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ORIGINAL ARTICLE

The Effect of Compulsory Citizenship Behaviors on Subjective Vitality Among Nurses

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ABSTRACT

Aim: The study aims to assess the extent of compulsory citizenship behaviors (CCBs) and their impact on the nurses' subjective vitality based on self-determination theory.

Background: CCBs are harmful to both nurses and organizations. These behaviors mean employees are expected to perform additional tasks outside their job descriptions. Although CCBs are highlighted within the recent nursing literature, empirical evidence of their effects is lacking.

Methods: This is descriptive cross-sectional research. The study included 244 staff nurses using a convenience sampling method who worked in two hospitals in Istanbul. Data were collected via a survey consisting of a personal information form, the compulsory citizenship scale, and the subjective vitality scale. STROBE guidelines were followed when reporting the study. Descriptive statistical analyses, independent samples *t*-test, one-way ANOVA test, Pearson's correlation, and hierarchical simple linear regression analyses were used.

Results: The participants' mean scores for compulsory citizenship and subjective vitality were 3.34 out of 5 (SD = 1.05) and 4.15 out of 7 (SD = 1.36), respectively. Nurses' compulsory citizenship scores significantly differed according to their education level, income, and sector. Their subjective vitality scores statistically differed according to their income levels. Regression analysis revealed that CCBs were significant negative predictors of subjective vitality ($\beta = -0.22$, $p < 0.01$).

Conclusion: By examining the CCBs and subjective vitality relationship, the current study extended the existing knowledge by drawing attention to the destructive and harmful effects of CCBs on positive psychological sources of nurses' subjective vitality. CCBs negatively predicted subjective vitality.

Clinical Relevance: Organizational factors such as CCBs, which leads to a lack of autonomy, affect nurses' well-being, thus affecting care quality and patient safety. As the International Council of Nurses mentioned, "Nurses cope with many physical, mental, emotional, and ethical challenges. It is essential that we address these challenges in a way that supports their overall health". In this regard, managers and policymakers in hospitals should develop preventive cautions for CCBs. However, in-service training activities should be carried out to increase awareness about the harmful effects of CCBs on nurses' psychological well-being.

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1 | Introduction

Healthcare facilities have become challenging work environments for several reasons. These include innovations, technological advancements, growing economic pressures, hospital and health service restructuring, shortages of qualified nurses, changes in work procedures, and increased competition among healthcare facilities (Scheffler and Arnold 2019). These issues pose difficulties for both healthcare facilities and professionals, particularly nurses. Furthermore, the qualifications required for nurses are becoming increasingly complex and specialized (Burke et al. 2015). Also, the nursing shortage inevitably leads to heightened work demands for staff nurses. Recent research has highlighted that this shortage has reached a crisis level, posing a significant threat to global healthcare systems (Catton 2022; Rosser 2022). Additionally, unforeseen circumstances such as the COVID-19 pandemic have further exacerbated the working conditions for healthcare professionals (Flaubert et al. 2021; Shoja et al. 2020).

While the relevant literature emphasizes these above-mentioned problems and limitations, the well-being of nurses has also gained importance in parallel with these issues (Flaubert et al. 2021). Accordingly, recent updates in the healthcare sector have identified various negative research topics in the nursing management literature like CCBs that affect nurses' well-being (Li et al. 2025; Yildiz et al. 2023; Yildiz and Elibol 2021; Unaldi Baydin et al. 2020). CCBs refer to the expectation that employees perform additional tasks beyond their job descriptions (E. Vigoda-Gadot 2007). The same source also noted that CCBs occur when employees face social pressure from peers or when company directors exert pressure on managers to undertake roles involving different responsibilities. Based on these arguments, it is evident that CCBs arise when employees are compelled to perform tasks due to pressure from managers or other authority figures. Although the conceptual definition of CCBs was made very clearly by E. R. A. N. Vigoda-Gadot (2006); E. Vigoda-Gadot (2007), they have some similarities with organizational citizenship behaviors (OCB) in terms of exceeding formal job descriptions. Therefore, it is useful to re-express the distinction between these two concepts. First, the most fundamental distinction between these two concepts arises from the principle of voluntariness. Therefore, while CCB refers to going beyond the job description without the employee's consent, OCB refers to the employee voluntarily going beyond the job description. Supporting this notion, E. R. A. N. Vigoda-Gadot (2006) highlighted the critical distinction between CCBs and OCBs, stating that CCBs involve coerced behaviors resulting from internal organizational pressures, whereas OCBs are voluntary in nature. Thus, in CCBs, tasks are not part of employees' regular duties, they feel obligated to carry them out. Furthermore, managers and/or peers expect employees to perform these tasks without receiving compensation such as awards or promotions (Liu et al. 2017).

A recent meta-analysis on CCBs has indicated that CCBs positively and significantly correlate with citizenship pressure, anger toward the organization, work alienation, and job stress as emotional variables (Yildiz et al. 2023). Studies also have found that CCBs may result in physiological and psychological overloads, prompting work-related stress (Unaldi Baydin et al. 2020), turnover intention, and social loafing in nurses (Yildiz and Elibol 2021). When we look at the issue from a nursing management perspective, although the recent nursing management literature has paid increasing attention to CCBs (Unaldi Baydin et al. 2020; Yildiz and Elibol 2021; Yildiz 2022), interestingly, empirical studies that uncover the destructive nature of these behaviors are limited. Existing studies have demonstrated the destructive effects of CCB behaviors in the nursing field, showing a positive and significant association with nurses' silence (Li et al. 2025), job stress (Unaldi Baydin et al. 2020), turnover intention and social loafing (Yildiz and Elibol 2021), job dissatisfaction (Boztilki et al. 2021), and anger toward organization and moral disengagement (Yildiz et al. 2022). Considering the above findings, while previous research has revealed that CCBs have negative effects on the cognitive (e.g., moral disengagement), emotional (e.g., anger toward an organization, job stress), dispositional (e.g., turnover intention), attitudinal (e.g., job dissatisfaction), and behavioral (e.g., social loafing, employee silence) outcomes of nurses, their relationship with subjective well-being—a vital component of nurses' overall psychological and mental health—remains underexplored.

The concept of vitality is divided into two sub-groups: objective and subjective vitality. In comparison, objective vitality refers to three actual and measurable socio-structural variables: demographics, status, and institutional support (Dragojevic et al. 2018). Ryan and Frederick (1997) defined subjective vitality as organismic well-being that varies according to the individual's psychological and somatic factors and affects the current life energy of an individual. While objective or "realistic" vitality is a stable phenomenon in a specific context, subjective vitality is a perception-based phenomenon that can vary across individuals in both its intensity and direction (Dragojevic et al. 2018). Such variation in subjective vitality represents a source of variance (Yagmur and Akinci 2003). In explaining the variance of subjective vitality, we focused on predicting subjective vitality with CCBs as a predictor variable.

Subjective vitality is also defined as an individual's conscious experience of energy and well-being (Ryan and Deci 2008). According to this view, it is regarded as a source of happiness and psychological well-being because it induces a feeling of energy and vitality (Ryan and Deci 2008). Vitality entails a specific psychological process of ensuring enthusiasm. Individuals' experiences of vitality may vary as a function of both physical influences and psychological factors (Blanco-Donoso et al. 2021).

