CIÊNCIAS DA VIDA E DA SAÚDE
LIFE AND HEALTH SCIENCES
CIENCIAS DE LA VIDA Y LA SALUD

millenium

*Millenium, 2*(Edição Especial Nº24)

# FELICIDADE NO TRABALHO EM PROFISSIONAIS DE ONCOLOGIA: UM DESAFIO PARA A GESTÃO ORGANIZACIONAL
# HAPPINESS AT WORK AMONG ONCOLOGY PROFESSIONALS: A CHALLENGE FOR ORGANIZATIONAL MANAGEMENT
# FELICIDAD EN EL TRABAJO EN PROFESIONALES DE ONCOLOGÍA: UN DESAFÍO PARA LA GESTIÓN ORGANIZACIONAL

Sandrina Sá[1] *https://orcid.org/0009-0005-0056-1128*
Rosa Silva[2,3] *https://orcid.org/0000-0002-3947-7098*
Elisabete Borges[2,3] *https://orcid.org/0000-0002-6478-1008*

[1] Instituto Português de Oncologia do Porto, Porto, Portugal
[2] Escola Superior de Enfermagem do Porto, Porto, Portugal
[3] RISE - Health – Rede de Investigação em Saúde, Porto, Portugal

Sandrina Sá – sandrina8@gmail.com | Rosa Silva - rosasilva@esenf.pt | Elisabete Borges - elisabete@esenf.pt



**Corresponding Author:**
*Sandrina Sá*
Rua José Oliveira Branco
4485 - 619 – Porto - Portugal
sandrina8@gmail.com

RECEIVED: 30th April, 2025
REVIEWED: 03rd May, 2026
ACCEPTED: 29th June, 2026
PUBLISHED: 07th September, 2026

**DOI:** https://doi.org/10.29352/mill0224e.41504

## RESUMO

**Introdução:** A gestão organizacional em saúde é crucial para ambientes de trabalho saudáveis, especialmente em oncologia, onde a exposição ao sofrimento impacta a saúde e a satisfação profissional. A Felicidade no Trabalho (FT) pode mitigar esses efeitos, promovendo bem-estar e compromisso organizacional.
**Objetivo:** Identificar os níveis de FT nos profissionais de saúde, em contexto oncológico; e analisar a relação entre a FT e as variáveis sociodemográficas e profissionais.
**Métodos:** Estudo descritivo, correlacional e transversal conduzido num hospital da região norte de Portugal, com uma amostra de conveniência de 285 profissionais. Aplicou-se um questionário para caracterização sociodemográfica e profissional e a *Shorted Happiness at Work Scale* (Salas-Valina & Alegre, 2018; Feitor et al., 2023). Os dados foram submetidos a análise estatística descritiva e inferencial.
**Resultados:** Os participantes eram maioritariamente mulheres, entre 41-50 anos, enfermeiros, licenciados, com vínculo definitivo e horário rotativo. Obtiveram-se níveis médios de FT total de 4,37, com valor superior na dimensão *Engagement* (M=5,11) e inferior na Satisfação no Trabalho (M=3,27). Verificaram-se associações significativas entre FT e as variáveis sociodemográficas e profissionais, destacando a idade, estado civil, habilitações, carreira, tipo de serviço, categoria, experiência e horário, nas três dimensões *Engagement*, Satisfação no Trabalho e Compromisso Organizacional Afetivo.
**Conclusão:** A FT em oncologia, revelou-se mais elevada na dimensão *Engagement* e mais baixa na Satisfação, sugerindo realização apesar do desgaste emocional. As características sociodemográficas e profissionais são cruciais para orientar estratégias organizacionais mais sustentáveis. Destaca-se, assim, o papel dos enfermeiros gestores na promoção de ambientes de trabalho saudáveis, já que serviços semelhantes apresentaram diferentes níveis de FT.

