

# Work engagement among participants of residency and professional development programs in nursing

*Engagement no trabalho entre residentes e aprimorandos de enfermagem*

*Engagement en el trabajo entre residentes y profesionales en perfeccionamiento de enfermería*

**Luciano Garcia Lourenção<sup>1</sup>**

<sup>1</sup> Universidade Federal do Rio Grande, School of Nursing, Rio Grande, Rio Grande do Sul, Brazil.

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## ABSTRACT

**Objective:** to assess the levels of engagement at work of nurses enrolled in multi-professional residency and professional development programs in health care of a Brazilian public institution. **Method:** a cross-sectional study with 36 professionals. The data were collected in September 2013, with use of the Utrecht Work Engagement Scale (UWES), composed of seventeen self-evaluation items with the dimensions vigor, dedication and absorption, as well as an overall score. **Results:** the levels of engagement ranged from 3.8 to 4.3, and the standard deviations, between 1.1 and 1.3. Nurses showed average levels on vigor (3.8) and absorption (3.9) dimensions, and high levels on dedication (4.3) and engagement (4.0). **Conclusion:** the professionals presented good levels of energy, resilience, enthusiasm and involvement with the work. They are satisfied with the activity and are dedicated to it, which promotes the acquisition of skills and competences along the in-service training, ensuring a future professional practice of quality. **Descriptors:** Staff Development; Internship and Residency; Nursing Human Resources; Nursing; Education in Nursing.

## RESUMO

**Objetivo:** Avaliar os níveis de *engagement* no trabalho de enfermeiros matriculados em programas de residência multiprofissional e aprimoramento profissional em saúde de uma instituição pública brasileira. **Método:** Estudo transversal com 36 profissionais. Os dados foram coletados em setembro de 2013, com o *Utrecht Work Engagement Scale* (UWES), composto por dezessete itens de autoavaliação com as dimensões: vigor, dedicação e absorção, além de um escore geral. **Resultados:** os índices de *engagement* variaram de 3,8 a 4,3, e os desvios-padrão, entre 1,1 e 1,3. Os enfermeiros apresentaram níveis médios de vigor (3,8) e absorção (3,9), e níveis altos de dedicação (4,3) e *engagement* (4,0). **Conclusão:** Os profissionais apresentam bons níveis de energia, resiliência, entusiasmo e envolvimento com trabalho. Encontram-se satisfeitos e se identificam com o trabalho, o que favorece a aquisição de habilidades e competências ao longo da formação em serviço, assegurando uma prática profissional futura de qualidade. **Descritores:** Desenvolvimento de Pessoal; Internato e Residência; Recursos Humanos de Enfermagem; Enfermagem; Educação em Enfermagem.

## RESUMEN

**Objetivo:** evaluar los niveles de *engagement* en el trabajo de enfermeros matriculados en programas de residencia multiprofesional y perfeccionamiento profesional en salud de una institución pública brasileña. **Método:** estudio transversal con 36 profesionales. Los datos fueron recogidos en septiembre del 2013, mediante la *Utrecht Work Engagement Scale* (UWES), compuesta por diecisiete ítems de autoevaluación con las dimensiones vigor, dedicación y absorción, además de una puntuación general. **Resultados:** los índices de *engagement* variaron de 3,8 a 4,3, y los desvíos estándar, entre 1,1 y 1,3. Los enfermeros presentaron niveles medios de vigor (3,8) y absorción (3,9), y niveles altos de dedicación (4,3) y *engagement* (4,0). **Conclusión:** los profesionales presentan buenos niveles de energía, resiliencia, entusiasmo e involucración con el trabajo. Se encuentran satisfechos con la actividad y se dedican a ella, lo que favorece a adquisición de habilidades y competencias a lo largo de la formación en servicio, lo que asegura una práctica profesional futura de calidad. **Descriptor:** Desarrollo de Personal; Internado y Residencia; Recursos Humanos de Enfermería; Enfermería; Educación en Enfermería.