Recent studies examining the organizational domain of subjective vitality concluded that high levels of subjective vitality are associated with positive outcomes such as organizational citizenship behaviors (Spanouli and Hofmans 2020) and goal attainment (Rodríguez-Carvajal et al. 2019). These studies also found that life satisfaction serves as a source of subjective vitality that induces subjective happiness (Uysal et al. 2014). While subjective vitality plays a source role in the appearance of positive outcomes, studies also have indicated that some factors affect subjective vitality negatively, such as stress (Satici 2020), neuroticism (Ryan and Frederick 1997), burnout (Elci et al. 2018), and negative effects (Ryan and Frederick 1997). Considering these findings, it is evident that subjective vitality is a positive and

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essential source of an individual's overall subjective well-being (Muyan-Yılık and Bakalım 2022; Mozdeh and Namani 2021; Uysal et al. 2014).

According to Ryan and Frederick (1997), subjective vitality denotes the sensation of being alive, invigorated, and cognitively attentive. It encompasses both physical and psychological well-being, rendering it a crucial element in high-stress occupations like nursing, where continuous energy and motivation are vital for patient care. Surprisingly, despite its growing importance, there has been limited scientific effort to assess the relationship between workplace stressors and subjective vitality (Saad et al. 2024; Katana et al. 2019; Oates 2016). Further, to our knowledge, no studies have investigated the direct relationship between CCBs and subjective vitality in the nursing management literature. The existence of this gap is especially troubling because a decrease in one's subjective vitality may cause burnout (Parmar et al. 2022; Elci et al. 2018; Maslach et al. 2001), poor patient care quality (Arshad et al. 2024; Hemsworth et al. 2020) and high-level turnover rates (Parmar et al. 2022; Elci et al. 2018). To provide high-quality patient care services and ensure a sustainable patient-centered approach, the presence of psychologically healthy and happy nursing services is essential (Catton 2022). Consequently, addressing the gap mentioned above is crucial for the overall well-being of nurses.

The existing research often focused on organizational outcomes (e.g., turnover intention, job dissatisfaction, social loafing, anger toward the organization) instead of the individual-level outcomes that directly influence nurses' well-being. Examining the relationship between CCBs and subjective vitality in nursing management is essential for a comprehensive knowledge of how CCBs impact not just organizational factors but also the personal lives and well-being of nursing professionals. Moreover, examining the interplay of these characteristics with subjective vitality might guide treatments designed to improve nurses' mental health and work satisfaction, therefore satisfying both organizational and individual requirements.

The International Council of Nurses (ICN) stated that the theme for International Nurses Day 2022 was "Nurses: A Voice to Lead—Invest in Nursing and respect rights to secure global health" (ICN 2022). In 2025, the theme shifts focus to the health and well-being of nurses. It highlights the vital importance of a healthy nursing workforce in strengthening economies, enhancing health systems, and achieving improved global community outcomes. Consistent with ICN's theme, nurses' voluntary behaviors are related to their psychological well-being and the sustainability of global health. Because CCBs limit the free will of nurses, the study's timing overlaps with the ICN themes. Thus, investing in nurses' well-being and respecting their rights is highly important to provide a secure and healthy work environment. In this regard, the aim of this study is to assess levels of CCBs and subjective vitality among nurses working in hospitals. With this study, we aim to expand the existing body of knowledge regarding the consequences of CCBs. More specifically, the potential contributions of this study are as follows: (a) it contributes the arising awareness of the negative effects of CCBs on subjective vitality in the healthcare setting, and (b) it provides a piece of empirical evidence for policymakers and nurse managers to formulate preventive strategies in managing CCBs.

2 | Theoretical Background

The relationship between CCBs and subjective vitality can be framed according to self-determination theory (Ryan and Deci 2000). This theory suggests that three factors contribute to individuals' psychological well-being: autonomy, relatedness, and competence (Ryan and Deci 2002). When present, these factors positively affect individuals' psychological well-being, and their absence causes dissatisfaction. According to past studies, CCBs are negatively associated with autonomy (Liu et al. 2017; E. Vigoda-Gadot 2007). In other words, exposure to these behaviors could restrict autonomy. Supporting this notion, Sheldon et al. assert that reduced autonomy inhibits individuals' sense of competence (Tummers et al. 2018). The reduced autonomy negatively affects individuals' subjective vitality (Muraven et al. 2008). Further, task communication between managers and employees could be stronger when managers or other authorities are not concerned about the free will of employees (Tummers et al. 2018) about CCBs. Considering that subjective vitality has a positive relationship with psychological well-being (Arslan 2021; Elci et al. 2018) and that CCBs harm individuals' psychological well-being (Yildiz and Elibol 2021), we posit that exposure to demonstrations of CCBs could result in reduced subjective vitality in Turkish nurses. Furthermore, according to indicators of Sustainable Development Goals, Turkiye's subjective well-being level is extremely low, and it is 4.37/10, the lowest score so far (Sachs et al. 2021).

In this study, we used self-determination theory as an umbrella lens to explain why CCBs may be one of the negative antecedents of subjective vitality. Based on the SDT and arguments above, the following hypothesis was developed:

Hypothesis 1. *CCBs negatively affect the subjective vitality of nurses.*

3 | Methods

3.1 | Design

It was a descriptive and cross-sectional study.

3.2 | Setting and Participants

Participants were working at two hospitals (one public and one private) located on the European side of Istanbul. Both hospitals were general healthcare institutions with inpatient and outpatient clinics. The inclusion criteria for participation were as follows: (1) employment as a staff nurse at one of the selected hospitals, (2) having at least 1 year of work experience, (3) having been working in the same institution for the last 6 months, (4) working with the same manager/supervisor for the last 6 months.

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3.3 | Sample

The study used a convenience sampling method. A total of 524 nurses were identified, including 376 from a public hospital and 148 from a private hospital. The authors aimed to reach all nurses who met the study's inclusion criteria. Data were collected from those who provided informed consent and completed the survey appropriately. Ultimately, the final sample comprised 280 clinical nurses, representing 53.4% of the target population. After calculating the Mahalanobis distance, 36 surveys were determined as outliers and were excluded from the study. Therefore, we analyzed this study's 244 valid surveys.

This sample size was adequate, with a confidence level of 85% and a margin of error of 6.15%. The "pwr" package in the R statistical language (Champely 2020) was employed to assess the robustness of the sample size adequacy. The significance level for the power statistics was set at 0.05, and both the correlation coefficient and the sample size were inputted into the equation using a two-tailed sample. According to Cohen's (1988) effect size classification, which includes small ($d = 0.2$), medium ($d = 0.5$), and large ($d \geq 0.8$) effect sizes, the power of the sample size in this study was calculated as $d = 0.80$, indicating a large study sample size (Champely 2020; Cohen 1988).

3.4 | Instruments

It was an online survey with 18 items subdivided into three sections: the personal information form, the Compulsory Citizenship Scale, and the Subjective Vitality Scale. The personal information form covered the demographic characteristics of the sample population, notably age, gender, level of education, marital status, level of income, sector, working shift, and job experience.

3.4.1 | Compulsory Citizenship Scale

The Compulsory Citizenship Scale was developed by E. Vigoda-Gadot (2007). It was a one-dimensional tool consisting of 5 Likert items. Response categories varied from 1 = *strongly disagree* to 5 = *strongly agree*. Turkish adaptation of the scale was performed by Yildiz et al. (2022). A sample item was: "There is social pressure in my hospital to work extra hours beyond the formal workload and without any formal rewards." The scale score ranged between 1 and 5 points, in line with the total item mean scores. Higher scores indicated a higher level of CCBs.

