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**Examining the Effect of Affective Commitment to the Supervisor on Nurses' Psychological Health as a Function of Internal Locus of Control: A Cross-Sectional Study.**

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**Abstract**

*Aims:* The present research aimed to examine how affective commitment to the supervisor (ACS) related to nurses' well- and ill-being, and to explore the moderating function of internal locus of control (LOC) in these relationships.

*Background:* Little is known about the effects of ACS on well- and ill-being, even less so in the nursing profession. Moreover, previous studies suggested that nurses' psychological reactions to their work environment might vary as a function of their individual characteristics.

*Methods:* This cross-sectional research used a questionnaire survey to explore the hypothesized relationships in a sample of 100 female certified nursing assistants.

*Results:* Results revealed that ACS was most strongly related to job satisfaction and well-being, and associated with lower levels of emotional exhaustion, when internal LOC was high.

*Conclusions:* The present study emphasizes the importance of a high quality relationship between nurses and their supervisors in order to promote their psychological health, and underscores the importance of individual characteristics.

*Implications for nursing management:* This research indicates how nurses' psychological health could be promoted by fostering their ACS. It also emphasizes that managers' relationships with their subordinates should be adjusted as a function of nurses' individual characteristics.

*Keywords:* affective commitment, locus of control, burnout, satisfaction, well-being.

### **Aims and background**

Among the different facets of commitment, affective commitment is known for being the “most widely studied, the most generalizable across targets, and the most predictive of employee behavior” (Morin et al. 2011, p.718) and can be defined as an attachment to, an identification with, and an involvement in a particular target (Meyer & Herscovitch 2001). Affective commitment can indeed be directed towards different targets or foci including the supervisor (Landry & Vandenberghe 2009). Affective commitment to supervisors (ACS) refers to a high quality relationship between employees and their supervisors. Because they are seen as more salient and immediate foci, supervisors are made accountable for monitoring and rewarding employees’ work, as well as influencing their work conditions (Lawler 1992). If employees make positive assessments about these supervisory missions, they are thus more likely to develop emotional attachment and identification to their supervisors, and a desire to maintain a work relationship with them (i.e., high ACS) (Landry & Vandenberghe 2009).

The beneficial effects of nurses’ ACS have consistently been demonstrated as it was shown to have a positive effect on their job performance and a negative effect on their turnover intentions (e.g., Vandenberghe & Bentein 2009). It appears that these beneficial effects of ACS have mostly been observed on work outcomes. However, less attention has been paid to its effects on workers’ psychological health, even less so in the nursing profession. Yet, the healthcare setting is among the most exposed industries when it comes to employee health (EU-OSHA 2014), and research showed the importance of subordinate-supervisor’s relationship for nurses’ well-being (e.g., Brunetto et al. 2013). This may suggest ACS to be a potential lever to protect nurses from ill-being and promote their well-being. Therefore, the present research offered to explore the effects of ACS on nurse well- and ill-being, while examining internal LOC (Rotter 1966) as a potential moderator of these relationships. Indeed, scholars suggested that individual characteristics make some professionals more or less sensitive to the beneficial effects of ACS than others (e.g., Landry & Vandenberghe 2009).

### ***Affective commitment to the supervisor, and well- and ill- being***

On one hand, ACS might be positively related to nurses’ well-being. Indeed, based on social exchange theory (Blau 1964), if nurses show commitment to their supervisor, the latter might be more inclined to reciprocate by rewarding them with more resources (e.g., support, information) to help them complete their tasks more efficiently (Lapointe et al. 2013). These resources not only allow workers to meet their professional goals but also to stimulate their personal development, hence they promote their well-being (Bakker & Demerouti 2007). Therefore, because they are provided with more resources, nurses do not have to draw on their own resources to deal with their work challenges, leaving them with more energy and a higher sense of well-being (Hobfoll 2001).

