	2	3	4	5
4. [The hospital] strongly considers my goals and values.	1	2	3	4	5
5. [The hospital] would ignore any complaints from me.	1	2	3	4	5
6. [The hospital] disregards my best interests when it makes decisions that affect me.	1	2	3	4	5
7. Help is available from [the hospital] when I have a problem.	1	2	3	4	5
8. [The hospital] really cares about my well-being.	1	2	3	4	5
9. Even if I did the best job possible, [the hospital] would fail to notice.	1	2	3	4	5
10. [The hospital] is willing to help me when I need a special favour.	1	2	3	4	5
11. [The hospital] cares about my general satisfaction at work.	1	2	3	4	5
12. If given the opportunity, [the hospital] would take advantage of me.	1	2	3	4	5
13. [The hospital] shows very little concern for me.	1	2	3	4	5
14. [The hospital] cares about my opinions.	1	2	3	4	5
15. [The hospital] takes pride in my accomplishments at work.	1	2	3	4	5
16. [The hospital] tries to make my job as interesting as possible.	1	2	3	4	5

We would like to know whether you feel that your work interferes with your family life. Indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. After work, I come home too tired to do some of the things I'd like to do.	1	2	3	4	5
2. On the job I have so much work to do that it takes away from my personal interests.	1	2	3	4	5
3. My family / friends dislike how often I am preoccupied with my work while I am at home.	1	2	3	4	5
4. My work takes up time that I'd like to spend with family / friends.	1	2	3	4	5

Section B: Employee well-being

The following set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers. Circle the number that best describes your present agreement or disagreement with each statement.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	1	2	3	4	5
2. In general, I feel I am in charge of the situation in which I live.	1	2	3	4	5
3. I don't want to try new ways of doing things - my life is fine the way it is.	1	2	3	4	5
4. I often feel lonely because I have few close friends with whom to share my concerns.	1	2	3	4	5
5. I feel good when I think of what I've done in the past and what I hope to do in the future.	1	2	3	4	5
6. When I look at the story of my life, I am pleased with how things have turned out.	1	2	3	4	5
7. I tend to worry about what other people think of me.	1	2	3	4	5
8. The demands of everyday life often get me down.	1	2	3	4	5
9. I think it is important to have new experiences that challenge how you think about yourself and the world.	1	2	3	4	5

10. I don't have many people who want to listen when I need to talk.	1	2	3	4	5
11. I have a sense of direction and purpose in life.	1	2	3	4	5
12. In general, I feel confident and positive about myself.	1	2	3	4	5
13. I tend to be influenced by people with strong opinions.	1	2	3	4	5
14. I am quite good at managing the many responsibilities of my daily life.	1	2	3	4	5
15. When I think about it, I haven't really improved much as a person over the years.	1	2	3	4	5
16. I feel like I get a lot out of my friendships.	1	2	3	4	5
17. I don't have a good sense of what it is I'm trying to accomplish in life.	1	2	3	4	5
18. Given the opportunity, there are many things about myself that I would change.	1	2	3	4	5
19. I have confidence in my opinions, even if they are contrary to the general consensus.	1	2	3	4	5
20. If I were unhappy with my living situation, I would take effective steps to change it.	1	2	3	4	5
21. I have the sense that I have developed a lot as a person over time.	1	2	3	4	5
22. It seems to me that most other people have more friends than I do.	1	2	3	4	5
23. I enjoy making plans for the future and working to make them a reality.	1	2	3	4	5
24. I like most aspects of my personality.	1	2	3	4	5
25. I am concerned about how other people evaluate the choices I have made in my life.	1	2	3	4	5
26. I have difficulty arranging my life in a way that is satisfying to me.	1	2	3	4	5
27. For me, life has been a continuous process of learning, changing, and growth.	1	2	3	4	5
28. I have not experienced many warm and trusting relationships with others.	1	2	3	4	5
29. I am an active person in carrying out the plans I set for myself.	1	2	3	4	5