3.4.2 | Subjective Vitality Scale

It was a 7-point Likert-type scale developed by Ryan and Frederick (1997). Response categories varied from 1 = *not true* to 7 = *very true*. Elci et al. (2018) adapted the tool to Turkish. *The* Subjective A sample item was: "Sometimes I feel so alive I just want to burst!" The scale score ranged between 1 and 7 points, in line with the total item mean scores. Higher scores indicated a higher level of subjective vitality.

3.5 | Data Collection

Data were collected via an online survey form between February and May 2021. The authors shared the forms with the head nurses of these two hospitals. The survey link was shared in WhatsApp groups of nurses from these hospitals. The groups used for distribution consisted exclusively of registered nurses. At the beginning of the form, there was an explanation and an informed consent form before each participant completed the questionnaire. Specifically, the first page of the online questionnaire included a short screening and confirmation statement to ensure participants self-verified their eligibility, (1) being a currently employed nurse in the targeted two hospitals, and (2) previously exposed to the CCBs (after providing a brief definition of CCBs). The nurses who agreed to participate in the research clicked the "yes" button, and then they could see the survey form.

3.6 | Data Analysis

The study was analyzed using the R statistical language. R is increasingly being applied to analyze scientific data in nursing management literature (Stiglic et al. 2019; Yildiz 2022). Therefore, we analyzed data in the *R* environment using specific packages: "pwr" (Champely 2020), "psych" (Revelle 2025), "lavaan" (Rosseel 2012) "haven" (Wickham et al. 2023). We analyzed descriptive statistics (means and standard deviations), difference tests (independent sample *t*-test, one-way ANOVAs, and the *F*-test), and performed Pearson's correlation and hierarchical linear regression analyses to give a response to the research question.

3.7 | Validity, Reliability, and Rigor

The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist was used to guide the reporting of the study. In addition, all scales validated that were used before by healthcare professionals. To test construct validity, exploratory factor analysis (EFA) was conducted. The results of the EFA showed that the sample adequacy was acceptable, exceeding the recommended value of 0.50 (KMO = 0.85; Chi-square = 2129.885 (55), $p < 0.001$). Accordingly, the analysis revealed that total variance explained was 73.7% (CCBs accounted for 37.7% of the variance and subjective vitality accounted for 38%). Following the EFA, confirmatory factor analysis (CFA) was conducted to test whether the data fit the hypothesized measurement model. The results of the CFA indicated a close fit between the data and the proposed theoretical model (Chi-square = 81.855, df = 40, $p < 0.001$). The model fit indices indicated a good fit between the model and the data (GFI = 0.94, AGFI = 0.91, NFI = 0.96, CFI = 0.98, TLI = 0.97, RMSEA = 0.06, SRMR = 0.05) (Hair et al. 2019). Detailed information on the construct, convergent, and discriminant validity, as well as construct reliability coefficients (Cronbach's alpha and composite reliability), is presented in Table 1.

As shown in Table 1, following the confirmatory factor analysis, we assessed the reliability and validity of the constructs, namely CCBs and subjective vitality. First, as suggested by

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TABLE 1 | Reliability and validity results.

Constructs	Factor loadings	Mean	SD	Cronbach's alpha	CR	AVE	MSV
CCBs	0.69–0.94	3.34	0.47	0.93	0.88	0.70	0.02
SV	0.69–0.88	4.15	0.89	0.91	0.89	0.62	0.02

Abbreviations: AVE, average variance extracted; CCBs, compulsory citizenship behaviors, CR, composite reliability, MSV, maximum shared variance; SV, subjective vitality, SD, standard deviation.

Hair et al. (2019), all item factor loadings exceed the recommended threshold of 0.50, and the average variance extracted (AVE) values for each construct are also above 0.50, indicating a good convergent validity for each construct. Similarly, as presented in Table 1, AVE values are higher than the maximum shared variance (MSV), indicating that discriminant validity was achieved. Lastly, composite reliability and Cronbach's alpha reliability values are above the suggested reference value of 0.70, indicating that each construct is reliable (Cronbach 1951).

4 | Results

4.1 | Participants' Characteristics and Descriptive Statistics of Study Variables

A total of 244 valid questionnaires were analyzed in this research. Among the 244 nurses, most of their age range was between 20 and 29 years (56.1%), most of them were female (85.7%), were single (60.7%), had bachelor's degrees (53.3%), worked in the public hospital (79.9%), worked in mixed shift (50.8%), had a middle-income level (55.8%), and had 1–5 years of job experience (46.3%). Table 2 presents the participants' characteristics and the mean scores for their CCBs and subjective vitality. The One-way ANOVA tests showed that nurses' CCB scores were significantly different according to their level of education, level of income, and sector, and their subjective vitality scores statistically differed according to their income levels ($p < 0.05$). Specifically, nurses who had graduated from high school had lower CCB scores than nurses with bachelor's, master's, and doctorate degrees ($F = 3.205$; $p < 0.05$). Nurses whose income levels were low displayed higher CCBs scores ($F = 3.493$; $p < 0.01$) and lower subjective vitality scores than nurses with mid-level and high-level income ($F = 6.990$; $p < 0.05$). The nurses who work in a private hospital had lower CCB scores than those in a public hospital ($t = 4.655$; $p < 0.001$). Table 2 also shows the mean scores of CCBs and subjective vitality and correlations among participants' characteristics, CCBs, and subjective vitality. The participants' mean scores for CCBs and subjective vitality were 3.34 (SD = 1.05) and 4.15 (SD = 1.36), respectively. Correlation analysis indicated that the relationships between CCBs and education ($r = 0.22$; $p < 0.01$), CCBs and experience ($r = 0.043$; $p < 0.05$), and income level and subjective vitality ($r = 0.146$; $p < 0.05$) were statistically significant and positive, whereas the relationship between income level and CCBs is statistically significant and negative ($r = -0.195$; $p < 0.01$). Additionally, a statistically significant and negative correlation was found between the CCBs and subjective vitality relationship ($r = -0.14$; $p < 0.05$).

4.2 | Correlation and Regression Analyses

Table 3 presents the correlation coefficients and descriptive statistics of the study variables. Pearson's correlation test results indicate a negative and statistically significant relationship between CCBs and subjective vitality ($r = -179$; $p < 0.05$).

We employed hierarchical linear regression analysis to control the effect of demographic factors (sector, income, and education) related to study variables (Table 4). Although a recent meta-analysis (Yildiz et al. 2023) has investigated the demographic factors associated with CCB, no statistically significant relationship was found except for the gender and number of children in that analysis. Unlike the findings in the mentioned meta-analytic study, in this study, when the sector, income, and education were found to be related to the dependent and independent variables, they were added as control variables to the first block of the regression analysis. The regression model was found to be statistically significant ($F = 3.60$; $p < 0.01$). Further, after controlling sector, income, and education as control variables, the effect of CCBs on subjective vitality was found to be negative and statistically significant ($\beta = -0.22$; $t(239) = -2.79$; $p = 0.006$; 95% CI [−0.38, −0.07]). Specifically, an increase of one unit of CCBs induced a decrease of a −0.22 unit in subjective vitality. The R-square value of the model was 0.057 (5.7%) ($p < 0.01$; 95% CI [−0.01–0.07]). Additionally, when we compared Model 1 (B.F. = 3.23; Omega2 = 0.04, $p = 0.009$; L.R. = 7.84, $p = 0.011$) and Model 2 (B.F. = 3.23; Omega2 = 0.04, $p = 0.009$; L.R. = 7.84, $p = 0.011$), models were detected as nested and are compared in sequential order ($p < 0.05$).