**Palavras-chave**: felicidade; oncologia; hospital; gestão em saúde; profissionais de saúde

## ABSTRACT

**Introduction:** Effective organizational management in healthcare is essential for fostering healthy work environments, particularly in oncology, where frequent exposure to suffering can affect both health and professional satisfaction. Happiness at Work (HAW) can mitigate these effects, promoting well-being and organizational commitment.
**Objective:** To identify the levels of HAW among healthcare professionals in an oncology context and to analyse the relationship between HAW and sociodemographic and professional variables.
**Methods:** A descriptive, correlational, and cross-sectional study was conducted at a hospital in northern Portugal, using a convenience sample of 285 professionals. Data were collected through a questionnaire that gathered sociodemographic and professional data, along with the *Shorted Happiness at Work Scale* (Salas-Vallina & Alegre, 2018; Feitor et al., 2023). Data were subjected to descriptive and inferential statistical analysis.
**Results:** Most participants were women, aged between 41–50 years, nurses, held bachelor's degrees, had permanent contracts, and worked rotating shifts. The mean overall HAW level was 4.37, with the highest mean score in the Engagement dimension (M=5.11) and the lowest in Job Satisfaction (M=3.27). Significant associations were found between HAW and sociodemographic and professional variables, particularly age, marital status, educational level, career, type of service, professional category, work experience, and work schedule, across the three dimensions: Engagement, Job Satisfaction, and Affective Organizational Commitment.
**Conclusion:** HAW among oncology professionals was higher in the Engagement dimension and lower in Job Satisfaction, suggesting a sense of fulfilment despite emotional strain. Sociodemographic and professional characteristics are crucial for guiding more sustainable organizational strategies. The role of nurse managers in promoting healthy work environments is particularly highlighted, as similar services showed different HAW levels.

**Keywords:** happiness; oncology; hospital; health management; health professionals

**DOI:** https://doi.org/10.29352/mill0224e.41504

## RESUMEN

**Introducción:** La gestión organizacional en salud es crucial para entornos laborales saludables, especialmente en oncología, donde la exposición al sufrimiento impacta en la salud y en la satisfacción profesional. La Felicidad en el Trabajo (FT) puede mitigar estos efectos, promoviendo el bienestar y el compromiso organizacional.
**Objetivo:** Identificar los niveles de FT entre los profesionales de la salud en un contexto oncológico y analizar la relación entre la FT y las variables sociodemográficas y profesionales.
**Métodos:** Estudio descriptivo, correlacional y transversal realizado en un hospital de la región norte de Portugal, con una muestra de conveniencia de 285 profesionales. Se aplicó un cuestionario para la caracterización sociodemográfica y profesional, así como la *Shorted Happiness at Work Scale* (Salas-Vallina & Alegre, 2018; Feitor et al., 2023). Los datos fueron sometidos a análisis estadístico descriptivo e inferencial.
**Resultados:** La mayoría de los participantes eran mujeres, de entre 41 y 50 años, enfermeras, con titulación universitaria, contrato permanente y turno rotativo. El nivel medio total de FT fue de 4,37, con el valor más alto en la dimensión *Engagement* (M=5,11) y el más bajo en Satisfacción en el Trabajo (M=3,27). Se observaron asociaciones significativas entre la FT y las variables sociodemográficas y profesionales, destacándose la edad, el estado civil, el nivel educativo, la carrera, el tipo de servicio, la categoría profesional, la experiencia y el horario de trabajo, en las tres dimensiones: *Engagement*, Satisfacción en el Trabajo y Compromiso Organizacional Afectivo.
**Conclusión:** La FT en oncología se mostró más elevada en la dimensión *Engagement* y más baja en Satisfacción en el Trabajo, lo que sugiere realización personal a pesar del desgaste emocional. Las características sociodemográficas y profesionales son esenciales para orientar estrategias organizacionales más sostenibles. Se resalta el papel de los enfermeros gestores en la promoción de ambientes laborales saludables, dado que servicios similares presentaron diferentes niveles de FT.