CORRESPONDING AUTHOR

Luciano Garcia Lourenção

E-mail: [luciano.famerp@gmail.com](mailto:luciano.famerp@gmail.com)

## INTRODUCTION

Linked to positive psychology, engagement is a recent concept that draws the interest of researchers due to the positive effect caused on performance, health and well-being of professionals<sup>(1)</sup>. The concept involves a process of positively using the workplace, which makes the professionals more satisfied with the profession, demonstrating greater well-being and intentions of staying at the workplace, and that is characterized by three dimensions: vigor, dedication and absorption<sup>(2-3)</sup>.

Literature points that engagement is a shield from burnout<sup>(4-5)</sup>, and may interfere with the quality of the service provided to users of the health system due to the positive relationship of professionals with their workplace, generating consequences such as: increased productivity, greater enthusiasm, interaction with colleagues, motivation, creativity, reduced absenteeism and fewer errors<sup>(2-3,6-8)</sup>.

Studies with workers enrolled in in-service training programs, such as multidisciplinary residency and professional development in health care, indicate that the presence of factors such as work overload, attending critical patients, frequent contact with pain and suffering, living with the uncertainties and limitations of technical knowledge and of the assistance system may compromise the performance<sup>(7,9)</sup>.

However, the proposal for professional qualification through in-service training under supervision, which is inherent to these programs, is believed to promote the development of attitudes and professional skills that ensure a safe and quality service, meeting the demands of the users of the public health system<sup>(9-12)</sup>.

Residency and professional development programs are consolidated in nursing as an important area of qualification, allowing the exchange of knowledge between the various specialties and between the scientific and the popular knowledge, since the professionals are inserted into the health services integrating theory and practice, in contact with users and communities<sup>(9,12-13)</sup>.

Thus, measuring engagement allows the levels of motivation and professional fulfillment of nurses in continuous training process to be verified, contributing to reflections on the working conditions and on the psychosocial impact on workers, on organization and on the users of health services.

## OBJECTIVE

To evaluate levels of engagement at work of nurses enrolled in multi-professional residency and professional development programs in health care of a Brazilian public institution.

## METHOD

### Ethical aspects

The study received a favorable opinion from the Research Ethics Committee of *Faculdade de Medicina* of São José do Rio Preto. The ethical principles of voluntary and consented participation of each subject were respected.

### Study design, location and period

Cross-sectional study performed among nurses enrolled in multi-professional residency and professional development

programs in health care of an educational institution located in the interior of the state of São Paulo (SP), Brazil, in 2013.

### Population or sample, inclusion and exclusion criteria

The population of the study consisted of nurses enrolled in multi-professional residency and professional development programs in health care that consented to participate in the study after being informed on its objectives and purposes, with a total of 36 professionals. These programs are educational arrangements characterized by in-service training under full-time supervision, with workload of 60 and 40 hours per week<sup>(10-11)</sup>, respectively, distributed in theoretical (20%) and practical (80%) activities, as determined by the legislation<sup>(10,14-15)</sup>.

The professionals who were clear of their activities for any reason during the period of data collection were excluded.

### Study protocol

Data collection was performed with use of two self-report instruments: one elaborated by the authors, containing variables to define the profile of professionals, such as age, sex, marital status, weekly workload, practice of physical activity, leisure activity, family income, if they are satisfied or if they ever think about quitting the program; and the Brazilian Version of the Utrecht Work Engagement Scale (UWES), validated in Brazil by Vasquez et al.<sup>(16)</sup>, composed by seventeen self-evaluation items with three dimensions, vigor, dedication and absorption, as well as an overall score<sup>(2)</sup>.

Vigor refers to high levels of energy and resilience, the will to invest efforts, not fatiguing easily and persisting when facing difficulties. Those that present high scores of vigor usually have a lot of energy when working, unlike those with low scores on this dimension<sup>(2,6-7)</sup>.