5 | Discussion

The purpose of this study is to assess the extent of CCBs and their impact on the nurses' subjective vitality. Unavoidably, nurses' physical and psychological well-being is likely to be affected if they are obliged to demonstrate involuntarily extra-role behaviors that are CCBs. In this respect, the results that are discussed below are consistent with our theoretical assumptions regarding the relationship between CCBs and subjective vitality.

5.1 | Compulsory Citizenship Behaviors and Subjective Vitality Among Nurses

By propelling more dynamic management of healthcare organizations, competitive healthcare market forces affect the healthcare environment and its professionals (Wake and Green 2019). As a result, healthcare professionals are under

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TABLE 2 | The comparison of the participants' compulsory citizenship behavior and subjective vitality mean scores ($N = 244$).

		Compulsory citizenship behaviors	Subjective vitality
Groups	***n***	**Mean (SD)**	**Mean (SD)**
Age			
20–29[a]	137	3.16 (1.03)	4.08 (1.18)
30–39[b]	64	3.45 (3.27)	4.47 (1.16)
40 + [c]	43	3.27 (1.07)	4.31 (1.36)
	Test & *p* values	$F = 2.336$	$F = 0.516$
		$p = 0.099$	$p = 0.598$
Gender			
Female[a]	209	3.38 (1.04)	4.20 (1.21)
Male[b]	35	3.14 (1.09)	4.36 (1.24)
	Test & *p* values	$t = 1.263$	$t = -0.707$
		$p = 0.208$	$p = 0.480$
Marital status			
Single[a]	148	3.27 (1.02)	4.18 (1.22)
Married[b]	96	3.46 (1.08)	4.29 (1.21)
	Test & *p* values	$t = -1.386$	$t = -0.723$
		$p = 0.167$	$p = 0.470$
Education			
High school[a]	18	2.72 (1.02)	3.92 (1.32)
Associate[b]	17	3.05 (1.2)	4.15 (1.21)
Bachelor[c]	130	3.32 (1.03)	4.21 (1.24)
Master[d]	57	3.57 (0.99)	4.28 (1.16)
Doctorate[e]	22	3.65 (0.95)	4.45 (1.20)
	Test & *p* values	**$F = 3.205$**	$F = 0.524$
		$p = 0.014$*	$p = 0.718$
		a<c,d,e	
Sector			
Private[a]	49	2.75	4.25
Public[b]	195	3.49	4.22
	Test & *p* values	**$t = 4.655$**	$t = -0.148$
		$p = 0.000$* **	$p = 0.882$
		a<b	
Shift type			
Day shift[a]	94	3.37	4.35
Night shift[b]	26	3.64	3.74
Mixed[c]	124	3.26	4.23
	Test & *p* values	$F = 1.435$	$F = 2.602$
		$p = 0.24$	$p = 0.76$
Income level			
Low[a]	82	3.69 (0.96)	3.94 (1.35)
Mid[b]	136	3.16 (1.03)	4.37 (1.14)
High[c]	26	3.23 (1.15)	4.36 (1.01)
	Test & *p* values	**$F = 3.493$**	**$F = 6.990$**
		$p = 0.001$ **	**$p = 0.032$***
		b<a	**a<b,c**

(Continues)

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TABLE 2 | (Continued)

Groups	*n*	Compulsory citizenship behaviors Mean (SD)	Subjective vitality Mean (SD)
Experience			
1–5 years[a]	113	3.23 (1.03)	4.07 (1.17)
6–10 years[b]	52	3.65 (1.04)	4.36 (1.24)
10 + years[c]	79	3.30 (1.05)	4.35 (1.24)
	Test & *p* values	$F = 3.007$	$F = 1.676$
		$p = 0.051$	$p = 0.189$

Note: a–e: These letters are used to express subgroups under each demographicö feature. $^{*}p < 0.05$; $^{**}p < 0.01$; $^{***}p < 0.001$.
Abbreviations: *F*, One-way ANOVA; S.D., standard deviation, *t*, Independent sample *t*-tests.

more pressure to contribute to their organizations (Baird et al. 2019). The pressure to become more successful sometimes causes healthcare professionals to focus more on organizational targets. However, this situation may also entail the risk of abuse, for example, by increasing CCBs, especially within Eastern cultures (Unaldi Baydin et al. 2020; Yildiz and Elibol 2021). Thus, consistent with previous studies on CCB scores of nurses (Unaldi Baydin et al. 2020; Yildiz and Elibol 2021), the study found that nurses exhibited moderate CCBs in their work settings.

Similar to scores of nurses' subjective vitality, which were higher than those of physicians (Blanco-Donoso et al. 2021), both are subject to various demands. In this study, nurses' subjective vitality level was moderate. It is consistent with the subjective well-being scores of Türkiye (4.37/10) in 2021 (Sachs et al. 2021). This is an important finding because well-being is vital in providing qualified health care during a pandemic, influencing individuals' thoughts and cognitive processes (Saini and Seema 2021). After all, while nurses should provide sustained healthcare under all conditions, they must also sustain their well-being. As previously mentioned, to ensure a sustainable global health system, nurses' subjective and objective vitality are essential dynamics of positive psychology and, in turn, global health (Flaubert et al. 2021). ICN's theme also advocates this view, which emphasizes nurses' critical role in the global health system (ICN 2022).

5.2 | Discussion of Comparisons Between Personal, Professional Characteristics and CCBs, Subjective Vitality

We investigated the independent variables that resulted in nurses' CCBs and subjective vitality variations. Our findings indicated that education level, income status, and sector correlate with CCBs, and nurses' income status correlates with their subjective vitality. Whereas nurses with lower education and income levels displayed higher levels of CCBs, only nurses with higher income levels exhibited higher subjective vitality. Understandably, more educated nurses exhibit higher levels of CCBs because of their high sense of professional responsibility in reaching out to the targets. It is also clear that a healthy lifestyle, diet, and regular physical exercise help remove pessimistic thoughts (Saini and Seema 2021). Generally, moderate incomes are required to acquire and sustain such healthy habits. Therefore, nurses with lower incomes have lower levels of subjective vitality than those with higher incomes.

Furthermore, the nurses who work in the public hospital displayed a higher level of CCB. This finding relates to the Ministry of Health restrictions in the COVID-19 pandemic process. On October 27, 2020, a circular was issued by the Ministry of Health for precautions in the fight against COVID-19 for all personnel in the central and provincial organizations of the Ministry of Health in Turkiye (Ministry of Health 2020). According to this circular, one of the restrictions was "The request mentioned above of the personnel who request to withdraw from their duty (resignation) during this process will not be accepted." Moreover, the other one is that "Annual leave of all personnel working in the central and provincial organizations of the Ministry of Health has been suspended until further notice." Because of these restrictions, nurses worked longer hours. Therefore, even though some wanted to quit their job, they could not, leading to physical and psychosocial stressors.

