


Managerial style and well-being among psychiatric nurses: A prospective study

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Accessible summary

What is known on the subject?

- Numerous studies have shown that organizational and managerial factors have significant effects on nurses' workplace well-being.
- There are few studies on the effects of nurses' perceptions of their supervisors' autonomy-supportive behaviours on their workplace well-being.
- There are few studies on the determinants of nurses' workplace well-being within a psychiatric context.

What does this paper add to existing knowledge?

- This study examines the psychological processes underlying the relationship between nurses' perceptions of their supervisors' autonomy-supportive behaviours and their workplace well-being.
- Mental health nurses' perceptions of their supervisors' autonomy-supportive behaviours are indirectly and positively related to their workplace well-being through their positive effects on psychological need satisfaction.
- Autonomy and competence need satisfaction has stronger effects on workplace well-being than relatedness need satisfaction.

What are the implications for practice?

- When their supervisor gives nurses a meaningful rationale for tasks and acknowledges their feelings and views, they feel more autonomous, competent and related to others.
- It is important for nurses to feel autonomous and competent in order to experience well-being at work.
- Nurses' workplace well-being might be positively and negatively linked to quality of care and turnover intentions, respectively.

Abstract

Introduction: There is growing interest in the relationships between work factors and nurses' workplace well-being. However, there has been very little research on the psychological processes underlying the relationships between nurses' perceptions of supervisors' autonomy-supportive managerial style and their workplace well-being.

Aim/question: Drawing on self-determination theory, we explored the mediating role of psychological need satisfaction (autonomy, competence and relatedness) in the relationships between nurses' perceptions of supervisors' autonomy-supportive managerial style and their workplace well-being, using a prospective design.

Method: A prospective questionnaire was given to nurses in eight French psychiatric units. Data were collected from a sample of 294 French nurses who completed measures of perceived supervisors' autonomy-supportive behaviours at Time 1 and of psychological need satisfaction, work engagement and job satisfaction at Time 2 one year later.

Results: Results revealed that nurses' perceptions of supervisors' autonomy-supportive managerial style were indirectly and positively related to their vigour, dedication, absorption and job satisfaction one year later through their positive effects on psychological need satisfaction.

Discussion/implications for practice: Overall, this paper sheds light on the indirect effect of nurses' perceptions of supervisors' autonomy-supportive behaviours on their workplace well-being. Theoretical contributions and future directions, as well as implications for practice, are discussed.

KEYWORDS

job satisfaction, nursing, perceived supervisors' autonomy-supportive managerial style, psychological need satisfaction, work engagement

1 | INTRODUCTION

Nurses' well-being in the workplace has become a major issue in a context where western health organizations have been facing many challenges (e.g., large-scale organizational changes, austerity measures, inadequate staffing levels; Romppanen & Häggman-Laitila, 2017). In addition to the beneficial effects of high workplace well-being on nurses' mental health, it has been demonstrated that improving workplace well-being is related to better quality of care, as well as increased commitment to the organization and lower turnover rates (Almalki, Fitzgerald, & Clark, 2012). In the field of mental health nursing, identification of the specific factors associated with improved workplace well-being is all the more critical in that the work involves specific stressors (e.g., having to cope with violent and disruptive patients, especially in the context of scarce staff resources, dealing with difficult and challenging patient behaviour on a regular basis, difficulties in nurse relationships) and is associated with higher levels of stress and burnout than in other fields of nursing (Edwards, Burnard, Coyle, Fothergill, & Hannigan, 2000).