Dedication is related to a sense of meaning of the work, the feeling of excitement and pride in labor, which inspires and challenges. Professionals with high scores in dedication identify strongly with their work because the experience is meaningful, inspiring and challenging. In addition, they usually feel excited and proud about their job. Those that present low scores do not identify themselves with the job because they do not experience it as meaningful, inspiring or challenging, and feel no excitement or pride<sup>(2,6-7)</sup>.

Absorption refers to be fully immersed in the work and finding it difficult to let go of it; time passes quickly, and the professional forgets everything around. Presenting high absorption rates implies feeling involved and focused during work. Consequently, everything around is forgotten and time seems to fly<sup>(2,6-7)</sup>.

The data were collected in September 2013 at the start of a theoretical class, after at least six months of professional activities on the programs. After the permission of the teacher in charge, the questionnaires were applied by the researcher and a trained collaborator to all nurses enrolled in the programs that were not away at the time.

### Results analysis and statistics

The sociodemographic data were used to characterize the population of the study. For analysis of the engagement, the scores were calculated according to the statistical model

proposed in the UWES Preliminary Manual<sup>(2)</sup>, presenting the values of minimum, maximum, median, mean ( $\pm$  standard deviation) and 95% confidence interval for each dimension of the UWES. The values obtained were interpreted with use of the UWES Preliminary Manual as shown in Table 1.

**Table 1** – Model for interpretation of the mean values of the study

Classification	Frequency of feelings in relation to work (UWES questions)
Very Low	From 0 to 0.99 = 0 (never) = 1 (at least once a year)
Low	From 1 to 1.99 = 2 (at least once a month)
Average	From 2 to 2.99 = 3 (at least a couple of times a month) From 3 to 3.99 = 4 (at least once a week)
High	From 4 to 4.99 = 5 (at least a few times a week)
Very high	From 5 to 6 = 6 (daily)

Note: Utrecht Work Engagement Scale (UWES)

Data were analyzed with use of the Statistical Package for Social Sciences (SPSS) software, version 17.0.

The comparisons were made with use of the Chi-square test, considering significant p-value less than or equal to 0.05.

## RESULTS

36 nurses participated in the study, with women prevalence (94.4%). The age of professionals ranged from 22 to 35 years, with an average of 25.5 years (SD:  $\pm$  2.7 years) and CI95% of 24.6 to 26.5 years; single (86.1%), with household income of two to five minimum wages (58.3%); most professionals participated in the Professional Development Program and worked 40 hours a week (58.3%), did not practice physical activity (61.1%) and reported leisure activity (52.8%). We highlight that 69.4% of the professionals reported being satisfied with the residency program, the same percentage of nurses who considered quitting the program (69.4%) (Table 2).

Table 3 presents the results of the evaluation of the levels of work engagement from the distribution of the coefficients of reliability, minimum, maximum, median, mean ( $\pm$  standard deviation) and 95% confidence interval, according to the dimensions of the UWES: vigor, dedication, absorption and engagement. On the analysis of reliability, the Cronbach's alpha values ranged from 0.805 to 0.945. The mean of dimensions ranged from 3.8 to 4.3 and the standard deviations, between 1.1 and 1.3. Vigor and absorption dimensions obtained average levels, and dedication and engagement dimensions, high levels.

The levels of work engagement, according to weekly workload, reported satisfaction and desire to quit the programs, are presented in Table 4.

**Table 2** – Distribution of sociodemographic characteristics of nurses enrolled in the multi-professional residency and professional development programs in health care

		n	%
Sex	Man	02	5.6
	Women	34	94.4
Age group	20 – 25 years	21	58.3
	26 – 30 years	13	36.1
	31 – 35 years	02	5.6
Marital status	Married	05	13.9
	Single	31	86.1
Household income (minimum wages)*	Up to 1	01	2.8
	From 2 to 5	21	58.3
	From 6 to 10	12	33.3
	More than 10	02	5.6
Practice of sports	Yes	14	38.9
	No	22	61.1
Leisure activity	Yes	19	52.8
	No	15	41.7
	Did not answer	02	5.6
Weekly Workload	40 hours**	21	58.3
	60 hours***	15	41.7
Satisfied with the program	Yes	25	69.4
	No	11	30.6
Thought about quitting the program	Yes	25	69.4
	No	11	30.6

Note: \*Value of the minimum wage: 744.00 BRL. \*\*Professional Development Program. \*\*\*Multi-professional Residency Program.