5.3 | Discussion of the Study Variables

The study found that CCBs are negatively and significantly correlated with subjective vitality, and CCBs affect nurses' subjective vitality negatively, which aligns with self-determination theory. Although the research findings are consistent with SDT and overlap with our theoretical arguments, surprisingly, the explanatory power of the model (R^2 amount) is quite small. There may be several potential reasons for this that should be taken into consideration by future researchers. First of all, since this research is one of the first studies to examine the relationship between CCB and subjective vitality, other variables (e.g., autonomy, leadership styles, psychological resilience, personality traits etc.) that have the potential to affect the dependent variable, and the independent variable were not included in the model. Adding these variables as mediators or moderators can have an incremental effect on the targeted relationships. Secondly, although the relationship between CCB and subjective vitality appears to be linear, the relationship between these two variables may work better in the presence of various situational factors, so it is thought that the explanatory power of the model will increase with

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TABLE 3 | Descriptive statistics and Spearman correlations among the study variables ($N = 244$).

Variables	Mean	SD	Age	Gender	Education	M.S	Income	Sector	Shift	Exper.	CCBs	SV
Age	—	—	1	−0.123	0.196**	0.494**	−0.124	−0.087	−0.355**	0.862**	0.028	0.112
Gender	—	—		1	0.022	−0.066	0.151*	0.145*	0.124	−0.187**	−0.084	0.035
Education	—	—			1	0.053	0.159*	−0.156*	−0.100	0.320**	0.212**	0.078
Marital status	—	—				1	−0.017	−0.194**	−0.133*	0.478**	0.120	0.053
Income level	—	—					1	0.036	0.000	−0.140*	−0.197**	0.157*
Sector	—	—						1	−0.126*	−0.091	−0.302**	0.021
Shift	—	—							1	−0.333**	−0.050	−0.049
Experience	—	—								1	0.067	0.109
CCBs	3.34	1.05									1	−0.179*
SV	4.15	1.36										1

Note: SD is used to represent mean and standard deviation. Dummy variables; Gender: (0 = Female, 1 = Male), Marital Status: (0 = Single, 1 = Married), Sector: (0 = Private, 1 = Public).
Abbreviations: CCBs, compulsory citizenship behaviors; M.S, marital status; SV, subjective vitality.
*$p < 0.05$.
**$p < 0.01$.

the addition of potential moderators. Another factor is that the context is more general in the scale used to measure subjective vitality (Ryan and Frederick 1997), while the context of the expressions in the CCB scale mostly refers to the workplace. Since the scale specified for subjective vitality is mostly used in the literature, it comes to mind that the scale may fluctuate based on the context. This can be shown as another reason why the R^2 value explained in this research model is low. It is suggested that this situation should be taken into consideration by future researchers, and a new scale should be developed or adapted by revising the expressions that are more workplace oriented.

When the fundamental arguments of Self Determination Theory are evaluated, it can be said that the research has significant theoretical contributions. As you may recall, competence, autonomy, and relatedness are three essential components for employees' psychological and mental well-being (Ryan and Deci 2000, 2002). If we start with the sense of autonomy, according to the theory, autonomy is crucial for individuals to be successful and see themselves as sufficient (Ryan and Deci 2002). Therefore, this is also a factor that nourishes or supports a person's motivation to improve themselves (Searle et al. 2017; Gagné and Deci 2005). If an individual's autonomy or free will decreases and this space narrows in the face of unlimited demands from the manager, a toxic work environment characterized by oppressive control and micromanagement may emerge. Consequently, employees begin to feel increasingly powerless, and the positive behaviors that employees voluntarily exhibit may be restricted or eroded.

CCB also undermines the sense of competence. Perceived competence is a common component of self-concept and self-efficacy (Hughes et al. 2011; Tompkins 2013). Research further indicates that self-efficacy is one of the main components of positive psychological capital (Luthans and Avolio 2014; Luthans and Youssef-Morgan 2017). Studies also showed that self-efficacy is positively associated with vitality (Carmeli et al. 2021). Therefore, forcing CCB behaviors against the will of employees will damage their sense of competence and reduce their life energy and, as a result, their psychological capital. Considering these connections between constructs, forcing nurses to do things against their willpower may inhibit his/her sense of competence and, therefore, decrease his/her subjective vitality. In other words, by coercing nurses to perform contrary to their willpower, organizations may unintentionally undermine their workers' subjective vitality, resulting in diminished engagement (Li et al. 2025; Yildiz and Elibol 2021), satisfaction (Boztilki et al. 2021) resilience, and capacity (Yildiz and Elibol 2021) to flourish in their positions.

Relatedness is also one of the flourishing factors of subjective vitality (Saleem et al. 2023). Because relatedness plays a key role in basic psychological needs (Ryan and Deci 2000; Kasser and Ryan 1999), being in relationships with other people and being accepted and loved have an important place in the lives of individuals. Forcing nurses to do extra work or tasks may limit the time of organizational socialization and work-life balance. Therefore, nurses cannot spend enough time with their families and colleagues due to excessive workload stemming from CCB, and this situation can lead to a decrease in their subjective vitality as their basic psychological needs (relatedness) cannot be

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TABLE 4 | Hierarchical regression results.

Model	Predictor(s)	β	β 95% CI [L.L., U.L.]	sr^2	sr^2 95% CI [L.L., U.L.]	Fit	Difference
Model 1	(Intercept)	3.47**	[2.82, 4.12]				
	Sector	0.05	[−0.33, 0.44]	0.00	[−0.00, 0.00]		
	Income	0.26*	[0.01, 0.51]	0.02	[−0.01, 0.05]		
	Education	0.09	[−0.08, 0.25]	0.00	[−0.01, 0.02]		
						$R^2 = 0.026$	
Model 2	(Intercept)	4.15**	[3.39, 5.06]				
	Sector	−0.08	[−0.48, 0.31]	0.00	[−0.01, 0.01]		
	Income	0.18	[−0.07, 0.43]	0.01	[−0.01, 0.03]		
	Education	0.14	[−0.03, 0.31]	0.01	[−0.01, 0.04]		
	CCBs	−0.22**	[−0.38, −0.07]	0.03	[−0.01, 0.07]		
						$R^2 = 0.057$**	$\Delta R^2 = 0.031$**

Note: A significant *b*-weight indicates the semi-partial correlation is also significant. *b* represents unstandardized regression weights. sr^2 represents the semi-partial correlation squared. Standardized parameters were obtained by fitting the model on a standardized version of the dataset. 95% Confidence Intervals (C.I.s) and *p*-values were computed using the Wald approximation.
*$p < 0.05$.
**$p < 0.01$.

met. Therefore, this distressing situation can lead to individuals abandoning their jobs, becoming alienated, remaining silent, and experiencing burnout (Yildiz et al. 2023).

To our knowledge, no previous studies investigated the relationship between CCBs and subjective vitality. However, similar results have been reported with related variables. Past studies have concluded that CCBs are negatively associated with autonomy (Liu et al. 2017; E. Vigoda-Gadot 2007), and reduced autonomy negatively affects individuals' subjective vitality (Muraven et al. 2008). Similarly, CCBs are harmful to individuals' psychological well-being (Yildiz and Elibol 2021); subjective vitality is positively related to psychological well-being (Elci et al. 2018), positively related to beneficial organizational behaviors, and negatively associated with detrimental organizational behaviors (Bertrams 2021). As understood from the aforementioned studies, our results are consistent with them. According to Nix et al. (1999), autonomous or self-determined behaviors may provide better enhanced or maintained vitality than non-self-determined activities, even if one controls for competence or goal achievement. When the employees exhibit CCBs, their autonomy at work is reduced (He et al. 2020). Thus, CCBs reduce their subjective vitality. When nurses feel obligated to exhibit CCBs, their autonomy and competence get reduced, and hence, their subjective vitality decreases.

