Work–family conflict and enrichment in nurses: between job demands, perceived organisational support and work–family backlash

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(Article begins on next page)

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Abstract

Aim The present study investigates how work relationships (general perceived organizational support – POS – and specific work-family backlash) and job demands (workload and emotional dissonance) may interact with work-family conflict (WFC) and enrichment (WFE).

Background Despite the wide literature on the work-family interface, few studies on nursing profession have considered the role of job demands and organizational relationships, focusing on both the positive and negative side of work-family interface.

Method The study involved a sample of 500 nurses working in an Italian hospital. Hierarchical multiple regression analyses were used to test the hypotheses.

Results Analyses showed that WFC has a positive relationship with job demands and supervisor backlash, and a negative relationship with POS. WFE was found to have a negative relationship with job demands and a positive relationship with POS. No significant relationships were found between WFE and backlash.

Conclusion The study confirmed the importance of promoting a balance between job demands and resources in order to create favorable conditions for WFE and prevent WFC.

Implications for Nursing Management Findings suggest that it may be advisable for healthcare organizations to invest in measures at individual, team and organizational levels, specifically in training and counseling for nurses and supervisors.

Keywords: work-family conflict, work-family enrichment, perceived organizational support, work-family backlash, nurses.
Introduction
The number of studies on the work-family interface has increased over the past decades, following changes in demographics (more dual-earner or dual career couples and single-parent families) and in working conditions (more job insecurity and more blurring of boundaries between work and life; Ghislieri & Colombo 2014). As a result of these changes, workers are less able to handle tasks and demands from both work and family domains effectively. The issues of work-family conflict (WFC) and work-family enrichment (WFE) are central to understanding work dynamics in organizations and the relation among work and other life fields. This is especially true for the nursing profession (Cortese et al. 2010, Ghislieri et al. 2011), where scholars suggest that WFC is related to lower work satisfaction and higher turnover intentions, burnout, and health impairment (Grzywacz et al. 2006, van der Heijden et al. 2008, Cortese et al. 2010), while WFE is related to higher levels of professional commitment and lower intentions to leave the profession (Russo & Buonocore 2012, Tummers & Den Dulk 2013, Ghislieri et al. 2015).
This study involved a sample of Italian nurses to explore how work relationships may interact with WFC and WFE. Two faces of these relationships are considered: general perceived organizational support (POS) and specific work-family backlash. In addition, the effects of two of the most relevant job demands in the nursing profession, namely workload and emotional dissonance, are taken into account.

Theoretical background

Work-family conflict and enrichment in nurses
The work-family interface is defined as the process in which an individual’s functioning in the work (or family) domain is influenced by pressures and resources from the family (or work) domain (Bakker et al. 2011). Among the theoretical models which address the work-family interface, the conflict perspective dominated for most of the 1980s and ’90s, while
the enrichment perspective has become increasingly important in the last two decades (Ghislieri et al. 2011, Russo & Buonocore 2012).

The WFC model originates from role theory (Merton 1957) and from Goode’s (1960) role strain hypothesis. WFC has been defined as: “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect. That is, participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (Greenhaus & Beutell 1985, p. 77). WFC may be due to time issues, but may also derive from different kinds of stressors or from incompatible behavioral demands. Scholars have indicated job demands as the main determinants of WFC (O’Driscoll et al. 2006, Molino et al. 2016). This study considers two specific job demands related to WFC in the literature: workload, a general type of demand consisting of having too much work to do and not enough time to do it (van Veldhoven & Beijer 2012), and emotional dissonance, a type of demand specific to people-oriented professions which refers to a discrepancy between felt and displayed emotions (Bakker & Heuven 2006).

Recently, scholars have focused their attention on the link between WFC and WFE. Enrichment is a process whereby one role enhances the quality of the other: “work-to-family enrichment occurs when work experiences improve the quality of family life, and family-to-work enrichment occurs when family experiences improve the quality of work life” (Greenhaus & Powell 2006, p. 73). Two mechanisms describe the enrichment process: the instrumental mechanism occurs when resources are shifted from one role to the other, with a direct instrumental effect that enhances functioning in the second role; the affective mechanism occurs when extensive resources from one role increase the positive affect within this role that, in turn, fosters the functioning in the other one (Greenhaus & Powell 2006).
Recently, research has indicated that WFE should be considered important for both employees and organizations (Molino et al. 2013). Existing research shows that WFE is positively associated with job-related (Boyar & Mosley 2007, Shockley & Singla 2011), family-related (van Steenbergen et al. 2007), and health-related outcomes (van Steenbergen & Ellemers 2009). Moreover, scholars have found that some personality traits, including extraversion and positive affectivity, can influence WFE (Wayne et al. 2004, Michel & Clark 2009), and that organizational support can provide several important antecedents of WFE (Carlson et al. 2006). For these reasons, it seems important for organizations to understand not only how to reduce WFC, but also how to promote WFE (Bakker et al. 2011, Molino et al. 2013).