*Hypothesis 1: ACS is positively associated with nurses’ well-being.*

Moreover, previous studies showed the importance of identifying conditions that might trigger nurses’ job satisfaction, and it seems likely that it could actually be enhanced by their ACS (Becker 1992). Indeed, having this strong emotional bond with their supervisor allows them to have more resources to complete their tasks efficiently but also satisfies their fundamental need for relatedness (Deci & Ryan 2000), which might make them experience more positive affect at work. Because affective experiences at work have the power to alter workers’ evaluative judgments about their job (Weiss 2002), nurses might thus be more prone to evaluate their job in a positive light (i.e., high job satisfaction).

*Hypothesis 2: ACS is positively associated with nurses’ job satisfaction.*

On the other hand, benefitting from a high quality relationship with their supervisor might also contribute to lower nurses’ ill-being, in the form of emotional exhaustion (e.g., Lapointe et al. 2013). This central component of burnout, which refers to a continuous

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depletion of workers' resources due to their chronic exposure to work demands (Shirom & Melamed 2006) appears to be very prevalent in the nursing profession (Gelsema et al. 2006). However, one could argue that when nurses show a strong ACS, the latter might reciprocate by regulating the demands they face at work (Blau 1964), thus preventing their resources from being depleted in spending excessive efforts to cope with those demands. It thus seems plausible that when they are highly committed to their supervisor, nurses are less prone to emotional exhaustion.

*Hypothesis 3: ACS is negatively associated with nurses' emotional exhaustion.*

### ***The moderating role of internal LOC***

Locus of control (Rotter 1966) was shown to be an important dimension when it comes to understand individual differences in the way workers respond to their professional environment (Spector 1982), to the point where recent research keeps on addressing the conceptualization of LOC specifically in the work context (e.g., Oliver et al. 2006, Paquet et al. 2014). Based on the LOC theory, employees differ based on their tendency to interpret work situations either based on external factors (e.g., other people, luck) or to internal factors (e.g., efforts, skills) (Oliver et al. 2006). More specifically, internal individuals are characterized by their belief that environmental situations and reinforcements are within their control, that they are the result of their own behaviors and actions (Paquet et al. 2014). Therefore, workers with an internal LOC acknowledge their responsibility in their successes and failures and tend to take an active posture with respect to their work environment. This tendency of internals to devote great efforts to exert control over their environments has a positive impact on their functioning, including in hospital settings (Chiu et al. 2005).

More specifically, internal LOC, because it comes with a belief that one has the power to cope with a stressful work environment, has been negatively related to maladaptive outcomes such as counterproductive work behaviors, and positively associated with adaptive outcomes such as job performance and job satisfaction (e.g., Sprung & Jex 2012). In the most recent meta-analysis on LOC at work, Ng et al. (2006) found internal LOC to be positively related to favorable work outcomes including greater job motivation as well as positive task or social experiences. Despite these consensual findings on the beneficial main effects of internal LOC, research on its moderating role has yielded to mixed conclusions. Indeed, a main line of research showed that internal LOC, even though it is a positive self-variable, usually attenuates the beneficial effects of positive work conditions on individual outcomes (e.g., De Hoogh & Den Hartog 2009). Researchers interpret these findings by stating that internal employees, since they believe they have control over the situations they encounter, are less in need of reinforcements from their professional surroundings (e.g., supervisor support). Thus, internals pay less attention to such environmental cues whose impact on their psychological reactions is thus lessened.

A scarcer stream of research conversely found that internal LOC strengthened the beneficial effects of work resources (e.g., information sharing) on positive outcomes (e.g., intentions to stay, job satisfaction) (e.g., Ng & Butts 2009). Indeed, it can be argued that internal employees welcome environmental reinforcements as additional means of exerting even more control over their lives, thus fueling their desire to achieve and intensifying the beneficial effects of positive work conditions on their psychological reactions. In this study, we argued that ACS -although it might yield to some managerial reinforcements- essentially reflects an individual attitude wherein nurses have control over the emotional attachment they decide to show toward their supervisor. Therefore, we first argued that, internal LOC might positively interact with ACS to boost its effects on nurses' well-being. Indeed, if ACS has beneficial effects on nurses' well-being by means of social exchange wherein they are provided with more resources, it is likely that internals see those extra resources as an opportunity for them to control their work environment, thus making them feel more enabled

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and energized (Ng et al. 2006).