Over the years, various definitions of workplace well-being have been proposed, but it is generally recognized to be a complex multifaceted construct than can be studied through examination of work engagement and job satisfaction (Salanova et al., 2014). The present study focused on nurses' job satisfaction (i.e. the degree to which they enjoy their job or various facets of it, such as job design and incentives; Mueller & McCloskey, 1990) and work engagement

(i.e., a positive, fulfilling, work-related state of mind characterized by vigour, dedication and absorption; Schaufeli et al., 2002), which are widely recognized to be among the most important facets of nurses' workplace well-being, in terms of their impact at both the individual and the organizational levels (e.g., intention to leave the nursing profession, low quality of care; e.g., Van Bogaert, Wouters, Willems, Mondelaers, & Clarke, 2013). Numerous studies conducted over the last few decades have examined the social and intra-individual factors that may predict nurses' workplace well-being (e.g., Santos, Castanheira, Chambel, Amarante, & Costa, 2017). For instance, when nurses feel that their supervisor gives them a meaningful rationale for tasks, emphasizes choice rather than control and acknowledges their feelings and views (Deci, Connell, & Ryan, 1989), their job satisfaction is higher (Gillet, Colombat, Michinov, Pronost, & Fouquereau, 2013).

1.1 | Limitations of previous research

In the healthcare setting, the dominant approach has been to model simple sets of relationships whereby work-related factors are hypothesized to predict nurses' workplace well-being through unspecified or untested mechanisms. In psychiatry, nurses' workplace well-being has been found to be associated with lower occupational stress (Hamaideh, 2012) and higher perceived organizational support/justice (Brunault et al., 2014). However, one of the main limitations of these studies is their cross-sectional design, which does not

show the effects of organizational/managerial variables on nurses' workplace well-being over time. In addition, studies on the determinants of psychiatric nurses' job satisfaction and work engagement are scarce (Van Bogaert et al., 2013). Finally, although some key variables implicated in the development of nurses' workplace well-being have been identified, additional studies are needed to examine the underlying mechanisms. In line with these issues, we used a prospective design to examine the mediating role of autonomy, competence and relatedness need satisfaction (Ryan & Deci, 2000) in the relationships between nurses' perceptions of managerial style and their work engagement and job satisfaction.

1.2 | Rationale

It is important that a comprehensive assessment of work engagement should include the components of vigour, dedication and absorption (Schaufeli et al., 2002) and not only produce an overall score. Indeed, recent findings suggest that these three components of work engagement present theoretically meaningful and differentiated patterns of associations with a variety of external criteria (Gillet, Becker, Lafrenière, Huart, & Fouquereau, 2017). We conducted this research in France, where the mental health system has specific features, including organization on a geographical basis since 1960, a dramatic decrease in the number of beds in the late twentieth century and, as in other countries, staff shortages.

1.3 | Aims and objectives

We postulated that nurses' satisfaction of their psychological needs for autonomy, competence and relatedness at Time 2 would fully mediate the relationships between their perceptions of managerial style at Time 1 and their work engagement (i.e., vigour, dedication and absorption) as well as their job satisfaction at Time 2.

1.4 | Perceived managerial style, need satisfaction and workplace well-being

A number of empirical studies have shown that perceived managerial style is positively related to desirable outcomes such as performance and workplace well-being (Gillet, Colombat, et al., 2013; Gillet, Gagné, Sauvagère, & Fouquereau, 2013). Self-determination theory (SDT; Ryan & Deci, 2000) also highlights the psychological needs for autonomy (the need to experience a sense of volition and psychological freedom), competence (the need to feel effective when interacting with one's environment) and relatedness (the need to feel connected with others) as essential ingredients of individuals' optimal functioning. While it is recognized that an assessment of psychological need satisfaction should include autonomy, competence and relatedness (Bidee, Vantilborgh, Pepermans, Griep, & Hofmans, 2016), employees may experience their need satisfaction in a more holistic way, as a single overarching dimension (Huyghebaert et al., 2018). However, research has also revealed theoretically meaningful and differentiated relations between these three needs and a variety

of external criteria (Trépanier, Fernet, & Austin, 2016). For instance, Trépanier et al. (2016) showed that workplace bullying significantly and negatively predicted autonomy and competence need satisfaction, while the relationship between workplace bullying and relatedness need satisfaction was not significant.