Studies of the nursing profession have generally concentrated on WFC rather than WFE (Cortese et al. 2010). Simon et al. (2004) did fundamental work on this construct as part of the NEXT-Study. The study found high WFC scores in many of the European countries considered, with the highest being in Italy. Recent studies also found a high level of WFC among Italian nurses, and showed that WFC is significantly associated with burnout, sleep problems and presenteeism (Camerino et al. 2010), as well as with job satisfaction and turnover intentions (Battistelli et al. 2013).

Regarding studies of WFE in healthcare organizations, Tummers and Den Dulk (2013) identified relatively high levels of WFE in a sample of Dutch midwives. The authors demonstrated that work alienation and work pressure negatively influence WFE. Russo and Bonocore (2012) examined the relationship between WFE and organizational- and professional-related outcomes, showing that high levels of WFE are related to lower intentions to leave the nursing profession.

**Perceived organizational support and work-family backlash**
In studies that have investigated the resources which can mitigate WFC or increase WFE, particular attention has been devoted to the formal and informal support that organizations can give their employees (Kossek et al. 2011). The term family-friendly is widely used to denote organizations that show they are supportive of employees’ need to accommodate work and family responsibilities by offering benefits to help them manage multiple life roles (Ghislieri & Colombo 2014).

A number of studies have emphasized the importance of supportive management in reducing WFC (Cortese et al. 2010). In their survey of hospital employees, Odle-Dusseau et al. (2012) found that WFE significantly mediated the relationships between family supportive supervisor behaviors on the one hand, and organizational commitment, intention to leave, and supervisor ratings of organizational support performance on the other hand.

A recent study by Lembrechts et al. (2014) carried out to identify possible antidotes to WFC among hospital nurses found that organizational support, lack of workload and the absence of overtime hours can reduce WFC, whereas the use of work–family policies does not.

A construct that has been widely used to determine whether an organization is generally supportive is POS. Eisenberger et al. (1986), in their first definition of POS, suggested that employees develop a general perception about the degree to which organizations appreciate their contributions and care about their well-being. POS “is also valued as assurance that aid will be available from the organization when it is needed to carry out one’s job effectively and to deal with stressful situations” (Rhoades & Eisenberger 2002, p. 698).

Several studies investigated the relationship between POS and the work-family interface, intended either as WFC or as WFE. Regarding conflict, to give some examples, Casper et al. (2002) found that POS lessens the harmful effects of WFC on commitment when WFC was bidirectional (i.e., when it was high in both directions). Dixon and Sagas (2007) found that WFC partially mediated the relationship between POS and job satisfaction. In a more recent
study, Gurbuz et al. (2012) confirm that POS has a negative relationship with WFC (measured with Netemeyer et al.’s scale, 1996), while role overload does not have a mediating effect on the relationship between POS and WFC.

Regarding enrichment, it has been investigated the buffer effect of POS on the relationship between job performance on the one hand, and both WFE and WFC on the other hand (Witt & Car slon 2006). McNall et al. (2011) found that POS has a strong positive relationship with WFE. Furthermore, in highly supportive work environments, individuals reported high WFE regardless of the dispositional dimension (i.e., core self-evaluations). However, when POS was low, individuals high in core self-evaluations reported higher WFE than those low in that dimension.

While organizational support has attracted growing attention in the scientific literature, few studies have addressed work-family backlash. This expression refers to the opposition, resentment, animosity or annoyance that workers perceive or receive from their supervisors or co-workers as a result of their efforts to balance their work and family lives or their use of family-friendly benefits (Korabik & Warner 2009, Colombo & Ghislieri 2014). Perceived work-family backlash influences WFC and WFE, with an effect opposite to that of POS. To date, few studies have addressed the possible impact of this variable on issues associated with work-life balance (Ricotta et al. 2011).

**Aim of the research**

On the basis of the scientific literature discussed above, this study tests the following hypotheses:

H1 *Job demands (H1a workload; H1b emotional dissonance) are positively related to WFC.*

H2 *Work-family backlash (H2a supervisor backlash; H2b co-worker backlash) is positively related to WFC.*

H3 *Job resources (POS) are negatively related to WFC.*
H4 Job demands (H4a workload; H4b emotional dissonance) are negatively related to WFE.