*Hypothesis 4: Internal LOC moderates the relationship between ACS and well-being, such that the positive association will be stronger when employees have a high internal LOC.*

Second, internal LOC is likely to strengthen the effects of ACS on nurses' job satisfaction. Internal nurses might indeed feel that this strong emotional bond they experience with their supervisor is contingent upon their own behaviors, therefore comforting their belief that they exert control over their environment. Consequently, because ACS confirms their positive self-views (Swann 2011), they are more likely to feel consistent and to experience positive attitudes toward their job in the form of a higher job satisfaction.

*Hypothesis 5: Internal LOC moderates the relationship between ACS and job satisfaction, such that the positive association will be stronger when employees have a high internal LOC.*

Finally, ACS, when combined with a high internal LOC, might lead to lower levels of emotional exhaustion. Indeed, internals tend to use the information they obtain in order to improve their control of their environment in a constructive way and therefore experience less feelings of exhaustion (Ng et al. 2006). It is thus likely that internal nurses maximize the resources that come as a reciprocation for their attachment to their supervisor, consequently avoiding them to tap into their own resources until they are depleted (Shirom & Melamed 2006).

*Hypothesis 6: Internal LOC moderates the relationship between ACS and emotional exhaustion, such that the negative association will be stronger when employees have a high internal LOC.*

### Methods

#### *Procedure and participants*

Data were collected using a cross-sectional questionnaire survey design. The paper version of the questionnaire was made available by a graduate student in several healthcare centers, and the link to the online survey was published on dedicated social media groups. Because of this data collection method, it was impossible to determine exactly how many people originally had access to the questionnaire and therefore to assess a return rate. A total of 100 certified nursing assistants working night shifts accepted to complete the survey. This convenience sample was composed with certified nursing assistants from different healthcare centers, yet their job consensually consisted in providing basic, day-to-day care for patients and serving as an assistant to registered nurses. We chose to focus specifically on certified nursing assistants as less attention is paid to this population than to nurses in the literature. Yet, nursing assistants are as importantly characterized by very high turnover rates, and few options to create loyalty in a very constrained context (Martin & Legos 2015). More specifically, we chose to target night shift nursing assistants as these workers are exposed to specific job demands, including social isolation, which puts their health at risk (Berger & Hobbs 2006). It therefore appeared interesting to investigate ACS as a potential lever to promote their well-being and reduce their ill-being.

According to local regulations, no formal ethical scrutiny was required as no ethics committee existed in the institution at the time of the study. However, nurses were surveyed only upon approval of their organization, and each participant signed an informed consent form stressing the confidential and voluntary nature of the study. Along with this consent form, nurses received a cover letter explaining the study as well as the questionnaire. Completed questionnaires were given back to the student. No incentive was offered to take part in the study.

Even though gender was not a selection criterion for our study sample, all participants were women, which is roughly representative of the considerable proportion of female in the nursing assistant profession in France (i.e., 90.4% of women) as reported by the French

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Department of Labor (*Direction de l'Animation des Recherches, des Études et des Statistiques, DARES*, 2013). These women were between 24 and 59 years old, with a mean age of 39.61 years ( $SD = 9.74$ ). Participants were employed in the public ( $n = 81$ ) and private ( $n = 19$ ) sectors, and worked in various types of health organizations (e.g., public hospitals, nursing homes) in France. Average tenure in the current health organization was 11.34 years ( $SD = 9.12$ ). Ninety-three participants were permanent nurses and seven were temporary workers. Ninety nurses were full-time workers and ten were part-time workers. Participants' personal characteristics are illustrated in Table 1.

### **Measures**

All measures were administered in French. Specifically, all original scales were translated in French using the standard back-translation technique (Brislin, 1980), with the exception of the ACS and emotional exhaustion scales, which were already validated in French.