Gillet, Colombat, et al. (2013) investigated the relationship between nurses' perceptions of managerial style and the satisfaction of their psychological needs for autonomy, competence and relatedness, but regrettably, they only established a link with nurses' overall need satisfaction, aggregating the three psychological needs. There is thus a need for empirical research to look beyond this global relationship and investigate nurses' perceptions of managerial style in greater depth. In line with past studies, it is likely that nurses' perceptions of managerial style are related positively to each of the three needs. Indeed, when nurses have a positive perception of managerial style, they may feel valued and appreciated, which may satisfy their need for relatedness. Similarly, they may feel that they are perceived as being able to help resolve problems with which they are directly involved. They may thus feel valued, and their need for competence will be met. Finally, their need for autonomy may be satisfied as they have some control over their work environment.

Moreover, there is now a sizeable body of research linking nurses' satisfaction of their psychological needs to their workplace well-being. For instance, nurses' need satisfaction has been positively related to work engagement (Gillet et al., 2015) and job satisfaction (Huyghebaert et al., 2018). However, these previous studies considered psychological need satisfaction as a unitary construct, without examining the specific effects of autonomy, competence and relatedness. Furthermore, they are often based on cross-sectional designs. Nevertheless, Kovjanic, Schuh, and Jonas (2013) showed that satisfaction of competence and relatedness needs has significant and positive effects on work engagement, unlike satisfaction of the need for autonomy. Prospective studies are thus clearly needed to examine the effects of each need separately, especially in the nursing context.

2 | METHOD

2.1 | Study design and sample

Data for this prospective study were collected through questionnaires at two time points over a one-year period. Nurses working in the eight French psychiatric hospitals that had agreed to take part in the study were invited to complete an online questionnaire. Participants completed one questionnaire (assessing perceived managerial style) between January 2015 and December 2015 (Time 1, $n = 548$), and they were invited to complete a second questionnaire (assessing need satisfaction, job satisfaction and work engagement) one year later (Time 2, $n = 294$).

2.2 | Data collection

Both the director and the health and safety committee of each hospital gave their written informed consent for participation in the

study. In the first assessment phase (Time 1), participants were recruited during three on-site visits per centre, with at least two investigators per visit. During these visits, the researchers met the nurses in their own work environment (without the managers) and gave a short presentation of the study to each team. In the second phase (Time 2, 1 year after Time 1), participants were asked to answer an online questionnaire sent via email. They were informed that participation was voluntary and that their responses would be anonymous. Each participant was given an identification code to enable researchers to match their responses at the two data collections. Each participant signed an informed consent form emphasizing the anonymous and voluntary nature of the study. We also told the participants that their responses would not be disclosed to the hospital or unit management staff. No incentive was offered to take part in the study. Finally, we informed the participants that a debriefing would be held in each hospital in 2019, after completion of the main statistical analyses.

3 | MATERIAL

3.1 | Perceived managerial style (Time 1)

Nurses' perceptions of managerial style ($\alpha = .97$ in this sample) were assessed with the scale developed by Gillet, Vallerand, Paty, Gobancé, and Berjot (2010), which was slightly adapted to the work context for the purposes of the present study (see also Gillet, Gagné, et al., 2013). For instance, the first item ("I feel that my coach provides me with choices, options, and opportunities about whether to do this sport activity") was modified ("I feel that my supervisor provides me with choices, options, and opportunities regarding my work"). This questionnaire is a 12-item self-report measure assessing the extent to which nurses perceive their supervisor to be autonomy-supportive (e.g., "I think that my supervisor understands why I choose to do this work"). Responses were given on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with high values reflecting a more positive perception of managerial style. Results of previous studies revealed adequate psychometric properties of the scale (e.g., $\alpha = .97$ in Gillet, Gagné, et al. (2013) study).

3.2 | Psychological need satisfaction (Time 2)

Nurses' satisfaction of their needs for competence (5 items; $\alpha = .81$ in this sample; e.g., "I often feel that I am very efficient at work"), autonomy (5 items; $\alpha = .84$ in this sample; e.g., "Generally, I feel free to express my ideas and opinions at work") and relatedness (5 items; $\alpha = .72$ in this sample; e.g., "I have a lot of sympathy for the people with whom I interact at work") was assessed with the Basic Psychological Needs in Sport Scale (Gillet, Rosnet, & Vallerand, 2008). The scale was modified in the present study to assess need satisfaction in the work domain (see also Gillet, Colombat, et al., 2013; Gillet, Fouquereau, Forest, Brunault, & Colombat, 2012). For instance, the item "I often feel that I am very efficient in my sport activity" was modified as follows: "I often feel that I am very efficient at work".