**Palabras clave:** felicidad; oncología; hospital; gestión en salud; profesionales de la salud

## INTRODUCTION

Work plays a crucial role in people's lives. However, in recent decades, significant changes have occurred, impacting work environments. These changes result from profound social, economic, and technological transformations, as well as the effects of globalization (European Agency for Safety and Health at Work, 2022; Nowacka et al., 2025).
In the hospital context, particularly in the field of oncology, these transformations are strongly felt due to the specificity and complexity of the care provided. Scientific evidence has increasingly shown that frequent exposure to suffering makes healthcare professionals more vulnerable. Both nurses and operational assistants play critical roles in oncology services, providing specialized care to patients and their families. These, in turn, face disease processes marked by uncertainty (Grande & Neto, 2021; Toebe et al., 2023).
The prolonged and complex nature of oncology care particularly stands out, as it fosters the establishment of emotional bonds between professionals and patients. While this humanizes care, it can also increase emotional burden, and the risk of worker distress. These factors have contributed to growing attention toward the mental health of oncology workers and the positive aspects associated with their professional performance (Toebe et al., 2023).
Within this context, the concept of Happiness at Work (HAW) gains importance, as it encompasses both individual and organizational experiences of workers. Healthcare organizational management plays a critical role in creating healthy work environments. This is particularly relevant in emotionally demanding contexts such as oncology. In these settings, exposure to suffering may compromise psychological health and professional satisfaction (Balaminut et al., 2024). HAW thus emerges as a potential protective factor, with the capacity to mitigate these effects and enhance well-being and organizational commitment (Feitor et al., 2024). Additionally, there has been a growing recognition of the importance of this phenomenon within organizations (Costa, 2024), although the available evidence remains limited. This context has fostered the implementation of sustainable strategies aimed at promoting health and well-being in the workplace (Borges, 2023).
Nurse managers play a fundamental role in promoting healthy work environments (Porfírio et al., 2025; Silva et al., 2024), making the assessment of HAW crucial, as it directly influences the well-being of professionals and, consequently, the quality of care provided. This study, developed within the framework of the Health Work International Project (Nursing School of Porto / Health Research Network – HEALTH), aimed to identify the levels of HAW among healthcare professionals in an oncology context and to analyse the relationship between HAW and sociodemographic/professional variables. Given these objectives, a scientific gap is still identified in the evidence on HAW in oncology contexts, particularly regarding the integrated analysis of sociodemographic, professional, and organizational variables in complex hospital environments. This study seeks to contribute to addressing this gap by analyzing the levels of HAW in this population and its relationship with individual and organizational factors, as well as its implications for healthcare management and nursing managers.

**DOI:** https://doi.org/10.29352/mill0224e.41504

## 1. HAPPINESS AT WORK

HAW has also gained prominence at the political and institutional levels. It is important to emphasize that HAW is a complex and multidimensional construct, grounded in different theoretical perspectives of positive organizational psychology, which integrate affective, cognitive, and behavioral dimensions of well-being at work. In 2012, the United Nations established the International Day of Happiness, celebrated on March 20, advocating that the development of countries should be assessed not only by Gross Domestic Product but also through indicators such as Gross National Happiness, reflecting dimensions such as social well-being, quality of life, and sustainability (K. Silva et al., 2022).

In Portugal, the importance of well-being at work has been recognized through legislative measures such as the Decent Work Agenda, approved by Law No. 13/2023, of April 3. This reform introduced a set of measures aimed at improving working conditions and promoting the balance between professional and family life.

Additionally, Portuguese Standard No. 4590: Organizational Well-being and Happiness, published in October 2023 by the Portuguese Institute for Quality, represents a pioneering milestone by establishing practical guidelines for developing an organizational culture that promotes well-being. This standard aims to support organizations in defining sustainable policies and practices that foster HAW, thereby contributing to organizational performance and sustainability (Instituto Português da Qualidade, 2023).

In this regard, the approach to HAW must take into account the complexity of the phenomenon and recognize its multifaceted nature. The contributions of Cynthia Fisher have been particularly important in this field, as she was a pioneer in the theoretical development of this construct (Feitor et al., 2024; Fisher, 2010). Organizational and individual factors within the work context are also considered, which may be transient (emotions and moods) or stable (dispositions and attitudes) (Fisher, 2010).

In their most recent approach, Feitor et al. (2024) describe HAW as a construct integrating hedonic components, associated with pleasure and positive emotions, and eudaimonic components, related to self-realization and development over time. This definition is based on a three-dimensional perspective that includes affective-cognitive engagement in task performance (Engagement), the perception of job characteristics (Job Satisfaction), and the emotional bond with the organization (Affective Organizational Commitment).