**Affective commitment to the supervisor.** Six items (e.g., "I feel proud to work with my supervisor") from Vandenberghe and Bentein's (2009) scale were used to measure ACS ( $\alpha = .95$  in our study sample). Responses were provided on a 5-point Likert-type scale, with anchors ranging from 1 (strongly disagree) to 5 (strongly agree). This scale originally exhibited good internal consistency ( $\alpha = .86$  in Sample 2 and  $\alpha = .87$  in Sample 3) in the study conducted by Vandenberghe and Bentein (2009).

**Internal LOC.** We used the eight internally worded items (e.g., "Most employees have more influence on their supervisors than they think they do") from the Work Locus of Control Scale (Spector 1988) ( $\alpha = .68$  in the current sample) to assess nurses' internal LOC. The format is summated rating with five response choices scored from 1 (strongly disagree) to 5 (strongly agree). A previous study by Oliver et al. (2006) showed that the internal reliability of this subscale was satisfactory ( $\alpha = .71$ ).

**Emotional exhaustion.** We used five items (e.g., "I feel emotionally drained from my work") from Schaufeli et al.'s Maslach Burnout Inventory – General Survey (1996) to assess emotional exhaustion ( $\alpha = .85$  in our study sample) (see Lapointe et al. 2013, for a French version of the scale). Responses were anchored on a 5-point Likert ranging from 1 (strongly disagree) to 5 (strongly agree). Lapointe et al. (2013) demonstrated an acceptable level of internal consistency for this scale ( $\alpha = .89$ ).

**Job satisfaction.** Job satisfaction was assessed with the three-item (e.g., "All in all, I am satisfied with my job") overall satisfaction subscale ( $\alpha = .83$  in the current sample) from the Michigan Organizational Assessment Questionnaire (Cammann et al. 1979). Responses were made on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). Bowling and Hammond (2008) used a meta-analysis to examine construct validity of this subscale and showed it to be a reliable and construct-valid measure of job satisfaction ( $\alpha = .84$ ).

**Well-being.** The five-item (e.g., "My job makes me feel energetic") high pleasurable-high arousal subscale from the Job-related Affective Well-being Scale (Van Katwyk et al. 2000) was employed ( $\alpha = .81$  in our study sample). Participants responded on a 5-point Likert-scale anchored by 1 (never) and 5 (always). Results from Van Katwyk et al. (2000) revealed that this subscale has an adequate level of internal consistency ( $\alpha = .90$ ).

## **Results**

### **Descriptive Statistics and Intercorrelations**

Means, standard deviations, and correlations appear in Table 2. Results from correlations revealed that ACS and internal LOC were associated with higher job satisfaction and well-being, and lower emotional exhaustion.

### **Common Method Biases**

The issue of common method variance was addressed using Podsakoff et al.'s (2003) recommendations. We first examined a single factor model (i.e. Harman's single factor test).

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This test revealed a poor fit to the data,  $\chi^2(324) = 1013.70, p < .001, \chi^2/df = 3.13, IFI = .52, CFI = .52,$  and  $RMSEA = .15$ . The second model was composed of five latent variables (i.e., ACS, internal LOC, job satisfaction, well-being, and emotional exhaustion). This model yielded an acceptable fit to the data,  $\chi^2(307) = 401.80, p < .001, \chi^2/df = 1.31, IFI = .94, CFI = .93,$  and  $RMSEA = .06$ . Finally, we added an orthogonal latent common method factor to the hypothesized five-factor model in order to assess the potential increase in model fit that would be gained from accounting for this unmeasured method factor. The fit of that model was good:  $\chi^2(306) = 390.51, p < .001, \chi^2/df = 1.28, IFI = .94, CFI = .94,$  and  $RMSEA = .05$ . However, the method factor accounted for only 6 percent of the total variance, which is considerably lower than the median amount of method variance (25%) reported in prior studies (e.g., Williams et al. 1989). Overall, these results suggest common method bias was not a serious problem underlying our data.