Participants rated their responses on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with high values indicating a higher level of autonomy, competence and relatedness need satisfaction. Previous investigations revealed adequate levels of internal consistency and satisfactory construct validity of this scale (e.g., $\alpha = .78$ for autonomy, $\alpha = .81$ for competence and $\alpha = .76$ for relatedness in Gillet et al.'s (2019) study).

3.3 | Work engagement (Time 2)

The Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006) was used to assess nurses' work engagement. This instrument includes three subscales assessing vigour (3 items; $\alpha = .78$ in this sample; e.g., "At work, I feel bursting with energy"), dedication (3 items; $\alpha = .81$ in this sample; e.g., "I am enthusiastic about my work") and absorption (3 items; $\alpha = .75$ in this sample; e.g., "I feel happy when I am working intensely"). These items were rated on a 7-point scale ranging from 0 (*never*) to 6 (*always*), with high values indicating a higher level of work engagement. Results of previous research show that this scale has adequate factorial structure and internal consistency (e.g., $\alpha = .87$ for vigour, $\alpha = .93$ for dedication and $\alpha = .87$ for absorption in Gillet et al.'s (2017) study).

3.4 | Job satisfaction (Time 2)

As in previous research (e.g., Gillet et al., 2012), job satisfaction was assessed with five items ($\alpha = .88$ in this sample; e.g., "My work conditions are excellent") adapted from the Satisfaction with Life Scale (Blais, Vallerand, Pelletier, & Brière, 1989; Diener, Emmons, Larsen, & Griffin, 1985). For instance, the third item ("I am satisfied with my life") was modified in the present study ("I am satisfied with my work"). Responses were made on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with high values indicating a higher level of job satisfaction. Previous studies provided evidence for the factorial structure and high internal reliability of the scale (e.g., $\alpha = .89$ in Gillet, Gagné, et al. (2013) study).

3.5 | Data analysis

We first used descriptive statistics (e.g., means and standard deviations) to characterize our sample. Student's *t* tests were also conducted to compare participants who took part solely in the first session (i.e., T1) with those who completed the questionnaires at both time points (i.e., T1-T2) and identify potential differences on the variables assessed in the present study. Furthermore, correlation analyses, using the statistical package SPSS, were used to examine the relationships between perceived managerial style at Time 1, psychological need satisfaction at Time 2, job satisfaction at Time 2 and work engagement reported at Time 2 (i.e., vigour, dedication and absorption). Finally, our proposed model was tested through structural equation modelling using Mplus 7.4 (Muthén & Muthén, 2015) and bootstrapping analyses were used to confirm the indirect effects (see the Results section for more details).

TABLE 1 Means, standard deviations and correlations between variables

Variable	M	SD	1	2	3	4	5	6	7	8
1. Perceived managerial style (T1)	4.86	1.33	-							
2. Autonomy need satisfaction (T2)	5.00	1.01	0.327	-						
3. Competence need satisfaction (T2)	5.13	0.79	0.255	0.638	-					
4. Relatedness need satisfaction (T2)	5.30	0.70	0.280	0.547	0.575	-				
5. Vigour (T2)	3.91	0.89	0.255	0.526	0.522	0.445	-			
6. Dedication (T2)	4.40	0.96	0.269	0.448	0.524	0.398	0.730	-		
7. Absorption (T2)	3.89	0.87	0.215	0.314	0.391	0.283	0.537	0.611	-	
8. Job satisfaction (T2)	4.31	1.30	0.231	0.654	0.542	0.435	0.604	0.601	0.356	-

Note: All correlations are significant ($p < .001$).