In this framework, it is essential to consider particularly demanding contexts, such as oncology settings, where, despite high exposure to stress (Balaminut et al., 2024), many professionals report feeling happy in the performance of their duties (Junior et al., 2022). The meaning attributed to care and the perception of empowerment (V. Silva et al., 2022) emerge as protective factors, highlighting the importance of fostering small well-being experiences that promote emotional balance and resilience. Thus, recognizing the potential of work as a source of happiness can generate benefits for professionals, for the individuals they care for, for families, and for organizations (Junior et al., 2022).

Within this premise, the nurse manager, who possesses expertise in both the discipline of nursing and the specific domain of management, holds the responsibility of valuing professionals and contributing to the organization's success (Loureiro et al., 2024; Silva et al., 2024). Effective management improves the quality of life of professionals, creates conditions for job satisfaction, and consequently increases productivity. This directly impacts HAW and fosters a more positive and committed work environment (Loureiro et al., 2024).

## 2. METHODS

A study was developed within the quantitative paradigm, using a descriptive, correlational, and cross-sectional approach in a hospital located in the northern region of Portugal.

### 2.1 Sample

The convenience sample consisted of 285 nurses and operational assistants who had been working in oncology care functions for at least six months. These corresponded to a participation rate of 70.7% of the eligible professionals who agreed to take part in the study.

### 2.2 Data collection instruments

A questionnaire composed of two groups was applied. The first group included 14 closed-ended questions aimed at gathering sociodemographic and professional data from the participants, such as sex, age, marital status, presence of children, leisure activities, educational qualifications, professional career, department, professional category, years of professional experience, years working in the current department, type of employment contract with the institution, work schedule, and multiple employment.

The second group included the Portuguese version of the SHAW (Figure 1), originally developed by Salas-Vallina & Alegre (2018) and validated by Feitor et al. (2023). This scale assesses HAW through nine items distributed across three dimensions: Engagement, Job Satisfaction, and Affective Organizational Commitment. Items are rated on a seven-point Likert scale (1 - strongly disagree to

**DOI:** https://doi.org/10.29352/mill0224e.41504

7 - strongly agree), where higher scores indicate higher levels of HAW. The SHAW was selected because it is a concise, psychometrically robust instrument, validated for the portuguese population and widely used to assess Happiness at Work through the three dimensions. Examples of items include: "At my job, I feel strong and vigorous" (Engagement), "How satisfied are you with the nature of the work you perform?" (Job Satisfaction), and "I feel emotionally attached to this organization" (Affective Organizational Commitment).

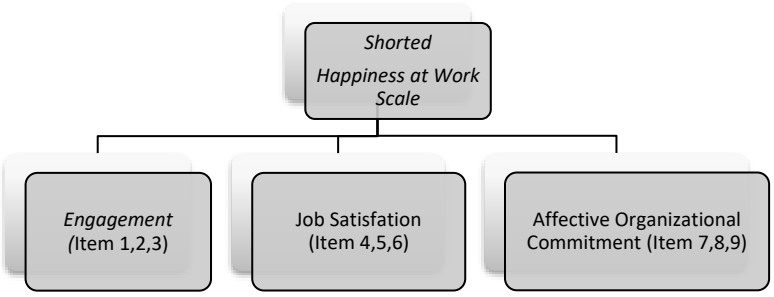


**Figure 1 –** *Shorted Happiness at Work Scale* and its dimensions (Salas-Vallina & Alegre, 2018; Feitor et al., 2023)

Authorization for the study was obtained from the hospital institution's Board of Directors and the Health Ethics Committee. The present study was also approved by the Technical-Scientific Council of the academic institution to which the research is affiliated (ADTE307/2023). Data collection took place from April 15 to May 14, 2024, and was conducted in person by one of the researchers through the administration of a paper-based questionnaire. After providing informed consent, each participant received two envelopes: one for the completed questionnaire and another for the signed consent form, both of which were placed into sealed boxes provided for this purpose. The collected data were coded and stored in a secure location. Digital information was anonymized, encrypted, and made accessible exclusively to the researcher.

### 2.3. Statistical Analysis

Data were analysed using descriptive and inferential statistics with the Statistical Package for the Social Sciences (IBM® SPSS), version 26.0. Sample characteristics were described using absolute and relative frequencies and measures of central tendency and dispersion. The internal consistency of the SHAW subscale was assessed using Cronbach's alpha coefficient (α).