### **Main Analyses**

As recommended by Aiken and West (1991), we standardized the predictor variables (i.e., ACS and internal LOC) and multiplied them to create interaction terms. Subsequently, the hypothesized structural model was tested using structural equation modelling with AMOS. Path analysis was conducted on the covariance matrix and the solutions were generated on the basis of maximum likelihood estimation. As Burke and Greenglass (2000) showed that full-time nurses reported greater emotional exhaustion than part-time nurses, we controlled for work status in all subsequent analyses. The hypothesized model contained four exogenous variables (i.e., ACS, internal LOC, ACS x internal LOC, and work status) and three endogenous variables (i.e., emotional exhaustion, job satisfaction, and well-being). Since the model tested was fully saturated, we did not report any fit indices. All estimated paths were significant. Figure 1 displays the results of the path analysis.

ACS and internal LOC were significant positive predictors of job satisfaction and well-being, and were negatively associated with emotional exhaustion. The interaction terms also predicted job satisfaction, well-being, and emotional exhaustion. To facilitate the interpretation of the interaction (Aiken & West 1991), we plotted the simple slopes for the relationships between ACS and job satisfaction, well-being, and emotional exhaustion. We used the conventional values of one standard deviation above and below the mean to plot the slopes (Aiken & West 1991). Results are plotted in Figures 2, 3, and 4

**Please insert Figures 2, 3, and 4 about here.**

As expected, ACS was most strongly related to well-being when internal LOC was high ( $b = .36, p < .001$ ) in comparison to when internal LOC was low ( $b = .06, p = .51$ ). In addition, ACS was most strongly related to job satisfaction when internal LOC was high ( $b = .31, p < .001$ ) in comparison to when internal LOC was low ( $b = .03, p = .76$ ). Finally, ACS was most strongly related to emotional exhaustion when internal LOC was high ( $b = -.41, p < .001$ ) in comparison to when internal LOC was low ( $b = -.11, p = .35$ ).

### **Conclusions**

#### **Theoretical Implications**

The present paper offers several theoretical contributions. First, it adds up to the literature on commitment by extending the knowledge on the relationship between ACS and nurse well- and ill-being. Indeed, previous research mostly studied the effects of nurses' ACS on work-related outcomes (e.g., Vandenberghe & Bentein 2009) but did not pay as much attention to health-related outcomes. The present research therefore enriches our understanding of the effects of ACS on well-being, job satisfaction, and emotional exhaustion. More specifically, our findings showed ACS to be positively related to both well-being and job satisfaction, therefore confirming Hypotheses 1 and 2, respectively, and to negatively associate with emotional exhaustion, thus providing support for Hypothesis 3.

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Second, our research corroborates previous studies (e.g., Ng & Butts 2009) by emphasizing the importance of considering an interactionist perspective when it comes to understand nurses' psychological health. In other words, our study demonstrates that it is not only situational factors that matter in predicting well- and ill-being, but instead their combination with individual tendencies contribute to a better understanding of nurses' psychological reactions. Indeed, our findings showed internal LOC to enhance the positive effects of ACS on nurses' well-being and job satisfaction, thus providing support for Hypothesis 4 and 5, respectively. Internal LOC also showed to strengthen the negative association between ACS and emotional exhaustion, therefore confirming Hypothesis 6. More generally, these results corroborate a scarce stream of research that showed internal LOC to boost the beneficial effects of environmental factors on individual outcomes (Chiu et al. 2005, Ng & Butts 2009).

Additionally, one should note that previous studies on commitment in the healthcare setting mostly focused on nurses' affective commitment toward the organization (e.g., Brunetto et al. 2013). Our research therefore offers some new insight into the importance of a more proximal form of commitment for nurses, that is ACS. Moreover, in those studies, commitment was apprehended as an outcome variable of nurses' work conditions or psychological health, but our research shows that ACS can actually be a relevant lever to act on nurse well- and ill-being. Therefore, proximal supervisors appear to be reliable pillars to protect nurses' psychological health in a context where the French healthcare setting is concerned with mergers and acquisitions implying that employees' representation of their organization can be abstract and generate uncertainty (Stinglhamber & Vandenberghe 2003).