4 | RESULTS

4.1 | Descriptive statistics

A total of 548 French nurses were contacted in their own unit in 2015, and 410 agreed to participate in the study at Time 1 (participation rate was 74.8%). A total of 294 nurses returned their completed survey at both time points. Their average age was 37.63 years ($SD = 10.02$), 239 were women (81.3%), and 55 were men (18.7%). Participants' average tenure in psychiatric nursing was 10.35 years ($SD = 8.40$), and their average tenure in their current unit was 5.30 years ($SD = 6.26$). Among all respondents, 82.0% ($n = 241$) worked full time and 18.0% ($n = 53$) worked part time. Student's t tests revealed no significant differences between nurses who only completed the first questionnaire and those who completed the questionnaires at both time points regarding perceived managerial style ($M_{T1} = 4.89$, $SD_{T1} = 1.32$, $M_{T1-T2} = 4.86$, $SD_{T1-T2} = 1.33$; $t(722) = -0.21$, $p = .83$), age ($M_{T1} = 37.40$, $SD_{T1} = 10.27$, $M_{T1-T2} = 37.63$, $SD_{T1-T2} = 10.02$; $t(820) = 0.32$, $p = .75$), tenure in psychiatric nursing ($M_{T1} = 10.28$, $SD_{T1} = 8.84$, $M_{T1-T2} = 10.35$, $SD_{T1-T2} = 8.40$; $t(820) = 0.11$, $p = .92$), tenure in the current unit ($M_{T1} = 5.33$, $SD_{T1} = 6.48$, $M_{T1-T2} = 5.30$, $SD_{T1-T2} = 6.26$; $t(818) = -0.07$, $p = .94$) and gender ($t(820) = 0.73$, $p = .47$).

4.2 | Preliminary analyses

Correlation analyses (see Table 1) showed significant positive associations between perceived managerial style at Time 1 and autonomy ($r = .33$; $p < .001$), competence ($r = .26$; $p < .001$) and relatedness ($r = .28$; $p < .001$) need satisfaction at Time 2, and also job satisfaction ($r = .23$; $p < .001$), vigour ($r = .26$; $p < .001$), dedication ($r = .27$; $p < .001$) and absorption ($r = .22$; $p < .001$) at Time 2. Results also showed significant positive correlations between autonomy, competence and relatedness need satisfaction at Time 2 and job satisfaction (r s between = 0.44 and 0.65; $p < .001$), vigour (r s between = 0.45 and 0.53; $p < .001$), dedication (r s between = 0.40 and 0.52; $p < .001$)

and absorption (r s between = 0.28 and 0.39; $p < .001$) also at Time 2. These results provide preliminary support for our hypotheses.

4.3 | Structural equation modelling

The proposed model included eight latent variables and 43 indicators (items). Each latent variable had between three (vigour, dedication and absorption) and twelve (perceived managerial style) indicators. In line with our hypotheses, we tested the proposed model by including unidirectional paths between perceived managerial style and autonomy, competence and relatedness need satisfaction. We also specified links between these three needs and job satisfaction, vigour, dedication and absorption (see Figure 1). Finally, we controlled for the effects of nurses' tenure in psychiatric nursing and in their current unit on autonomy, competence and relatedness need satisfaction, as well as on work engagement (vigour, dedication and absorption) and job satisfaction. It is noteworthy that our model did not include paths from perceived managerial style to work engagement and job satisfaction, because, as mentioned above, we hypothesized that psychological need satisfaction would fully mediate the relationships between nurses' perceptions of managerial style and their work engagement as well as their job satisfaction.

This model with mediated effects of need satisfaction at Time 2 in the relationships between perceived managerial style at Time 1 and outcomes (job satisfaction, vigour, dedication and absorption at Time 2) showed a satisfactory fit to the data (Hu & Bentler, 1999): $\chi^2 = 1,435.27$, $df = 791$, $TLI = 0.92$, $CFI = 0.93$, $RMSEA = 0.05$ (0.05–0.06), $AIC = 1745.27$. All indicators were significantly related ($p < .001$) to their corresponding latent variables (loadings ranged between 0.41 and 0.94). Additionally, results revealed that perceived managerial style was positively related to autonomy ($\beta = .33$; $b = 0.38$; $SE = 0.07$; $p < .001$), competence ($\beta = .30$; $b = 0.16$; $SE = 0.04$; $p < .001$) and relatedness ($\beta = .30$; $b = 0.17$; $SE = 0.04$; $p < .001$) need satisfaction. Autonomy need satisfaction was also positively associated with job satisfaction ($\beta = .68$; $b = 0.81$; $SE = 0.14$; $p < .001$) and vigour ($\beta = .34$; $b = 0.20$; $SE = 0.08$; $p < .01$), but it was not