5.4 | Limitations

This study had several limitations. First, the study population was drawn from only two hospitals in Istanbul. Therefore, our study results cannot be generalized. Second, the cross-sectional design of the research limited causal inference of the relationship between the study variables. Further research can investigate our research model with a longitudinal research design or time-lagged studies. Third, during the COVID-19 pandemic, CCBs may have been more prominent than usual, as nurses were compelled to exhibit these behaviors over time. Therefore, we recommend that this study be replicated after the pandemic to compare its conditional effects. Fourth, to our knowledge, no previous studies have investigated the relationship between CCBs and subjective vitality within the existing literature. Therefore, the theoretical contribution of this study can be compared with another theoretical lens, such as the conservation of resources theory. Another limitation of this study was that the research model did not include other personal or organizational-level variables. Further research could include other potential outcomes of CCBs, such as the mediating role of subjective vitality in the relationship among CCBs, life satisfaction, and subjective happiness (Uysal et al. 2014). Other mitigating or protective factors such as leadership styles (e.g., supportive leadership), workplace autonomy, and work-life balance can be added to the model to see the role of these variables or their interaction (as moderators) with the subjective vitality and CCBs.

5.5 | Clinical Relevance

The International Council of Nurses stated that the theme for International Nurses Day 2025 is "Our Nurses Our Future—Caring for Nurses Strengthens Economies" (ICN 2025). Thus, to provide a secure and healthy work environment, investing in nurses' well-being and caring for them is highly important for global health. Otherwise, many countries worldwide may face nursing staff shortages.

Rosser (2022) clearly states that hospitals or other healthcare organizations are responsible for providing appropriate work environments and retaining competent nurses. Healthcare managers and policymakers should invest in nurses' well-being, development, and role expansion related to their profession. Nurses' mental, psychological, and physical well-being is

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essential for the provision of sustainable healthcare. It is also critical to ensure patient safety in clinical settings (Rosser 2022; Flaubert et al. 2021; Lee et al. 2019).

Since CCBs negatively affect nurses' subjective vitality, nurse managers should be aware of the effects of these undesirable behaviors. As Rosser (2022) emphasized, strategic nurse leaders have a pivotal role in providing a voice-centered organizational milieu and culture. Therefore, nurse managers, hospital administrators, and policymakers should consider the prevention of CCBs. This enables both nurses' intention to stay and voluntary extra-role behaviors opposite to CCBs. Individual and organizational studies also should be conducted to minimize the potential adverse effects of CCBs. Furthermore, in-service training programs should be organized to increase nurses' life satisfaction, happiness, and subjective vitality. In-service training programs also should be carried out to increase awareness about the adverse effects of CCBs on nurses' psychological well-being.

6 | Conclusion

This explorative and novel study contributes to the existing literature by clarifying and examining the significant relationship between CCBs and subjective vitality. By examining this relationship, the current study extends the existing knowledge by drawing attention to the destructive and harmful effects of CCBs on positive psychological sources of an individual, which is subjective vitality in this study. Further, it supports our theoretical prediction that these CCBs may negatively affect subjective vitality. In other words, we found that CCBs were one of the negative antecedents of subjective vitality strongly associated with positive psychology.

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Disclosure

Clinical resources: International Council of Nurses (2025). *Our Nurses Our Future—Caring for Nurses Strengthens Economies* https://www.icn.ch/news/icn-puts-wellbeing-nurses-centre-international-nurses-day-2025. Investing in Nursing https://onlinelibrary.wiley.com/doi/10.1111/inr.12765. The Future of Nursing 2020–2030—Supporting the Health and Professional Well-Being of Nurses: https://www.ncbi.nlm.nih.gov/books/NBK573902/. Well-being and Resilience https://www.aacnnursing.org/our-initiatives/well-being-resilience.

Ethics Statement

The research followed the ethical principles of the Declaration of Helsinki, and ethical approval was obtained by Istanbul Bilgi University's Committee on Ethics in Research on Humans (reference number: 2021-40,073-23). At the beginning of the survey form, before starting the survey, the researchers put information about the aim and contents of the study and ensured it was an anonymous questionnaire. Moreover, the data were only used for academic purposes. All participants were free to refuse to participate in this research or withdraw at any time.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

References

Arshad, H., H. Zahid, A. Khan, and F. Fatima. 2024. "Subjective Vitality, Compassion Fatigue and Empathy in Health Care Professionals." *International Journal of Contemporary Issues in Social Sciences* 3, no. 3: 282–296.

Arslan, G. 2021. "Loneliness, College Belongingness, Subjective Vitality, and Psychological Adjustment During Coronavirus Pandemic: Development of the College Belongingness Questionnaire." *Journal of Positive School Psychology* 5, no. 1: 17–31. https://doi.org/10.47602/jpsp.v5i1.240.

Baird, K. M., A. Tung, and Y. Yu. 2019. "Employee Organizational Commitment and Hospital Performance." *Health Care Management Review* 44, no. 3: 206–215. https://doi.org/10.1097/HMR.0000000000000181.

Bertrams, A. 2021. "Perceived Self-Control Effort, Subjective Vitality, and General Effect in an Associative Structure." *Frontiers in Psychology* 12: 575357. https://doi.org/10.3389/fpsyg.2021.575357.

Blanco-Donoso, L. M., J. Moreno-Jiménez, M. Hernández-Hurtado, J. L. Cifri-Gavela, S. Jacobs, and E. Garrosa. 2021. "Daily Work-Family Conflict and Burnout to Explain the Leaving Intentions and Vitality Levels of Healthcare Workers: Interactive Effects Using an Experience-Sampling Method." *International Journal of Environmental Research and Public Health* 18, no. 4: 1932. https://doi.org/10.3390/ijerph18041932.

Boztilki, M., Ç. U. Guler, S. Demir, A. Senkal, and IGI Global. 2021. "Compulsory Citizenship Behavior and Perceived Stress Level in the Pandemic Process: A Research on Healthcare Professionals." In *Handbook of Research on Representing Health and Medicine in Modern Media*, 330–351. IGI Global.

Burke, R. J., E. S. W. Ng, and J. Wolpin. 2015. "Economic Austerity and Healthcare Restructuring: Correlates and Consequences of Nursing Job Insecurity." *International Journal of Human Resource Management* 26, no. 5: 640–656. https://doi.org/10.1080/09585192.2014.921634.

Carmeli, A., A. C. Peng, J. M. Schaubroeck, and I. Amir. 2021. "Social Support as a Source of Vitality Among College Students: The Moderating Role of Social Self-Efficacy." *Psychology in the Schools* 58, no. 2: 351–363.

Catton, H. 2022. "Two Years Into the Pandemic Massive Investment in Nursing Is More Urgent Than Ever." *International Nursing Review* 69, no. 2: 115–117. https://doi.org/10.1111/inr.12766.

Champely, S. 2020. pwr: Basic functions for power analysis. R package version 1.3–0. https://CRAN.R-project.org/package=pwr.

Cohen, J. 1988. *Statistical Power Analysis for the Behavioural Sciences*. 2nd ed. Lawrence Erlbaum Associates.

Cronbach, L. J. 1951. "Coefficient Alpha and the Internal Structure of Tests." *Psychometrika* 16, no. 3: 297–334. https://doi.org/10.1007/BF02310555.

Dragojevic, M., J. Gasiorek, and L. Vincze. 2018. "Vitality, Language Use, and Life Satisfaction: A Study of Bilingual Hungarian Adolescents Living in Romania." *Journal of Language and Social Psychology* 37, no. 4: 431–450. https://doi.org/10.1177/0261927X17729437.