Finally, this paper focuses on a specific population, that is certified nursing assistants, and offers new insight into how their relationship to their supervisor (i.e., ACS), together with their personal characteristics (i.e., internal LOC) determine their ill- and well- being. Indeed, previous studies among nursing assistants mostly focused on organizational characteristics such as facility level service quality (Kostiwa & Meeks, 2009) or staffing (Kalisch & Lee, 2014) as causes of nursing assistants' psychological health. Our research therefore goes beyond previous studies by looking into the interaction between both environmental factors and nursing assistants' individual characteristics as determinants of their psychological functioning.

### ***Limitations and Future Research***

Although this paper offers several contributions, it still presents certain limitations. First, this study only used self-report measures and future research would do well in assessing nurses' health through objective physiological measures (e.g., Pereira & Elfering 2014). Second, our study was cross-sectional in nature, therefore no changes in nurse psychological health can be inferred. It would therefore be interesting to examine how ACS can influence nurses' psychological reactions over-time. For instance, Lapointe et al. (2013) showed that ACS interacted with affective organizational commitment to negatively predict turnover intention and emotional exhaustion four month later. It would therefore be interesting to confirm whether ACS' interaction with individual characteristics could produce similar longitudinal effects. Third, our study sample was relatively small and it would have been preferable to investigate a larger sample to allow for a more parsimonious analysis of the studied relationships. Moreover, our study sample consisted of a specific sample (i.e., French certified nursing assistants working night shifts). Consequently, to be generalized to other organizational settings and cultures, our findings need to be replicated in different samples, in different types of health centers, and in different countries. Indeed, Aiken et al. (2013) showed that nursing jobs varied greatly across 12 European countries, which suggests that culture needs to be accounted for when considering nurses' work experiences. Fourth, the



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current research focused solely on ACS and internal LOC. Since the percentage of explained variance in our studied outcomes was limited, research is needed to explore other determinants. For instance, future studies could look into how different facets of commitment (i.e., normative, continuance) (e.g., Morin et al. 2011) might interact with individual characteristics to boost nurses' well-being or buffer against their ill-being. Finally, it would be interesting to confirm, in the healthcare setting, previous findings that showed the relationship between ACS and work outcomes (i.e., performance) to be fully explained by employee well-being (Chughtai 2013). Indeed, future research could offer to test a moderated mediation model (e.g., Vandenberghe et al. in press) and to analyze whether nurses' well-being could mediate the effects of ACS on work outcomes (e.g., quality of care), while examining the potential moderating effect of internal LOC or other individual characteristics (e.g., workaholism) in the relationship between ACS and well-being.

### **Implications for Nursing Management**

Our research offers some valuable insights into how nurses' psychological health could be promoted by fostering their ACS. Indeed, our findings show that nurses' attachment to their supervisor is crucial for their well- and ill-being, and organizations would do well to strive to reinforce this form of commitment among their staff. Research on its antecedents suggests several ways to trigger stronger affective commitment to the supervisor in employees, such as promoting high quality leader-member exchange and supervisor support (Vandenberghe et al. 2004), paying attention to justice issues (Liao & Rupp 2005), building up organizational support (El Akremi et al. 2014), promoting affective commitment to the organization (Vandenberghe et al. in press), or reinforcing employees perception that they are valued and important to their organization (i.e., organizational-based self-esteem) (Panaccio & Vandenberghe 2011). Healthcare organizations could therefore offer training programs to their supervisors to encourage them to create such conditions for their subordinates.