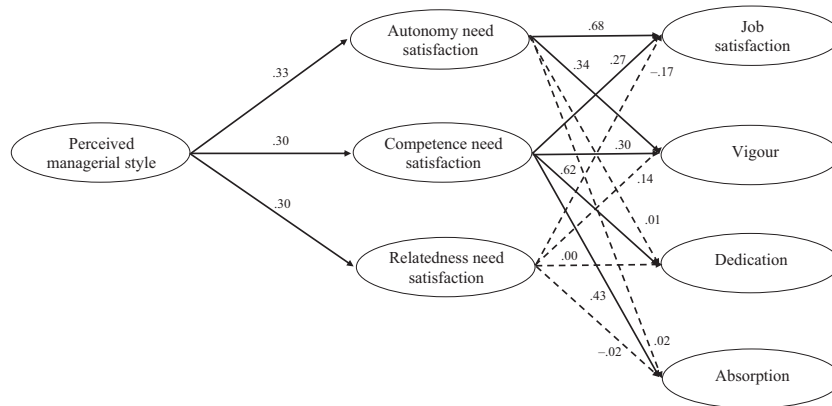


FIGURE 1 Results of structural equation modelling. Note. For clarity, neither the effects of tenure nor covariances and indicators (items) of the latent variables are presented. All relationships are significant at $p < .05$ except those with a dashed line

significantly related to dedication ($\beta = .01$; $b = 0.01$; $SE = 0.09$; $p = .91$) or absorption ($\beta = .02$; $b = .01$; $SE = 0.05$; $p = .88$). Competence need satisfaction was positively associated with job satisfaction ($\beta = .27$; $b = 0.73$; $SE = 0.27$; $p < .01$), vigour ($\beta = .30$; $b = 0.40$; $SE = 0.16$; $p < .05$), dedication ($\beta = .62$; $b = 1.13$; $SE = 0.24$; $p < .001$) and absorption ($\beta = .43$; $b = 0.35$; $SE = 0.12$; $p < .01$). Relatedness need satisfaction was not significantly associated with job satisfaction ($\beta = -.17$; $b = -0.40$; $SE = 0.23$; $p = .08$), vigour ($\beta = .14$; $b = 0.16$; $SE = 0.14$; $p = .23$), dedication ($\beta = .00$; $b = 0.00$; $SE = 0.17$; $p = 1.00$) or absorption ($\beta = -.02$; $b = -0.02$; $SE = 0.09$; $p = .86$). Finally, tenure in the current unit only had a significant effect on vigour ($\beta = .14$; $b = 0.02$; $SE = 0.01$; $p < .05$), while tenure in psychiatric nursing had a significant effect on vigour ($\beta = -.21$; $b = -0.02$; $SE = 0.01$; $p < .01$), dedication ($\beta = -.15$; $b = -0.02$; $SE = 0.01$; $p < .05$) and absorption ($\beta = -.24$; $b = -0.01$; $SE = 0.00$; $p < .01$).

We also tested a mediation model with direct effects between perceived managerial style at Time 1 and outcomes (job satisfaction, vigour, dedication and absorption at Time 2). Links were also specified between perceived managerial style at Time 1 and need satisfaction at Time 2, and also between need satisfaction at Time 2 and job satisfaction, vigour, dedication and absorption at Time 2. This mediation model with direct and indirect effects did not provide better fit indices ($\chi^2 = 1,431.84$, $df = 787$, $TLI = 0.92$, $CFI = 0.93$, $RMSEA = 0.05$ (0.05–0.06), $AIC = 1749.84$) than the previously reported model that included only indirect effects. To compare these two models, we used the Akaike information criterion (AIC). The model providing the best fit is represented by the lowest value on this index (Bozdogan & Ramirez, 1987). Moreover, the direct effects of perceived managerial style on job satisfaction, vigour, dedication and absorption were not significant ($p > .05$). In sum, as indicated by its lower AIC value, the proposed model including indirect effects provided a better fit than the mediation model with direct effects.