30. In many ways, I feel disappointed about my achievements in life.	1	2	3	4	5
31. I judge myself by what I think is important, not by the values of what others think is important.	1	2	3	4	5
32. I have been able to build a home and a lifestyle for myself that is much to my liking.	1	2	3	4	5
33. I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5
34. I know that I can trust my friends, and they know they can trust me.	1	2	3	4	5
35. My aims in life have been more a source of satisfaction than frustration to me.	1	2	3	4	5
36. For the most part, I am proud of who I am and the life I lead.	1	2	3	4	5

In the past month, how often have you:

	Never	Almost never	Sometimes	Fairly often	Very often
1. Been upset because of something that happened unexpectedly?	1	2	3	4	5
2. Felt that you were unable to control the important things in your life?	1	2	3	4	5
3. Felt nervous and "stressed"?	1	2	3	4	5
4. Felt confident about your abilities to handle your personal problems?	1	2	3	4	5
5. Felt that things were going your way?	1	2	3	4	5
6. Found that you could not cope with all the things that you had to do?	1	2	3	4	5
7. Been able to control irritations in your life?	1	2	3	4	5
8. Felt that you were on top of things?	1	2	3	4	5
9. Been angered because of things that happened that were outside of your control?	1	2	3	4	5
10. Felt difficulties were piling up so high that you could not overcome them?	1	2	3	4	5

Section C: Job-related attitudes

We would like to know how you feel about working at [the hospital] and how it affects the way in which you are able to do your job. Indicate the extent to which you agree or disagree with the following statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. The most important things that happen to me involve my present job.	1	2	3	4	5
2. Most of my interests are centred around my job.	1	2	3	4	5
3. I like to be absorbed in my job most of the time.	1	2	3	4	5
4. [The hospital] has a great deal of personal meaning to me.	1	2	3	4	5
5. To me, my job is only a small part of who I am.	1	2	3	4	5
6. I do not feel a strong sense of belonging to [the hospital].	1	2	3	4	5
7. I am very much involved personally in my job.	1	2	3	4	5
8. I do not feel like 'part of the family' at [the hospital].	1	2	3	4	5
9. I live, eat and breathe my job.	1	2	3	4	5
10. I do not feel 'emotionally attached' to [the hospital].	1	2	3	4	5
11. I have very strong ties with my present job which would be very difficult to break.	1	2	3	4	5
12. I would be very happy to spend the rest of my career with [the hospital].	1	2	3	4	5
13. Usually I feel detached from my job.	1	2	3	4	5
14. I really feel as if [the hospital]'s problems are my own.	1	2	3	4	5
15. Most of my personal life goals are job-oriented.	1	2	3	4	5
16. I consider my job to be very central to my existence.	1	2	3	4	5

The next set of items deals with various aspects of your job. We would like you to describe how satisfied or dissatisfied you feel with each of these features of your present job.

	Very dissatisfied	Moderately dissatisfied	Neither satisfied nor dissatisfied	Moderately satisfied	Very satisfied
1. The physical work conditions.	1	2	3	4	5
2. The freedom to choose your own method of working.	1	2	3	4	5
3. Your colleagues.	1	2	3	4	5
4. The recognition you get for good work.	1	2	3	4	5
5. Your immediate leader.	1	2	3	4	5
6. The amount of responsibility you are given.	1	2	3	4	5
7. Your rate of pay.	1	2	3	4	5
8. Your opportunity to use your abilities.	1	2	3	4	5
9. Relations between management and employees at [the hospital].	1	2	3	4	5
10. Your chance of promotion.	1	2	3	4	5
11. The way [the hospital] is managed.	1	2	3	4	5
12. The attention paid to suggestions you make.	1	2	3	4	5
13. Your hours of work.	1	2	3	4	5
14. The amount of variety in your job.	1	2	3	4	5
15. Your job security.	1	2	3	4	5
16. Now taking everything into consideration, how do you feel about your job as a whole?	1	2	3	4	5

We are interested in knowing how you feel about remaining at your present job versus pursuing other employment opportunities. Rate your agreement or disagreement with each of the following statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. I will likely actively look for a new job in the next year.	1	2	3	4	5
2. If I had a chance, I would take a different job within [the hospital].	1	2	3	4	5
3. I will probably look for a new job in the next year.	1	2	3	4	5