Regarding workload, the professionals showed average levels on the absorption dimension, regardless of the weekly workload. For the dedication dimension, the professionals working 40 hours a week showed average levels; among those working 60 hours a week, the levels were high. For all other dimensions, all professionals showed high levels.

Professionals who declared themselves satisfied with the programs for all dimensions of the UWES presented the highest engagement values.

**Table 3** – Distribution of the coefficients of reliability, minimum, maximum, median, mean ( $\pm$  standard deviation) and 95% confidence interval for the dimensions of the Utrecht Work Engagement Scale (UWES), according to the assessment of nurses enrolled in the multi-professional residency and professional development in health care programs

UWES Dimensions	Cronbach's alpha	Min	Max	Md	Mean $\pm$ SD	CI (95%)	Interpretation
Vigor	0.901	0.3	5.3	4.0	3.8 $\pm$ 1.3	3.4 - 4.2	Average
Dedication	0.911	0.4	6.0	4.6	4.3 $\pm$ 1.3	3.8 - 4.7	High
Absorption	0.805	1.0	5.7	4.2	3.9 $\pm$ 1.1	3.5 - 4.3	Average
Engagement	0.945	0.6	5.5	4.2	4.0 $\pm$ 1.1	3.6 - 4.4	High

Note: Min: minimum; Max: maximum; Md: median; SD: standard deviation; 95% CI: 95% confidence interval; UWES -Utrecht Work Engagement Scale.

**Table 4** – Distribution of means ( $\pm$  standard deviation) for the scales of the Utrecht Work Engagement Scale (UWES), according to weekly workload, reported satisfaction and desire to quit the programs

	Vigor			Dedication			Absorption			Engagement		
	Mean $\pm$ SD	Interpretation	p value	Mean $\pm$ SD	Interpretation	p value	Mean $\pm$ SD	Interpretation	p value	Mean $\pm$ SD	Interpretation	p value
Weekly Workload												
40 hours**	4.4 $\pm$ 1.2	High	0.808	3.8 $\pm$ 1.2	Average	0.756	3.8 $\pm$ 1.3	Average	0.632	4.0 $\pm$ 1.1	High	0.586
60 hours***	4.1 $\pm$ 1.5	High		4.0 $\pm$ 1.1	High		3.8 $\pm$ 1.3	Average		4.0 $\pm$ 1.2	High	
Satisfaction with the Program												
Yes	4.2 $\pm$ 1.1	High	0.156	4.6 $\pm$ 1.3	High	0.075	4.1 $\pm$ 1.1	Alto	0.087	4.3 $\pm$ 1.1	High	0.392
No	3.0 $\pm$ 1.2	Average		3.5 $\pm$ 1.2	Average		3.4 $\pm$ 1.1	Average		3.3 $\pm$ 0.9	Average	
Thought about quitting the program												
Yes	3.4 $\pm$ 1.3	Average	0.118	3.8 $\pm$ 1.3	Average	0.284	3.6 $\pm$ 1.1	Average	0.361	3.6 $\pm$ 1.1	Average	0.210
No	4.8 $\pm$ 0.5	High		5.3 $\pm$ 0.5	Very high		4.7 $\pm$ 0.6	Average		4.9 $\pm$ 0.5	High	

Note: \*\*Professional Development Program. \*\*\*Multi-professional Residency Program.

The professionals who thought about quitting the programs showed average levels in all dimensions of the UWES, while those who never thought of quitting presented average levels on the absorption dimension, high on engagement and vigor, and very high on dedication.

## DISCUSSION

The results of this study show that the nurses in the process of in-service professional training present high levels of engagement on all dimensions, especially on dedication. Brazilian studies with medical residents of Pediatrics<sup>(17)</sup> and with professionals on development programs<sup>(18)</sup> found similar results, showing that the professionals have good levels of engagement.