Elci, M., B. Yildiz, and M. E. Karabey. 2018. "How Does Burnout Affect Turnover Intention? The Conditional Effects of Subjective Vitality and Supervisor Support." *International Journal of Organizational Leadership* 7, no. 1: 47–60. https://doi.org/10.33844/ijol.2018.60233.

Flaubert, J. L., S. Le Menestrel, D. R. Williams, M. K. Wakefield, and of Sciences, Engineering, and Medicine, National Academies. 2021.

15475069, 0, Downloaded from https://sigmapubs.onlinelibrary.wiley.com/doi/10.1111/jnu.70032 by BORA YILDIZ - Istanbul University , Wiley Online Library on [02/07/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

"Supporting the Health and Professional Well-Being of Nurses." In *The Future of Nursing 2020–2030: Charting a Path to Achieve Health Equity*, edited by M. K. Wakefield, D. R. Williams, S. Le Menestrel, and J. L. Flaubert, 303. National Academies Press.

Gagné, M., and E. L. Deci. 2005. "Self-Determination Theory and Work Motivation." *Journal of Organizational Behavior* 26, no. 4: 331–362.

Hair, J. F., W. C. Black, B. J. Babin, and R. E. Anderson. 2019. *Multivariate Data Analysis*. England: Pearson Prentice.

He, P., Q. Zhou, H. Zhao, C. Jiang, and Y. J. Wu. 2020. "Compulsory Citizenship Behavior and Employee Creativity: Creative Self-Efficacy as a Mediator and Negative Affect as a Moderator." *Frontiers in Psychology* 11: 1640. https://doi.org/10.3389/fpsyg.2020.01640.

Hemsworth, D., J. F. Plough, A. Baregheh, et al. 2020. "Vitality and Well-Being in Nurses." *International Journal of Healthcare Technology and Management* 18, no. 1–2: 73–94.

Hughes, A., D. Galbraith, and D. White. 2011. "Perceived Competence: A Common Core for Self-Efficacy and Self-Concept?" *Journal of Personality Assessment* 93, no. 3: 278–289.

International Council of Nurses. 2022. *Nurses: A Voice to Lead Invest in Nursing and Respect Rights to Secure Global Health*. ICN. https://www.icn.ch/international-nurses-day-2022.

International Council of Nurses. 2025. *Our Nurses Our Future—Caring for Nurses Strengthens Economies*. ICN. https://www.icn.ch/news/icn-puts-wellbeing-nurses-centre-international-nurses-day-2025.

Kasser, V. G., and R. M. Ryan. 1999. "The Relation of Psychological Needs for Autonomy and Relatedness to Vitality, Well-Being, and Mortality in a Nursing Home." *Journal of Applied Social Psychology* 29, no. 5: 935–954.

Katana, M., C. Röcke, S. M. Spain, and M. Allemand. 2019. "Emotion Regulation, Subjective Well-Being, and Perceived Stress in Daily Life of Geriatric Nurses." *Frontiers in Psychology* 10: 1097.

Lee, T. S. H., W. C. Tzeng, and H. H. Chiang. 2019. "Impact of Coping Strategies on Nurses' Well-Being and Practice." *Journal of Nursing Scholarship* 51: 195–204. https://doi.org/10.1111/jnu.12467.

Li, Z., L. Yang, Z. Xi, et al. 2025. "The Relationship Between Compulsory Citizenship Behavior and Nurses' Silence: A Cross-Sectional Study." *BMC Nursing* 24, no. 1: 14.

Liu, Y., H. Zhao, and G. Sheard. 2017. "Organizational Citizenship Pressure, Compulsory Citizenship Behavior, and Work-Family Conflict." *Social Behavior and Personality: An International Journal* 45, no. 4: 695–704. https://doi.org/10.2224/sbp.6064.

Luthans, F., and B. J. Avolio. 2014. "Brief Summary of Psychological Capital and Introduction to the Special Issue." *Journal of Leadership and Organizational Studies* 21, no. 2: 125–129.

Luthans, F., and C. M. Youssef-Morgan. 2017. "Psychological Capital: An Evidence-Based Positive Approach." *Annual Review of Organizational Psychology and Organizational Behavior* 4, no. 1: 339–366.

Maslach, C., W. B. Schaufeli, and M. P. Leiter. 2001. "Job Burnout." *Annual Review of Psychology* 52, no. 1: 397–422. https://doi.org/10.1146/annurev.psych.52.1.397.

Ministry of Health, General Directorate of Administrative Services, Republic of Turkey. 2020. Subject: Personnel Operations. https://ohsad.org/wp-content/uploads/2020/10/Personel-Islemleri.pdf.

Mozdeh, R., and E. Namani. 2021. "Relationship Between Vitality and Sense of Psychosocial Coherence With Nurses' Quality of Work Life: The Role Mediating of Self-Differentiation." *Journal of Sabzevar University of Medical Sciences* 27, no. 6: 744–751.

Muraven, M., M. Gagné, and H. Rosman. 2008. "Helpful Self-Control: Autonomy Support, Vitality, and Depletion." *Journal of Experimental Social Psychology* 44, no. 3: 573–585. https://doi.org/10.1016/j.jesp.2007.10.008.

Muyan-Yılık, M., and O. Bakalım. 2022. "Hope as a Mediator of the Link Between Subjective Vitality and Subjective Happiness in University Students in Turkey." *Journal of Psychology* 156, no. 3: 241–255.

Nix, G. A., R. M. Ryan, J. B. Manly, and E. L. Deci. 1999. "Revitalization Through Self-Regulation: The Effects of Autonomous and Controlled Motivation on Happiness and Vitality." *Journal of Experimental Social Psychology* 35: 266–284. https://doi.org/10.1006/jesp.1999.1382.

Oates, J. 2016. Mental Health and Subjective Wellbeing in UK Mental Health Nurses (Doctoral Dissertation, City, University of London).

Parmar, V., Z. A. Channar, R. R. Ahmed, D. Streimikiene, M. H. Pahi, and J. Streimikis. 2022. "Assessing the Organizational Commitment, Subjective Vitality and Burnout Effects on Turnover Intention in Private Universities." *Oeconomia Copernicana* 13, no. 1: 251–286.

Revelle, W. 2025. *psych: Procedures for Psychological, Psychometric, and Personality Research (Version 2.5.3) [R Package]*. Northwestern University. https://CRAN.R-project.org/package=psych.

Rodríguez-Carvajal, R., M. Herrero, D. van Dierendonck, S. de Rivas, and B. Moreno-Jiménez. 2019. "Servant Leadership and Goal Attainment Through Meaningful Life and Vitality: A Diary Study." *Journal of Happiness Studies* 20, no. 2: 499–521. https://doi.org/10.1007/s10902-017-9954-y.

Rosseel, Y. 2012. "Lavaan: An R Package for Structural Equation Modeling." *Journal of Statistical Software* 48, no. 2: 1–36. https://doi.org/10.18637/jss.v048.i02.

Rosser, E. A. 2022. "Investing in Nursing and Its Leadership to Secure Global Health: Are We Making Progress?" *International Nursing Review* 69, no. 2: 121–124. https://doi.org/10.1111/inr.12765.

Ryan, R. M., and E. L. Deci. 2000. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-Being." *American Psychologist* 55, no. 1: 68–78.

Ryan, R. M., and E. L. Deci. 2002. "Overview of Self-Determination Theory: An Organismic Dialectical Perspective." In *Handbook of Self-Determination Research*, edited by E. L. Deci and R. M. Ryan, 3–33. University of Rochester Press.

