



### 1. Background

Nurses are considered individuals engaged with their profession and altruistic persons with vocation for caregiving (Eley et al., 2011, 2012), thus, presenting specific personality traits. Research shows a relationship between personality and work role performance (Ellershaw et al., 2016), and some personality traits such as resilience are related with engagement among nurses (Othman et al., 2013).

### 2. Aims

To know engagement levels among nurses, to identify Eysenck personality traits, and to analyze the relationship between engagement and personality and their variations according socio-demographic and professional characteristics.

### 3. Method

Data were collected after formal institutions' authorization, using an anonymous questionnaire composed by sociodemographic questions, and Portuguese versions of EPQ (Eysenck & Eysenck,1996; Sandin et al.,2002) and UWES (Schaufeli & Bakker,2003; Marques-Pinto & Picado, 2011). Participated voluntary 355 Portuguese nurses, 70% female, 50% married, 67% work in hospitals (25% work in health units and 8% in other health contexts such as private clinics and elderly care units), 62% work by shifts, 69% have a definitive job contract, and 72% considered their job as stressful. Age varied between 22 and 60 years (M= 34,4 SD=8,34) and job experience between 1 and 37 years (M=11,5 SD=8,20).

### 4. Results

Despite 72% considered their job as stressful, work engagement presents high levels of vigor, dedication and absorption (Table 1). Personality traits reveal more extraversion and conformity, and less psychoticism and neuroticism. Age correlates negatively with extraversion and psychoticism, while neuroticism correlates negatively with age and job experience, and job experience correlates positively with conformity. Vigor and dedication correlates negatively with psychoticism and neuroticism.

According comparative analysis, shifts, job stress perception and workplace affect engagement and personality traits (Table 2), with nurses working by fixed shifts showing more engagement, but also having stronger psychoticism than professionals working by rotating shifts. Nurses who perceived their job as stressful showed less engagement and more neuroticism. Regarding workplace, health units' professionals presented more engagement an less neuroticism, while other health contexts' professionals showed less engagement and more neuroticism.

Regression analyses revealed that personality traits explain only 7% of vigor and 9% of dedication (Table 3). Sociodemographic and professional variables aren't significant predictors of engagement, only increasing nearby 5% to the total predicted value.

### 5. Conclusions

Despite the sample presented high work engagement, extroversion and conformity, weak relationship between some engagement and Eysenck personality traits was found, suggesting that these traits are not the most important. However engagement is important for nurses' social support (Othman & Nasurdin, 2013). In the future, other traits such as big five must be considered, as well job characteristics, which can affect work engagement (Ellershaw et al., 2016; Santos et al., 2016), a topic that INT-SO project tries to study this relationship on Portugal, Spain and Brazil.

### References

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Table 1. Mean, SD and between age, job experience, engagement and personality traits

Dimensions with 0-6 scale	Mean	SD	1	2	3	4	5	6	7	8
1. Age	34,43	8,36								
2. Job experience	11,49	8,20								
3. Vigor	4,38	1,31	,092	,099						
4. Dedication	4,45	1,40	,079	,085	,840**					
5. Absorption	4,18	1,36	,081	,082	,733**	,751**				
6. Extraversion	3,94	1,70	-,129*	-,092	,090	,088	,033			
7. Neuroticism	1,72	1,84	-,153**	-,224**	-,227**	-,251**	-,092	-,107*		
8. Psychoticism	2,09	1,36	-,047	-,081	-,120*	-,131*	-,047	,154**	,181**	
9. Conformity	4,09	1,48	,080	,107*	,085	,097	,041	-,064	-,255**	-,275**

\* p < 0,050 \*\* p < 0,010

Table 2. Comparative analysis between shifts, job stress perception and workplace

Dimensions (0-6 scale)	Shift		Job stress perception			Workplace			F (p)	
	Fixed	Rotating	No	Yes	t (p)	Hospital	Health units	Other		
Vigor	4,61	4,27	2,299 (.022)*	5,02	4,29	4,213 (.000)***	4,30	4,78	3,89	6,643 (.001)***
Dedication	4,70	4,29	2,668 (.008)**	5,16	4,34	4,924 (.000)***	4,36	4,87	3,93	6,600 (.002)**
Absorption	4,44	4,05	2,555 (.011)*	4,80	4,07	4,322 (.000)***	4,03	4,70	3,77	9,419 (.000)***
Extraversion	3,77	4,05	-1,418 (.157)	4,24	3,91	1,283 (.200)	3,95	3,93	4,11	,124 (.883)
Neuroticism	1,62	1,75	-,469 (.639)	0,96	1,89	-3,662 (.000)***	1,68	1,53	2,61	3,799 (.023)*
Psychoticism	2,29	1,96	1,988 (.048)*	2,22	2,10	,592 (.554)	2,02	2,18	2,43	1,417 (.244)
Conformity	4,21	4,02	1,110 (.268)	4,27	4,00	1,185 (.237)	4,04	4,28	3,89	1,139 (.321)

\* p < 0,050 \*\* p < 0,010 \*\*\* p < 0,001

Table 3. Regression (Enter) analysis of predicted value of individual variables and personality traits on engagement

Dependent variable	Predictors	R <sup>2</sup>	R <sup>2</sup> change	F	p
Vigor	Sociodemographic variables	,024	,024	1,692	,152
	Professional variables	,054	,030	1,691	,091
	Personality traits	,120	,066	2,740	,001
Dedication	Sociodemographic variables	,021	,021	1,478	,209
	Professional variables	,053	,031	1,644	,103
	Personality traits	,141	,089	3,307	,000
Absorption	Sociodemographic variables	,012	,012	,806	,522
	Professional variables	,026	,015	,801	,616
	Personality traits	,044	,017	,920	,533