Prior to inferential analyses, the assumptions of normality and homogeneity of variances were assessed using the Kolmogorov–Smirnov or Shapiro–Wilk tests and Levene's test, respectively. The selection of statistical procedures was based on the fulfilment of these assumptions. When normality and homogeneity assumptions were satisfied, parametric tests were used, namely Student's *t*-test for comparisons between two independent groups and one-way analysis of variance (ANOVA) for comparisons involving three or more groups. When these assumptions were not met, the corresponding non-parametric alternatives (Mann–Whitney U and Kruskal–Wallis tests) were applied. When heterogeneity of variances was detected in comparisons between two groups, Welch's *t*-test was used.

For statistically significant ANOVA results, post-hoc multiple comparison tests were conducted to identify differences between groups. Tukey's HSD test was applied when the assumption of homogeneity of variances was met, whereas the Games-Howell procedure was used when this assumption was violated.

Statistical significance was set at $p < 0.05$.

## 3. RESULTS

The majority of participants had children (44.9%), were single (41.8%), and engaged in leisure activities outside of working hours (66.3%). Educational qualifications were varied, with bachelor's degree (30.2%), secondary education (27.7%), and a master's degree (14.4%), being the most common levels attained. Most participants were nurses (65.6%) and operational assistants (34.4%). The majority held permanent contracts (90.9%), worked rotating shifts (82.8%), and did not have multiple employment (70.9%). Participants worked across various departments, with Paediatrics (17.9%), the Bone Marrow Transplant Unit (17.2%), and Palliative Care (15.1%) being the most represented. Regarding professional experience, the largest groups had 3 to 10 years (37.9%) and more than 20 years (31.9%) of professional experience. Similarly, most participants had worked in their current department for 3 to 10 years (31.2%) or 6 months to 2 years (29.5%). Among nurses, generalist nurses (67%) and specialist nurses (28.8%) predominated.

**DOI:** https://doi.org/10.29352/mill0224e.41504

The internal consistency of the SHAW was assessed using Cronbach's alpha coefficient. The dimensions and the total score of the SHAW demonstrated good levels of internal consistency (α > 0.8), except for the Job Satisfaction dimension, which showed a lower level of agreement (α = 0.653) (Table 1). Regarding HAW levels across its dimensions, Engagement had a mean value of 5.11, Job Satisfaction had a mean value of 3.27, and Affective Organizational Commitment had a mean value of 4.75. The overall mean SHAW score was 4.37 (SD = 1.01), as described in Table 1.

**Table 1** – Reliability Levels (Cronbach's Alpha α) and Descriptive Statistics of the SHAW Dimensions

| SHAW Dimensions | Alfa α | Minimum | Maximum | Median | Mode | M | DP | sk | ku |
|---|---|---|---|---|---|---|---|---|---|
| *Engagement* | 0,824 | 1,67 | 7 | 5,33 | 6 | 5,11 | 1,16 | -0,830 | 0,060 |
| Job Satisfaction | 0,653 | 1 | 6 | 3 | 3,33 | 3,27 | 1,05 | -0,382 | -0,206 |
| Affective Organizational Commitment | 0,877 | 1 | 7 | 4,67 | 4 | 4,75 | 1,39 | -0,550 | -0,075 |
| SHAW total | 0,876 | 1 | 7 | 4,44 | 5,11 | 4,37 | 1,01 | -0,432 | -0,412 |

**Note:** M = mean; SD = standard deviation; sk = skewness values; ku = kurtosis coefficient.

The highest levels of agreement were found for the item " How satisfied are you with the nature of the work you perform" with a mean score of 5.44. However, two items showed lower values (means below 2.30): "How satisfied are you with the pay you receive for your job" and " How satisfied are you with the opportunities that exist in this organization for advancement (promotion)?" (Table 2).