Ryan, R. M., and E. L. Deci. 2008. "From Ego Depletion to Vitality: Theory and Findings Concerning the Facilitation of Energy Available to the Self." *Social and Personality Psychology Compass* 2, no. 2: 702–717. https://doi.org/10.1111/j.1751-9004.2008.00098.x.

Ryan, R. M., and C. Frederick. 1997. "On Energy, Personality, and Health: Subjective Vitality as a Dynamic Reflection of Well-Being." *Journal of Personality* 65, no. 3: 529–565. https://doi.org/10.1111/j.1467-6494.1997.tb00326.x.

Saad, A. A., Z. Abdelgwad Elsherif, and E. M. Gemeay. 2024. "Psychological Capital, Subjective Wellbeing and Their Relation With Occupational Stress Among Nurses Working at Tanta Mental Health Hospital." *Tanta Scientific Nursing Journal* 33: 2.

Saini, G., and S. Seema. 2021. "Ramification of Mindfulness, Subjective Vitality on Spiritual Intelligence and Impeding Effect of Stress in Professionals During Covid-19." *Journal of Statistics & Management Systems* 24, no. 1: 193–208. https://doi.org/10.1080/09720510.2020.1833451.

Saleem, M., H. Javaid, and T. Nisar. 2023. "Basic Psychological Need Satisfaction and Students' Well-Being: The Mediating Role of Subjective Vitality." *Iranian Rehabilitation Journal* 21, no. 3: 543–552.

Satici, S. A. 2020. "Hope and Loneliness Mediate the Association Between Stress and Subjective Vitality." *Journal of College Student Development* 61, no. 2: 225–239. https://doi.org/10.1353/csd.2020.0019.

Sachs, J., C. Kroll, G. Lafortune, G. Fuller, and F. Woelm. 2021. *Sustainable Development Report 2021*. Cambridge University Press. https://doi.org/10.1017/9781009106559.

15475069, 0, Downloaded from https://sigmapubs.onlinelibrary.wiley.com/doi/10.1111/jnu.70032 by BORA YILDIZ - Istanbul University , Wiley Online Library on [02/07/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Scheffler, R. M., and D. R. Arnold. 2019. "Projecting Shortages and Surpluses of Doctors and Nurses in the OECD: What Looms Ahead." *Health Economics, Policy, and Law* 14: 274–290. https://doi.org/10.1017/S174413311700055X.

Searle, A., P. Neville, and A. Waylen. 2017. "Psychological Growth and Well-Being in Individuals Born With Cleft: An Application of Self-Determination Theory." *Psychology & Health* 32, no. 4: 459–482.

Shoja, E., V. Aghamohammadi, H. Bazyar, et al. 2020. "Covid-19 Effects on the Workload of Iranian Healthcare Workers." *BMC Public Health* 20, no. 1: 1–7. https://doi.org/10.1186/s12889-020-09743-w.

Spanouli, A., and J. Hofmans. 2020. "A Resource-Based Perspective on Organizational Citizenship and Counterproductive Work Behavior: The Role of Vitality and Core Self-Evaluations." *Applied Psychology* 70: 1453–1462. https://doi.org/10.1111/apps.12281.

Stiglic, G., R. Watson, and L. Cilar. 2019. "R You Ready? Using the R Programme for Statistical Analysis and Graphics." *Research in Nursing & Health* 42, no. 6: 494–499. https://doi.org/10.1002/nur.21990.

Tompkins, M. A. 2013. "Enhancing Self-Efficacy to Achieve Competence." *Journal of Cognitive Psychotherapy* 27, no. 1: 71–80.

Tummers, L., B. Steijn, B. Nevicka, and M. Heerema. 2018. "The Effects of Leadership and Job Autonomy on Vitality: Survey and Experimental Evidence." *Review of Public Personnel Administration* 38, no. 3: 355–377. https://doi.org/10.1177/0734371X16671980.

Unaldi Baydin, N., H. Tiryaki Sen, S. Kartoglu Gurler, B. Dalli, and A. K. Harmanci Seren. 2020. "A Study on the Relationship Between Nurses' Compulsory Citizenship Behaviours and Job Stress." *Journal of Nursing Management* 28, no. 4: 851–859. https://doi.org/10.1111/jonm.13009.

Uysal, R., S. A. Satici, B. Satici, and A. Akin. 2014. "Subjective Vitality as a Mediator and Moderator of the Relationship Between Life Satisfaction and Subjective Happiness." *Educational Sciences: Theory & Practice* 14, no. 2: 489–497. https://doi.org/10.12738/estp.2014.2.1828.

Vigoda-Gadot, E. 2007. "Redrawing the Boundaries of OCB? An Empirical Examination of Compulsory Extra-Role Behavior in the Workplace." *Journal of Business and Psychology* 21, no. 3: 377–405. https://doi.org/10.1007/s10869-006-9034-5.

Vigoda-Gadot, E. R. A. N. 2006. "Compulsory Citizenship Behavior: Theorizing Some Dark Sides of the Good Soldier Syndrome in Organizations." *Journal for the Theory of Social Behaviour* 36, no. 1: 77–93. https://doi.org/10.1111/j.1468-5914.2006.00297.x.

Wake, M., and W. Green. 2019. "Relationship Between Employee Engagement Scores and Service Quality Ratings: Analysis of the National Health Service Staff Survey Across 97 Acute NHS Trusts in England and Concurrent Care Quality Commission Outcomes (2012–2016)." *BMJ Open* 9, no. 7: e026472. https://doi.org/10.1136/bmjopen-2018-026472.

Wickham, H., E. Miller, and D. Smith. 2023. haven: Import and export 'SPSS', 'Stata' and 'SAS' files (Version 2.5.4) [R package]. https://CRAN.R-project.org/package=haven.

Yagmur, K., and M. A. Akinci. 2003. "Language Use, Choice, Maintenance, and Ethnolinguistic Vitality of Turkish Speakers in France: Intergenerational Differences." *International Journal of the Sociology of Language* 2003, no. 164: 107–128. https://doi.org/10.1515/ijsl.2003.050.

Yildiz, B. 2022. "The Reliability and Validity of the Compulsory Citizenship Behaviors (CCBs) Scale: Six-Step R-Based Psychometrics Protocol Among Nurses in Turkey." *Perspectives in Psychiatric Care* 58, no. 1: 395–403. https://doi.org/10.1111/ppc.12805.

Yildiz, B., and E. Elibol. 2021. "Turnover Intention Linking Compulsory Citizenship Behaviours to Social Loafing in Nurses: A Mediation Analysis." *Journal of Nursing Management* 29, no. 4: 653–663. https://doi.org/10.1111/jonm.13200.

Yildiz, B., Z. Kaptan, T. Yildiz, E. Elibol, H. Yildiz, and M. Ozbilgin. 2023. "A Systematic Review and Meta-Analytic Synthesis of the Relationship Between Compulsory Citizenship Behaviors and Its Theoretical Correlates." *Frontiers in Psychology* 14: 1707. https://doi.org/10.3389/fpsyg.2023.1120209.

Yildiz, B., H. Yildiz, and M. Ozbilgin. 2022. "How Do Compulsory Citizenship Behaviors Affect Moral Disengagement in Organizations? Significance of Anger Toward the Organization During the COVID-19 Pandemic." *Frontiers in Psychology* 13: 1038860.

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