H5 Work-family backlash (H5a supervisor backlash; H5b co-worker backlash) is negatively related to WFE.

H6 Job resources (POS) are positively related to WFE.

Method

Participants and data collection procedures

Participants are nurses working in a hospital in the North of Italy. The organization is divided into four working areas: medicine, surgery, intensive care, and maternal and child health.

A self-reported questionnaire was sent to the 942 nurses working in the hospital. The overall response rate was 55.1%; this data is moderately low but is in line with other studies on nursing (VanGeest & Johnson 2011). After data cleaning, 500 respondents remained in the final sample.

The study was authorized by the hospital board of directors. Participants signed an informed consent form which the researchers distributed along with the questionnaires. To guarantee anonymity, respondents returned questionnaires in drop-boxes provided by hospital management. A cover letter attached to the questionnaire described the measures taken to guarantee anonymity, the voluntary participation, and provided guidelines for filling out the questionnaire.

Of the 500 respondents, 84.00% were women with an average age of 44.09 years (SD 7.06); 64.20% had a high school diploma, while 22.60% held a bachelor’s or master’s degree. Mean job tenure was 18.93 years (SD 9.56), and most respondents had a full-time job (82.20%) with an open-ended employment contract (96.00%) for about 35.01 hours per
week (SD 5.17). Regarding working areas, 35.10% of respondents worked in intensive care, 33.30% in medicine, 23.00% in surgery, and 8.60% in maternal and child health.

**Measures**

All the measures used in this study have been adapted in Italian and/or used in previous Italian studies.

*Work-family conflict* (WFC) was assessed with the Italian version (Colombo & Ghislieri 2008) of the five-item scale developed by Netemeyer et al. (1996) using a six-point frequency scale (1 = never, 6 = always). An example item is “The amount of time my job takes up makes it difficult to fulfill family responsibilities”. Cronbach’s alpha of this scale was .89.

*Work-family enrichment* (WFE) was measured using three items (Ghislieri et al. 2011). An example item is “At work I feel a sense of accomplishment and this helps me to be a better family member” (1 = strongly disagree, 5 = strongly agree). Cronbach’s alpha was .85

*Workload* was measured by four items taken from Bakker et al. (2004) and used in a previous Italian study (Molino et al. 2013). An example item is “How often do you have to work extra hard in order to reach a deadline?” (1 = never, 5 = always). Cronbach’s alpha was .79.

*Emotional dissonance* was assessed using four items (Zapf et al. 1999) used in a previous Italian study (Ghislieri et al. 2012). An example item is “Display positive emotions while feeling indifferent” (1 = never, 6 = always). Cronbach’s alpha was .84.

*Perceived organizational support* (POS) was assessed on a seven-point agree scale (1 = strongly disagree, 7 = strongly agree). Six items were used from an eight-item scale (Eisenberger et al. 1997; validated in Italian by Battistelli & Mariani 2011), because two of the original items presented lower correlations with the other items and would have
decreased Cronbach’s alpha. An example item is “My organization really cares about my well-being”. Cronbach’s alpha was .87.

Supervisor backlash was assessed using six items (Ricotta et al. 2011). An example item is “Supervisors make negative comments if someone benefits from tools aimed at supporting work-family balance” (1 = disagree, 4 = agree). Cronbach’s alpha was .91.

Co-worker backlash was assessed using six items (Ricotta et al. 2011). An example item is “Coworkers make negative comments if someone benefits from tools aimed at supporting work-family balance” (1 = disagree, 4 = agree). Cronbach’s alpha was .90.

Data analyses

Descriptive analyses, internal reliability of the scales and correlations between variables were calculated using the PASW 18 statistical package. The software was also used to test the relationship between the variables throughout hierarchical regression analyses.

Specifically, the following variables were entered in the regression analysis: 1) at the first step, gender and working hours, as control variables; 2) at the second step, workload and emotional dissonance as job demands that are the main predictors of WFC and that can also be important in the enrichment process (Grzywacz & Marks 2000, Tement & Korunka 2015); 3) at the third step, POS as a job resource based on positive work relationships, mainly associated with enrichment; 4) at the fourth step, work-family backlash, which is an innovative dimension and for this reason it would be interesting to observe its role separately from the other predictors; we thus expect a low but significant relationship with the considered outcomes.