Section D: Individual differences

The following statements ask some general questions about how you view yourself. Please indicate your agreement or disagreement with each of these statements.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. If I were given an opportunity to do something I really enjoy, I would respond with a lot of energy.	1	2	3	4	5
2. I tend to become really aggravated when things don't go right at work.	1	2	3	4	5
3. I find most things interesting.	1	2	3	4	5
4. I tend to become very distressed when I have too much work to do.	1	2	3	4	5
5. In general, I tend to approach everything with a great deal of enthusiasm.	1	2	3	4	5
6. I tend to become very apprehensive when my boss calls me into his or her office.	1	2	3	4	5
7. Whenever I encounter a difficult problem, I usually worry about it a lot.	1	2	3	4	5
8. Whenever I hear of good news, I tend to get very excited.	1	2	3	4	5
9. I tend to be very active when I have a lot of tasks to complete.	1	2	3	4	5
10. If I were given a difficult project to work on, I usually worry about it a lot.	1	2	3	4	5

Section E: Demographic information

Finally, we would like to ask some basic demographic information. None of these questions will be used to identify individual respondents. This information will only be reported in grouped form and is for research purposes only. It will not be reported to individual units. Please feel free to skip any question you do not feel comfortable answering.

1. Are you _____ female _____ male

2. How old are you? _____ years

3. Marital status

_____ single	_____ widowed
_____ married	_____ divorced
_____ common law	_____ separated
_____ other (please specify) _____	

4. Number of dependent children: _____

5. Please identify your **highest** level of education

_____ High school
_____ College diploma
_____ Some university
_____ Baccalaureate degree
_____ Masters degree
_____ Doctorate degree
_____ Medical degree
_____ Other (please specify) _____

6. How many years have you been working at [the hospital]?
_____ years

7. Which program do you presently work for?

_____ Genetics
_____ Oncology/Medical Day unit
_____ Rehabilitation

8. How long have you worked in this program?
_____ years

Appendix E

Reminder Email

Hello!

About one [two] week ago we sent you a survey entitled “Organizational Life and Well-being Survey” about your perceptions of your current job and work environment. We would like to take this opportunity to thank those people who have already completed and returned the survey. We greatly appreciate your assistance!

If you have not completed or returned the survey yet, we hope that you will have the opportunity to respond to this survey. It should take only 15 minutes. Simply read the participant information, fill in the questionnaire, and return it to us in the postage-paid reply envelope. If you need another copy of the questionnaire, please contact Annik O’Brien at 520-2600, ext. 1034 or by email at aobrien4@connect.carleton.ca.

If you would like to know more about the results of this research, a report will be available and a presentation of the findings will be given in Spring 2005.

Thank you for your help with this project. We believe that you have important insights to share regarding your perceptions of organizational life and how this may impact your well-being and attitudes regarding your job.

Sincerely,

Annik O’Brien
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Appendix F

Factor Loadings of Psychological Well-being Items (Pattern Matrix)

	1	2	3	4	5	6	7	8	9
<i>Autonomy items</i>									
I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	-.01	.01	.93	.07	-.09	-.03	-.01	-.14	.04
I tend to worry about what other people think of me.	.06	.12	.37	-.17	-.05	.02	-.17	.37	-.15
I tend to be influenced by people with strong opinions.	-.00	-.12	.44	-.01	.17	.21	.05	.33	-.24
I have confidence in my opinions, even if they are contrary to the general consensus.	-.05	.04	.28	-.12	.00	.63	.15	.08	.12
I am concerned about how other people evaluate the choices I have made in my life.	.21	.06	.29	-.03	.25	.09	-.13	.29	.05
I judge myself by what I think is important, not by the values of what others think is important.	-.01	.06	-.04	.01	-.00	.01	.13	.58	.09
<i>Environmental mastery items</i>									
In general, I feel I am in charge of the situation in which I live.	.12	-.08	-.01	-.10	-.01	-.06	.03	.02	.58
The demands of everyday life often get me down.	-.12	-.01	.21	-.21	-.08	-.40	.15	.10	.10
I am quite good at managing the many responsibilities of my daily life.	.02	.42	-.02	-.08	-.06	.09	.07	.12	.15
If I were unhappy with my living situation, I	.12	-.20	.00	-.17	-.04	.04	.45	.24	.08