**Table 2** – Main Statistics of Happiness at Work (1 – Strongly Disagree to 7 – Strongly Agree)

| Items | Minimum | Maximum | Median | Mode (%) | M | DP |
|---|---|---|---|---|---|---|
| 1. At my job, I feel strong and vigorous | 1 | 7 | 5 | 6(40,4) | 5,02 | 1,35 |
| 2. I am enthusiastic about my job | 1 | 7 | 6 | 6(46,3) | 5,15 | 1,32 |
| 3. I get carried away when I am working | 1 | 7 | 5 | 6(29,1) | 5,15 | 1,40 |
| 4. How satisfied are you with the nature of the work you perform? | 1 | 7 | 6 | 6(49,5) | 5,44 | 1,34 |
| 5. How satisfied are you with the pay you receive for your Job? | 1 | 6 | 2 | 1(46,3) | 2,06 | 1,32 |
| 6. How satisfied are you with the opportunities that exist in this organization for advancement (promotion)? | 1 | 6 | 2 | 1(38,6) | 2,30 | 1,44 |
| 7. I would be very happy to spend the rest of my career with this organization. | 1 | 7 | 4 | 4(30,2) | 4,58 | 1,60 |
| 8. I feel emotionally attached to this organization | 1 | 7 | 5 | 6(31,2) | 4,94 | 1,48 |
| 9. I feel a strong sense of belonging to my organization | 1 | 7 | 5 | 6(25,3) | 4,72 | 1,57 |

**Note:** M = mean; SD = standard deviation.

In the relationship between HAW and sociodemographic variables, statistically significant results were found in the Engagement dimension with age. In the Job Satisfaction dimension, significant differences were also identified among professionals according to their age. For Affective Organizational Commitment, statistically significant results were observed based on age and educational qualifications. The remaining sociodemographic variables did not show statistically significant associations with the analysed dimensions (p > 0.10), as shown in Table 3.

**Table 3** – Association between SHAW Dimensions and Sociodemographic Variables

| SHAW Dimensions | Sex | Age | Marital Status | Children | Leisure Activities | Educational Qualifications |
|---|---|---|---|---|---|---|
| *Engagement* | t=0,084<br>p=0,933 | f=6,763<br>p<0,001 | f=2,276<br>p=0,080 | t=0,620<br>p=0,536 | t=0,956<br>p=0,340 | f= 2,305<br>p=0,059 |
| Job Satisfaction | t=1,492<br>p=0,137 | f=4,894<br>p=0,001 | f=2,365<br>p=0,071 | t=0,355<br>p=0,723 | t=1,146<br>p=0,253 | f=1,461<br>p=0,214 |
| Affective Organizational Commitment | t=1,596<br>p=0,112 | f=6,726<br>p<0,001 | f=1,627<br>p=0,183 | t=1,305<br>p=0,193 | t=0,870<br>p=0,385 | f=2,703<br>p=0,031 |

***Note:*** *t = Student's t-test; F = ANOVA test; p = test value.*

The ANOVA test revealed statistically significant differences in all three SHAW dimensions-Engagement, Job Satisfaction, and Affective Organizational Commitment-according to the professionals' age. Post-hoc tests (Tukey's HSD or Games-Howell) indicated that professionals aged 51-60 and over 60 years had higher mean levels of agreement compared to younger age groups.
For Engagement, mean scores ranged from M = 4.69 among professionals aged 30–40 years to M = 5.85 among those aged over 60 years. For Job Satisfaction and Affective Organizational Commitment, the highest mean scores were observed among professionals aged 51–60 years (M = 3.65, SD = 0.97 and M = 5.45, SD = 1.10, respectively). Regarding educational qualifications, significant differences were observed in Affective Organizational Commitment between professionals with Basic/ Secondary Education (M = 5.12; SD = 1.29) and those with a bachelor's degree (M = 4.51; SD = 1.31), with p = 0.027. In the Engagement dimension, higher mean scores were also observed among the group with lower educational levels (M = 5.41; SD = 1.03), although

**DOI:** https://doi.org/10.29352/mill0224e.41504

the differences did not reach statistical significance (p = 0.084). No statistically significant differences were found between marital status groups (p > 0.10).