Bootstrapping analyses (see Preacher & Hayes, 2008) were then conducted, on the proposed model, to confirm the mediating role of autonomy, competence and relatedness need satisfaction in the relationships between perceived managerial style and job satisfaction, vigour, dedication and absorption. The indirect effects were tested with 90% confidence intervals computed from 10,000 bootstrap samples. Results confirmed the indirect effects of

perceived managerial style on vigour through autonomy ($b = 0.18$; $CI = [0.06-0.33]$; $p < .05$) and competence ($b = 0.41$; $CI = [0.10-0.75]$; $p < .05$) need satisfaction, the indirect effects of perceived managerial style on absorption ($b = 0.36$; $CI = [0.16-0.64]$; $p < .01$) and dedication ($b = 1.12$; $CI = [0.74-1.76]$; $p < .01$) through competence need satisfaction and the indirect effects of perceived managerial style on job satisfaction through autonomy ($b = 0.79$; $CI = [0.57-1.06]$; $p < .01$) and competence ($b = 0.78$; $CI = [0.21-1.36]$; $p < .05$) need satisfaction.

5 | DISCUSSION

This study aimed to explore the indirect effects over time of nurses' perceptions of managerial style on their job satisfaction and work engagement (i.e. vigour, dedication and absorption) through their autonomy, competence and relatedness need satisfaction. Our findings confirm that nurses' perceptions of managerial style had a positive effect on satisfaction of their psychological needs for autonomy, competence and relatedness one year later. In turn, autonomy need satisfaction had positive effects on job satisfaction and vigour, while competence need satisfaction had positive effects on job satisfaction, vigour, dedication and absorption. By contrast, relatedness need satisfaction had no significant effect on these outcomes. These findings indicate that the perception of managerial style is a valuable lever to facilitate nurses' need satisfaction over time and thus enhances their workplace well-being.

5.1 | What the study adds to the existing literature

Our research contributes to the literature by identifying a mechanism (psychological need satisfaction) that explains the effects of nurses' perceived managerial style on their workplace well-being over time. Specifically, when supervisors give nurses a meaningful rationale for carrying out tasks, emphasize choice rather than control and acknowledge their feelings and views (Deci et al., 1989), they satisfy the nurses' psychological needs and give them the essential ingredients for optimal functioning, leading to higher levels of workplace well-being. These results provide further support for

SDT in organizations (Gagné & Deci, 2005), and more specifically in the nursing context (Gillet, Colombat, et al., 2013), by showing that need satisfaction is a crucial factor explaining the effects of managerial approaches on positive individual outcomes (job satisfaction and work engagement). More generally, our findings fill a gap in the research on need satisfaction in the nursing domain (Trépanier et al., 2016), and, to the best of our knowledge, they are the first to demonstrate these effects in psychiatry. This study also extends research using cross-sectional designs to analyse the links between managerial interventions and nurses' need satisfaction (Gillet, Colombat, et al., 2013). Our research thus offers additional insight into the prospective relationships between these dimensions.

However, it is noteworthy that satisfaction of the need for competence, in contrast to relatedness, predicted the four outcomes (job satisfaction, vigour, dedication and absorption), while autonomy need satisfaction predicted job satisfaction and vigour. The current findings do not corroborate Ryan and Deci's (2000) observation that autonomy is the most salient and the most influential of the three psychological needs. By contrast, our finding that competence need satisfaction is positively associated with all four outcomes is consistent with recent SDT studies showing that competence need satisfaction is associated with higher task performance (Greguras & Diefendorff, 2009). Our findings thus provide an interesting implication for SDT by demonstrating that the need for competence plays a more central role than initially postulated in previous research (Ryan & Deci, 2000). More generally, as postulated by Ryan and Deci (2000), autonomy and competence need satisfaction has stronger effects on work engagement and job satisfaction than relatedness need satisfaction.