would take effective steps to change it.									
I have difficulty arranging my life in a way that is satisfying to me.	-.00	-.17	-.00	-.20	.44	-.16	.22	.38	.04
I have been able to build a home and a lifestyle for myself that is much to my liking.	.03	.17	-.01	-.04	.39	-.22	-.08	.32	.19
<hr/>									
<i>Personal growth items</i>									
When I think about it, I haven't really improved much as a person over the years.	.14	.36	.05	-.11	-.09	-.07	.35	.09	-.14
I have the sense that I have developed a lot as a person over time.	.35	.40	-.01	-.22	-.17	.03	.23	-.08	.08
For me, life has been a continuous process of learning, changing, and growth.	1.04	-.14	-.01	.02	-.09	.02	.05	-.04	.04
I gave up trying to make big improvements or changes in my life a long time ago.	.14	-.06	.06	-.43	.30	-.15	.18	-.21	-.02
<hr/>									
<i>Positive relations with others items</i>									
I often feel lonely because I have few close friends with whom to share my concerns.	.10	-.05	.00	-.82	.06	-.10	-.13	.15	.05
I don't have many people who want to listen when I need to talk.	.03	.03	-.04	-.82	-.07	-.04	.02	.10	-.02
I feel like I get a lot out of my friendships.	-.12	.09	.09	-.62	.03	.19	.20	-.13	.04
It seems to me that most other people have more friends than I do.	.02	.04	-.01	-.66	.16	-.03	.09	.02	-.03
I have not experienced many warm and trusting relationships with others.	.13	.06	.08	-.45	.09	-.40	.03	-.05	-.02
I know that I can trust my friends, and they know they can trust me.	.05	.18	.01	-.40	.06	.19	-.02	-.08	.16

<i>Purpose in life items</i>									
I feel good when I think of what I've done in the past and what I hope to do in the future.	.00	.16	-.02	.08	.12	.10	-.03	.07	.69
I have a sense of direction and purpose in life.	.22	.29	-.06	.16	.19	-.19	.23	.21	.20
I don't have a good sense of what it is I'm trying to accomplish in life.	.10	.20	-.08	-.02	.08	-.01	.71	.06	-.04
I enjoy making plans for the future and working to make them a reality.	.15	.16	.04	-.11	.08	-.11	.40	-.00	.11
I am an active person in carrying out the plans I set for myself.	.18	.01	.20	.03	.20	.11	.36	-.07	.22
My aims in life have been more a source of satisfaction than frustration to me.	.19	.18	.13	.07	.24	-.34	.25	-.19	.09
<i>Self-acceptance items</i>									
When I look at the story of my life, I am pleased with how things have turned out.	.01	-.02	-.12	-.24	.67	.14	.08	-.03	.22
In general, I feel confident and positive about myself.	.10	.39	.24	-.09	-.01	-.05	.12	.10	.35
Given the opportunity, there are many things about myself that I would change.	.17	.39	-.02	-.07	.44	-.08	-.02	.08	-.34
I like most aspects of my personality.	-.11	.76	.09	-.08	.16	-.05	.06	-.01	.09
In many ways, I feel disappointed about my achievements in life.	-.11	.25	.16	-.17	.48	-.04	.18	-.06	.15
For the most part, I am proud of who I am and the life I lead.	.29	.32	-.01	-.11	.24	.01	-.13	.06	.30
% of variance explained	9.97	24.66	5.42	4.44	3.47	3.58	2.38	2.25	2.08

Appendix G

Factor Loadings of Psychological Well-being Items (Structure Matrix)