Results

Table 1 shows descriptive statistics, reliability and correlations among all variables. Analysis shows positive correlations between WFC, job demands and backlash (especially supervisor backlash) and negative correlations between WFC and POS. WFC also presents a
low positive correlation with working hours per week. WFE shows negative correlations with job demands and backlash and positive correlation with POS.

_table 1 about here_

Table 2 shows results of hierarchical multiple regression. The model with WFC as dependent variable (corrected $R^2$ .19) shows no relations with sex and working hours per week at the first step. The job demands considered here show a positive relation with WFC, especially emotional dissonance, at the second step. POS has a negative relation with WFC at the third step, and at the fourth step only supervisor backlash has a positive relation with WFC; no relations were found with co-worker backlash.

The model with WFE as dependent variable (corrected $R^2$ .18) shows no relations with sex and working hours per week at the first step. At the second step, the two job demands considered have a similar negative low relation with WFE. POS has a positive high relation with WFE at the third step and, at the fourth step, no relations were found with work-family backlash.

_table 2 about here_

**Discussion**

The aim of this study was to explore how work relationships may interact with WFC and WFE in a sample of Italian nurses, with a particular focus on general POS and specific work-family backlash. The study also considered the relationships of WFC and WFE with two job demands, workload and emotional dissonance.

Regarding H1, results confirm that job demands are potential predictors of WFC, in line with other studies on this subject (O’Driscoll et al. 2006, van Veldhoven & Baijer 2012). In particular, emotional dissonance is important in work-to-family interactions: the effort involved in displaying emotions at work that differ from those that are really felt may cause
spillover effects in other life domains, confirming results that are also found for other professions (Emanuel et al. 2014).

H2 is partially confirmed. Results of multiple regression show that only supervisor backlash is related to WFC. It would thus appear that it is above all in the relationship with the supervisor that potentially problematic elements may arise when the need to balance work and family responsibilities is not given due consideration and attracts criticism and resentment, if not outright hostility (Korabik & Warner 2009, Colombo & Ghislieri 2014). Lastly, H3 is also confirmed: POS is negatively related to WFC (cf. Gurbuz et al. 2012).

Regarding WFE, H4 is confirmed: both the job demands (workload and emotional dissonance) are negatively related to WFE, in line with previous studies which found job demands as predictors of WFE in heterogeneous samples (Grzywacz & Marks 2000, Tement & Korunka 2015).

H5, on the other hand, is not confirmed: work-family backlash is not related to WFE. It thus seems that WFE is not affected by negative aspects of the relationship, but is heavily influenced by the support received in the organization. Few studies have considered this relationship so far, therefore this issue needs more investigation and discussion.

H6 is in fact confirmed: POS shows a strong, positive and significant relationship with WFE. This result is in line with the finding by McNall and colleagues (2011), who demonstrated that POS is a significant antecedent of WFE. Furthermore, the authors show that respondents who perceive high POS report higher levels of WFE regardless of other variables, such as the personality dimension of core self-evaluations. The latter variable, however, was significantly related to WFE at low and medium levels of POS. Since POS “serves an important socioemotional function” (Rhoades & Eisenberger 2002, p. 710) and has a strong positive relationship, for instance, with positive mood, we could hypothesize that this variable powers up the affective path to enrichment (Greenhaus & Powell 2006):
nurses who feel more supported by their organization perceive higher positive emotions toward their job which, in turn, allows them to perceive higher positive emotions in their family role.

**Conclusions**

The study addresses work-family balance in the nursing profession, considering both work-family conflict and work-family enrichment.

For WFC, the study confirms the important role of job demands, but also indicates that POS can have a direct impact on mitigating WFC (Gurbuz *et al.* 2012), whereas backlash, i.e., workers’ perception that supervisors resent their efforts to balance work and family life, can potentially intensify WFC.

Regarding WFE, the role of POS appears to be crucial (McNall *et al.* 2011): it seems to enable people to see their jobs as an experience that generates resources which can also improve the quality of personal and family life. Though the study did not compare this element with formal aspects and concrete solutions, it nevertheless pointed to the importance of perceptions about the quality of the support received from the organization.

The study is thus a contribution to the literature in this area, as few studies to date have considered both conflict and enrichment among Italian nurses. However, it also has certain limitations. First, participants were nurses at the same hospital: a comparison with other hospitals, and also other regions, would be advisable in future research. Moreover, it is also possible that our findings have been influenced by cultural characteristics that are specific to Italy. For this reason, it could be instructive to replicate the study in other cultural contexts. The cross-sectional research design relying on self-reported data, moreover, means that results may be affected by common method variance and an unequivocal interpretation of the causal relationships is thus not possible. Future work should combine self-reported data
with measures from other sources or other observers (e.g., supervisors and/or co-workers), as well as employ longitudinal designs.