5.2 | Limitations and future directions

Although the present research contributes to a better understanding of the indirect effects of nurses' perceptions of managerial style on their workplace well-being through psychological need satisfaction, it has some limitations. First, it only examined a positive set of outcomes associated with perceived managerial style and did not include negative consequences (e.g., work-family conflict, burnout, turnover). By including such indicators, future research could provide a more comprehensive understanding of nurses' psychological health, attitudes and behaviours. Second, it would be interesting to examine the role of need thwarting in the relationship between perceived managerial style and negative outcomes. Indeed, previous research in the work context has shown that need satisfaction and thwarting are two separate psychological experiences that can have common antecedents (e.g., perceived management style) but have different consequences over time (e.g., Huyghebaert et al., 2018). More generally, it would be interesting to examine whether other mechanisms are involved in the relationship between nurses' perceptions of managerial style and their workplace well- and ill-being. A third limitation of this study pertains to the specific context of the French mental health service. Our hypotheses should thus be tested in other countries before extrapolating the validity of our findings

to mental healthcare settings with different cultural backgrounds. Finally, this study was conducted with a relatively small sample and relied on various scales adapted to the work domain. Our findings should thus be replicated with a larger number of nurses and different scales.

5.3 | Implications for practice

While our results suggest avenues for future research, they also have some valuable implications for organizations and practitioners wishing to increase the workplace well-being of mental health nurses. In particular, they highlight the importance of promoting autonomy-supportive behaviours. In other words, supervisors should increase the extent to which they accept the nurses' views, and encourage choice and self-regulation. This seems particularly relevant in the field of mental health, where nurses are faced with situations that are related to interpersonal stressors (e.g., working with patients with psychiatric disorders, which can affect their capacity to interact properly with their peers). Interestingly, previous intervention studies found that supervisors can learn how to become more autonomy-supportive in their interactions with others (e.g., Reeve & Jang, 2006). For instance, Hardré and Reeve (2009) showed that supervisors who received training on how to be more autonomy-supportive with their employees displayed more autonomy-supportive behaviours than non-trained supervisors in a control group. Moreover, participants in the experimental group had higher levels of autonomous motivation and were more engaged in their work than those in the control group.

Another important implication of our results is the demonstration of the indirect effects of perceived managerial style on job satisfaction through competence need satisfaction. Working in psychiatry involves specific skills, notably interpersonal: patients with psychiatric disorders can experience severe interpersonal difficulties, sometimes leading to agitation or violent acts that might undermine the nurses' motivation to work in this field. We can assume that the nurses' supervisors might act as a role model (Bandura, 1977): by recognizing and meeting the nurses' psychological needs, they may help the nurses to do likewise with their patients, thereby increasing their level of competence need satisfaction, well-being and motivation. More generally, nurses with high levels of workplace well-being are more likely to perform extra-role behaviours at work (Tsai & Wu, 2010) and display high levels of organizational commitment (Chang, 2015). Workplace well-being is also positively related to the amount of effort and time exerted during work hours (Boamah, Read, & Laschinger, 2017). Nurses experiencing high levels of workplace well-being may thus strongly adhere to policies and procedures that have significant and positive effects on patient care.

6 | RELEVANCE STATEMENT

This paper is the first to demonstrate (using a prospective study) that mental health nurses' perceptions of how their manager values and

supports their autonomy (hereafter referred to as managerial style) are positively related to psychological need satisfaction at work, which in turn improve nurses' workplace well-being. This paper paves the way for future interventional studies that may improve nurses' workplace well-being by targeting these specific managerial factors. Our results also suggest that improving the well-being of mental health nurses at work could enhance the quality of patient care in psychiatric settings and decrease nurses' turnover intentions.

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ETHICAL APPROVAL

Prior to the work, this study was approved by the Institutional Review Board of the University Hospital of Tours, France (IRB number: 2014-002), and the CNIL (French Data Protection Authority responsible for ensuring compliance with the provisions of the French Data Protection and Freedom Act). The research was also conducted in accordance with the Helsinki Declaration, as revised in 1989.

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