More generally, managers' ability to create such conditions has to be considered in a context where the many reforms that affected the healthcare setting have increased the workload of supervisors as they are "expected to create empowering places, but while operating within tight budgetary controls and performance measures and targets" (Farr-Wharton et al. 2012, p. 1394). This current context therefore constrains most supervisors in their ability to allocate time and resources to develop high quality relationships with their subordinates (Brunetto et al. 2013). Our results underscoring the importance of ACS should therefore contribute to raise organizations' awareness on the necessity to create the conditions to allow supervisors to cultivate strong emotional bonds with nurses.

Finally, the important moderating role of LOC found in our study corroborates the above statement as these significant moderations imply that supervisors should personalize the way they interact with their subordinates. Our results suggest that managers should acknowledge that their relationships with their subordinates may yield to different effects, based on whether nurses are more or less internally oriented. These results could also corroborate previous research recommendation to consider the assessment of nurses' LOC during hiring processes (e.g., Ng & Butts 2009). Indeed, those with a high internal LOC are shown to maximize the beneficial and protective effects of positive work conditions on their psychological health, thus making them less depleted, more satisfied, and more energetic to perform their tasks.

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Table 1

*Participants' personal characteristics (N=100)*

	<i>M</i>	<i>SD</i>	<i>n (%)</i>
Age	39.61	6.74	-
Sector			
Public sector	-	-	81 (81%)
Private sector	-	-	19 (19%)
Contract type			
Permanent certified nursing assistants	-	-	93 (93%)
Temporary workers	-	-	7 (7%)
Working time			
Full-time workers	-	-	90 (90%)
Part-time workers	-	-	10 (10%)

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Table 2

*Means, Standard Deviations, Alphas Reliabilities and Correlations Involving all Variables*

	<i>M</i>	<i>SD</i>	1	2	3	4	5
Affective commitment to the supervisor (1)	2.69	.90	.95				
Internal LOC (2)	3.14	.58	.31*	.68			
Emotional exhaustion (3)	3.18	.90	-.38**	-.34*	.85		
Job satisfaction (4)	3.90	.78	.33*	.40**	-.59**	.83	
Well-being (5)	3.17	.73	.39**	.36**	-.57**	.56**	.81

\*  $p < .01$ , \*\*  $p < .001$ . Alpha coefficients are reported along the diagonal

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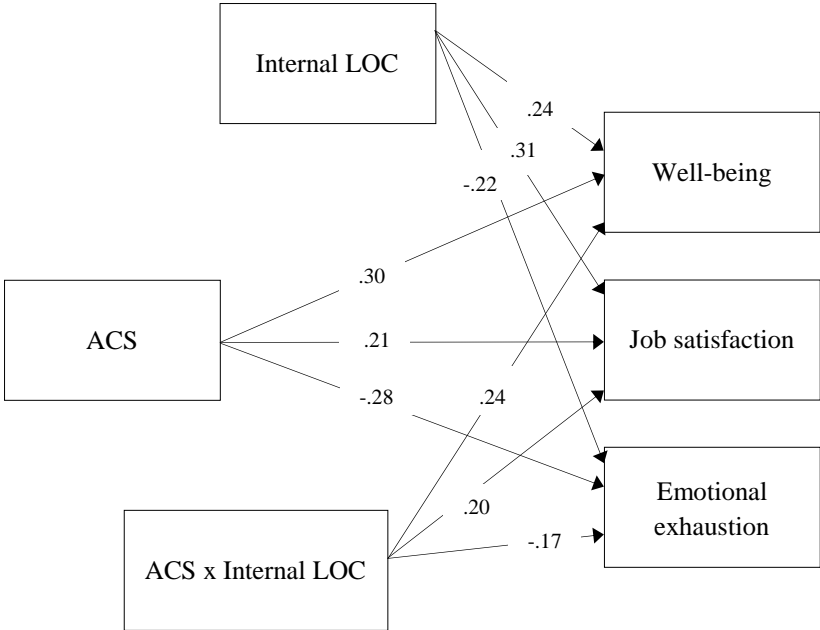


Figure 1. Results from the path analysis. All links are significant ( $p < .05$ ). For clarity reasons, the control variable is not included.