Lastly, the relationships with supervisors and coworkers should be investigated in greater depth to determine how they are linked to work-family balance, and how they can both help and hinder it. Preliminary qualitative studies, particularly in-depth interviews, could also prove useful for this purpose.

**Implications for nursing management**

Action on the dimensions that the study found could mitigate work-family conflict and increase work-family enrichment (workload, emotional dissonance, supervisor backlash and perceived organizational support) should be taken at individual, team and organizational levels (see Table 3). Before describing these actions, it is important to underline that they do not always call for major financial outlays: targeted investments should also be made in initiatives focusing on the communicational, relational and cultural dimensions.

Actions at the individual level are mainly those aimed at reducing workload perceptions through the ability to manage the workload itself. The focus should be on perceptions, since reducing the quantity of work tasks is not really practicable nowadays, partly because of the hiring freeze caused by the contemporary economic crisis that increases duties, shifts and time pressure (Cortese 2013). In this regard, it is important to consider that having a higher autonomy and being more aware about their responsibilities, aims and priorities at work could help nurses in managing their job activities, decreasing workload perceptions (Zito et al. 2015).

Measures to reduce emotional dissonance can be taken at both individual and team level. In particular, the study’s findings indicate that it is essential to devote attention to the emotional commitment and demands of the hospital setting where nurses exercise their profession. Individual training initiatives designed to help nurses develop coping skills and
gain an appropriate emotional distance from their job could contribute to lightening this burden. For the same purpose, small group counselling for actual teams should make members capable of giving mutual support (Pizam 2004). In particular, this support could be achieved by providing an opportunity to express the discomfort related to emotional dissonance during interactions with colleagues, gaining relief.

At both individual and team level, measures can also be taken to reduce supervisor backlash. In this respect, some efforts must be made to raise awareness of this problem among nursing directors and head nurses to ensure that they are not perceived as obstacles to work-life balance – involuntary or otherwise – as a result of inadequate communication with the nurses they manage. It is thus important to help supervisors engage in supportive behaviors that can be conducive to a family-friendly culture and serve as an additional resource for increasing WFE (Molino et al. 2013). To this end, teamwork training initiatives could also be accompanied by individual counseling, coaching, and mentoring (Ghislieri & Gatti 2012).

Lastly, as far as the organizational level is concerned, introducing work-family benefits and ensuring that employees are aware of them can be useful in increasing perceived organizational support. This will entail providing information and training on work-family balance, through counselling groups or hot lines, and developing solutions targeted to employees’ expressed needs (Amstad et al. 2011).

*insert Table 3 about here*

**References**


Emanuel F., Molino M., Cortese C.G. & Ghislieri, C. (2014) Dalle richieste alle risorse lavorative per superare il conflitto lavoro-famiglia nei call center: differenze di genere [From work demands to work resources in order to overcome work-family conflict in call centres: gender differences]. *Counseling* 7 (3), 293–305.


Table 1. Item means, item standard deviations and correlations among the study variables.

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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<th>9</th>
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<tbody>
<tr>
<td>1. Sex (1 = F)</td>
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<tr>
<td>2. Working hours per week</td>
<td>35.01</td>
<td>5.17</td>
<td>-.22**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. WFC</td>
<td>17.76</td>
<td>5.95</td>
<td>.06</td>
<td>.10*</td>
<td>(.89)</td>
<td></td>
<td></td>
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<tr>
<td>4. WFE</td>
<td>8.39</td>
<td>2.98</td>
<td>.03</td>
<td>- .06</td>
<td>-.28**</td>
<td>(.85)</td>
<td></td>
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<tr>
<td>5. Workload</td>
<td>14.12</td>
<td>2.83</td>
<td>-.04</td>
<td>.08</td>
<td>.28**</td>
<td>-.21**</td>
<td>(.79)</td>
<td></td>
<td></td>
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<tr>
<td>6. Emotional dissonance</td>
<td>13.67</td>
<td>4.72</td>
<td>.03</td>
<td>.08</td>
<td>.36**</td>
<td>-.20**</td>
<td>.29**</td>
<td>(.84)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Supervisor backlash</td>
<td>13.38</td>
<td>5.22</td>
<td>.02</td>
<td>-.03</td>
<td>.30**</td>
<td>-.19**</td>
<td>.21**</td>
<td>.28**</td>
<td>(.91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Co-worker backlash</td>
<td>13.74</td>
<td>5.09</td>
<td>-.06</td>
<td>-.12*</td>
<td>.19**</td>
<td>-.09*</td>
<td>.05</td>
<td>.12**</td>
<td>.44**</td>
<td>(.90)</td>
<td></td>
</tr>
<tr>
<td>9. POS</td>
<td>20.62</td>
<td>7.86</td>
<td>.02</td>
<td>-.15**</td>
<td>-.28**</td>
<td>.36**</td>
<td>-.18**</td>
<td>-.19**</td>
<td>-.32**</td>
<td>-.14**</td>
<td>(.87)</td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01. Cronbach’s Alpha on the diagonal.
Table 2. Results of hierarchical regression; dependent variable = work-family conflict.