	1	2	3	4	5	6	7	8	9
<i>Autonomy items</i>									
I am not afraid to voice my opinions, even when they are in opposition to the opinions of most people.	.02	.09	.86	-.14	-.02	.06	.09	.07	.01
I tend to worry about what other people think of me.	.12	.19	.50	-.28	.11	.05	-.01	.48	-.09
I tend to be influenced by people with strong opinions.	.03	-.03	.55	-.16	.19	.23	.06	.46	-.18
I have confidence in my opinions, even if they are contrary to the general consensus.	.04	.14	.41	-.24	.07	.63	.21	.22	.22
I am concerned about how other people evaluate the choices I have made in my life.	.34	.27	.41	-.28	.41	.07	.11	.45	.17
I judge myself by what I think is important, not by the values of what others think is important.	.15	.18	.1	-.18	.17	.01	.22	.59	.18
<i>Environmental mastery items</i>									
In general, I feel I am in charge of the situation in which I live.	.28	.16	.03	-.26	.17	-.08	.27	.09	.62
The demands of everyday life often get me down.	.07	.13	.27	-.36	.10	-.40	.30	.18	.15
I am quite good at managing the many responsibilities of my daily life.	.22	.49	.12	-.26	.16	.05	.25	.20	.30
If I were unhappy with my living situation, I	.30	.04	.16	-.38	.15	-.02	.55	.32	.25

would take effective steps to change it.									
I have difficulty arranging my life in a way that is satisfying to me.	.28	.15	.20	-.48	.60	-.24	.42	.51	.23
I have been able to build a home and a lifestyle for myself that is much to my liking.	.30	.40	.13	-.32	.58	-.27	.20	.43	.33
<hr/>									
<i>Personal growth items</i>									
When I think about it, I haven't really improved much as a person over the years.	.37	.49	.21	-.37	.18	-.15	.50	.20	.12
I have the sense that I have developed a lot as a person over time.	.56	.58	.14	-.46	.18	-.08	.51	.06	.36
For me, life has been a continuous process of learning, changing, and growth.	.98	.16	.05	-.20	.16	-.09	.34	.09	.25
I gave up trying to make big improvements or changes in my life a long time ago.	.36	.23	.18	-.60	.47	-.27	.44	-.02	.20
<hr/>									
<i>Positive relations with others items</i>									
I often feel lonely because I have few close friends with whom to share my concerns.	.32	.25	.26	-.85	.37	-.19	.29	.34	.23
I don't have many people who want to listen when I need to talk.	.25	.26	.21	-.83	.24	-.13	.36	.25	.18
I feel like I get a lot out of my friendships.	.12	.29	.28	-.69	.23	.10	.43	.05	.24
It seems to me that most other people have more friends than I do.	.28	.30	.22	-.77	.41	-.14	.41	.20	.20
I have not experienced many warm and trusting relationships with others.	.34	.29	.20	-.59	.34	-.48	.34	.11	.15
I know that I can trust my friends, and they know they can trust me.	.23	.35	.16	-.48	.26	.12	.24	.06	.32

<i>Purpose in life items</i>									
I feel good when I think of what I've done in the past and what I hope to do in the future.	.23	.36	.04	-.16	.29	.10	.21	.14	.74
I have a sense of direction and purpose in life.	.50	.52	.06	-.23	.44	-.26	.45	.30	.42
I don't have a good sense of what it is I'm trying to accomplish in life.	.43	.44	.10	-.40	.33	-.14	.80	.18	.29
I enjoy making plans for the future and working to make them a reality.	.43	.41	.18	-.43	.34	-.20	.61	.14	.36
I am an active person in carrying out the plans I set for myself.	.40	.29	.29	-.32	.37	.04	.53	.10	.42
My aims in life have been more a source of satisfaction than frustration to me.	.42	.40	.15	-.27	.41	-.42	.45	-.05	.28
<i>Self-acceptance items</i>									
When I look at the story of my life, I am pleased with how things have turned out.	.31	.31	.04	-.48	.77	.02	.35	.15	.44
In general, I feel confident and positive about myself.	.42	.62	.38	-.45	.33	-.09	.45	.28	.55
Given the opportunity, there are many things about myself that I would change.	.36	.51	.13	-.30	.58	-.19	.18	.22	-.08
I like most aspects of my personality.	.25	.86	.24	-.40	.44	-.12	.33	.15	.34
In many ways, I feel disappointed about my achievements in life.	.26	.53	.31	-.52	.67	-.13	.45	.16	.39
For the most part, I am proud of who I am and the life I lead.	.53	.57	.13	-.39	.51	-.07	.25	.22	.50
% of variance explained	9.97	24.66	5.42	4.44	3.47	3.58	2.38	2.25	2.08