Levels of engagement on a research on readiness and commitment of nurses to changes in hospitals were lower than the levels identified on the nurses of this study. According to the author, the level of engagement interferes with the commitment of the professional to perform activities that contribute to patient safety, such as proper hand washing<sup>(19)</sup>.

These results show that the studied nurses are satisfied and identify with the work, which promotes the acquisition of skills and competences throughout in-service training, ensuring a future professional practice of quality.

The professionals who declared themselves satisfied or did not think of quitting the programs showed higher levels of engagement in relation to those dissatisfied or, who thought of quitting the residency/development at some point. Despite the inherent difficulties of the in-service training process pointed by literature, no significant statistical difference in levels of engagement between the groups, evidencing the involvement of these professionals with the work<sup>(9,13,20-23)</sup>.

The engagement levels found among the professionals in this research are supported by a Portuguese study with nurses in hospital units, it presented medium and high levels of engagement, varying between regions, hospitals and assistance units<sup>(24)</sup>.

Havens et al.<sup>(25)</sup>, claims that the engagement of nurses is influenced by the professional practice environment. Thus, while there

is no specific set of factors for the development of engagement<sup>(26)</sup>, implementing of measures such as the identification and valuing of preferences, personal and professional goals and values of nurses; the direct and constant supervision; the monitoring of the development of activities and the achievement of the goals set, with constant reviews, can strengthen the involvement of medical residents, promoting engagement within the institution.

Working environments that provide social support are important to obtain high levels of engagement reported by the professionals<sup>(25)</sup>. Similarly, satisfactory levels of dedication among the workers will depend on the support provided by managers<sup>(27)</sup>.

Cardoso<sup>(27)</sup> analyzed the importance of social support to promote engagement of Portuguese nurses and showed that the support of colleagues influences the level of engagement of the nurses directly and positively, especially in the dimensions of vigor and dedication, while the support provided by the managers interferes with the dedication of the professional. However, the author points that this is only possible if there is no excess of work, since this overload damages the relation between social support and engagement.

Given this context, the evaluation of the working conditions by the coordinators, teachers and tutors of the residency and professional development programs in nursing is fundamental, avoiding overload and providing social support to stimulate the development of engagement and that the working environment is conducive to the training and performance of these professionals.

## Study limitations

The main limitation of the study was the lack of publications on the topic, emphasizing the need for more scientific research on engagement among participants of residency and professional improvement programs in nursing. New studies, with professionals from different institutions, inserted in other contexts of in-service professional training, could make this assessment more effective, as well as the understanding of the factors that interfere on the level of professional engagement, in its different dimensions (force, absorption, dedication). Another limitation was performing the study on a single training center, restricting the analysis of results.

### Contributions to the nursing field and public health

This study contributes to the reflection of the relation between participants of residency and professional development programs and the working environment where they perform their professional training, contributing to the understanding of the impact of cultural and organizational differences, experiences and types of assistance in developing the engagement of these professionals, improving the process of in-service training proposed by the residency and professional development programs.

Furthermore, by contributing to the reflection of the relation of professionals with their working environment, this study may encourage the implementation of adjustments and improvements that favor in-service training, providing the insertion of better trained professionals to care for users of health services, especially of the Brazilian Unified Health System (SUS).

### CONCLUSION

The results of this study showed that nurses have good levels of engagement in all dimensions evaluated, showing

good levels of energy and resilience, enthusiasm and involvement with the work. They declared satisfaction with the activity and are dedicated to it, which promotes the acquisition of skills and competences throughout the in-service training, ensuring a future professional practice of quality. This evidences that the engagement is a good indicator of well-being, for both the residents and the institutions in which they are inserted.

This study highlights the importance of assessing the motivation and satisfaction of professionals in in-service training programs, reflecting on their working conditions. Thus, reinforcing the view that the occupational health of nurses interferes with their individual performance, influencing the quality of the service offered to the population.

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