<table>
<thead>
<tr>
<th></th>
<th>WFC</th>
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<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
<td>Step 4</td>
<td></td>
</tr>
<tr>
<td>Sex (1 = F)</td>
<td>.04</td>
<td>.03</td>
<td>.03</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Working hours per week</td>
<td>.11</td>
<td>.05</td>
<td>.03</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Workload</td>
<td>–</td>
<td>.15**</td>
<td>.13**</td>
<td>.12*</td>
<td></td>
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<tr>
<td>Emotional dissonance</td>
<td>–</td>
<td>.29***</td>
<td>.25***</td>
<td>.22***</td>
<td></td>
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<tr>
<td>POS</td>
<td>–</td>
<td>–</td>
<td>-.18***</td>
<td>-.13*</td>
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<tr>
<td>Co-worker backlash</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Supervisor backlash</td>
<td>–</td>
<td>–</td>
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<td>.08</td>
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<td>$R^2$</td>
<td>.01</td>
<td>.13</td>
<td>.16</td>
<td>.19</td>
<td></td>
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<tr>
<td>$\Delta R^2$</td>
<td>.01</td>
<td>.12</td>
<td>.03</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>$\Delta F$</td>
<td>2.18</td>
<td>29.55***</td>
<td>13.41***</td>
<td>7.21**</td>
<td></td>
</tr>
</tbody>
</table>

|                | WFE                |          |          |          |          |
|                | Step 1             | Step 2   | Step 3   | Step 4   |          |
| Sex (1 = F)    | .04                | .05      | .04      | .04      |          |
| Working hours per week | -.09       | -.05     | -.01     | -.01     |          |
| Workload       | –                  | -.15**   | -.11*    | -.10*    |          |
| Emotional dissonance | –             | -.17**   | -.11*    | -.10*    |          |
| POS            | –                  | –        | .36***   | .34***   |          |
| Co-worker backlash | –               | –        | –        | -.04     |          |
| Supervisor backlash | –              | –        | –        | -.02     |          |
| $R^2$          | .01                | .07      | .18      | .18      |          |
| $\Delta R^2$  | .01                | .06      | .12      | .00      |          |
| $\Delta F$    | 2.16               | 14.00*** | 58.07*** | .55      |          |

*Note. * $p < .05$. ** $p < .01$. *** $p < .001$. N = 597. $R^2$ = R-squared. $\Delta R^2$ = delta R-squared. $\Delta F$ = delta F value.
Table 3. Three levels of nursing management interventions and related expected outcomes.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Target variables</th>
<th>Expected outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher autonomy in job activities</td>
<td>Decreasing workload perceptions</td>
<td>Decrease of WFC Increase of WFE</td>
</tr>
<tr>
<td>More awareness about own working priorities, tasks, and goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual training initiatives</td>
<td>Decreasing emotional dissonance</td>
<td>Decrease of WFC Increase of WFE</td>
</tr>
<tr>
<td>Counseling and coaching for nursing directors and head nurses</td>
<td>Decreasing supervisor backlash</td>
<td>Decrease of WFC</td>
</tr>
<tr>
<td><strong>Team level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamwork counseling</td>
<td>Decreasing emotional dissonance</td>
<td>Decrease of WFC Increase of WFE</td>
</tr>
<tr>
<td>Teamwork training initiatives</td>
<td>Decreasing supervisor backlash</td>
<td>Decrease of WFC</td>
</tr>
<tr>
<td><strong>Organizational level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introducing work-family benefits</td>
<td>Increasing POS</td>
<td>Decrease of WFC Increase of WFE</td>
</tr>
</tbody>
</table>