Concerning the influence of professional variables on the SHAW dimensions, statistically significant associations were also identified, as shown in Table 4. The Engagement dimension revealed significant differences according to professional category, total work experience, length of service in the current department, and work schedule. Professionals with a fixed schedule showed higher mean Engagement levels (M = 5.53; SD = 0.92) compared to those with rotating shifts (M = 5.02; SD = 1.19). Operational assistants also reported higher Engagement scores than nurses (M = 5.29 vs. M = 5.01). Job Satisfaction showed a significant association with professional category, professional experience, length of service in the current department, employment contract type, and work schedule. Professionals with precarious contracts reported higher mean levels of satisfaction (M = 4.06; SD = 0.97). In this dimension as well, professionals with a fixed schedule reported greater satisfaction (M = 3.75; SD = 1.05). The Affective Organizational Commitment dimension also revealed statistically significant differences across most professional variables. Operational assistants presented higher mean levels (M = 5.01; SD = 1.37) compared to nurses (M = 4.61; SD = 1.38). Higher commitment levels were also observed among professionals working fixed schedules (M = 5.37; SD = 1.19) and among those without multiple employment (M = 4.87; SD = 1.33). Differences were additionally identified according to nurse category, department, professional experience, and length of service in the current department (Table 4).

**Table 4** – Association between SHAW Dimensions and professional characterization variables

| SHAW Dimensions | Professional Career | Department | Professional Category | Professional Experience | Time in Current Department | Contract Type | Work Schedule | Multiple Employment |
|---|---|---|---|---|---|---|---|---|
| *Engagement* | t=1,925<br>p=0,055 | f=2,044<br>p=0,050 | f=4,484<br>p=0,013 | f=11,598<br>p<0,001 | f=15,874<br>p<0,001 | u=3007,5<br>p=0,367 | t=3,341*<br>p=0,001 | t=1,775<br>p=0,077 |
| Job Satisfaction | t=0,221<br>p=0,825 | f=1,282<br>p=0,259 | f=5,120<br>p=0,007 | f=10,965<br>p<0,001 | f=15,821<br>p<0,001 | t=4,177<br>p<0,001 | t=3,601<br>p<0,001 | t=1,635<br>p=0,103 |
| Affective Organizational Commitment | t=2,344<br>p=0,020 | f=3,230<br>p=0,003 | f=5,612<br>p=0,004 | f=10,305<br>p<0,001 | f=9,660<br>p<0,001 | t=0,437<br>p=0,664 | t=3,552<br>p<0,001 | t=2,330<br>p=0,021 |

**Note:** t = Student's t-test; f = ANOVA test; U = Mann-Whitney test; p = test value; * Welch's t-test.

In the analysis of the influence of department on the SHAW dimensions, Tukey's HSD post-hoc test revealed that professionals from the Oncology Medicine Department (aa) showed significantly lower Engagement levels than those from the Oncology Medicine Department (bb) (M = 4.60; SD = 1.39 vs. M = 5.59; SD = 1.07, respectively). Similarly, in the Affective Organizational Commitment dimension, professionals from Oncology Medicine (aa) reported lower mean levels compared to those from Oncology Medicine (bb) (M = 4.05; SD = 1.18 vs. M = 5.43; SD = 1.13) (95% CI [0.2460; 2.4979], p = 0.006) and Paediatrics (M = 5.07; SD = 1.25).

Regarding the nurse category, nurse managers/specialist nurses with management roles presented significantly higher levels of Engagement (M = 5.88; SD = 0.47) and Affective Organizational Commitment (M = 5.88; SD = 1.04) compared to generalist care nurses (M = 4.40; SD = 1.27). In the Job Satisfaction dimension, specialist nurses also presented higher mean levels than generalist nurses (M = 3.56; SD = 1.23 vs. M = 3.08; SD = 0.96) (95% CI [0.0320; 0.9217], p = 0.009).

Regarding total professional experience (Table 5), the ANOVA test revealed lower levels of Engagement and Job Satisfaction among the groups with 3 to 10 years and 11 to 20 years of experience, compared to professionals with either less or more experience. Professionals with more 20 years of experience showed the highest levels across all SHAW dimensions, particularly in Affective Organizational Commitment. Similar results were found when considering the time spent in the current department. Professionals with more than 20 years of service in the same department reported higher levels of Engagement, Job Satisfaction, and Affective Organizational Commitment than those with shorter tenure (Table 5).

**Table 5 –** Statistics of SHAW subscales according to professional experience

| SHAW Dimensions | Professional Experience – Mean (SD) | | | | Time in Current Department – Mean (SD) | | | |
|---|---|---|---|---|---|---|---|---|
| | 6 months to 2 years | 3 to 10 years | 11 to 20 years | more than 20 years | 6 months to 2 years | 3 to 10 years | 11 to 20 years | more than 20 years |
| Engagement | 5,76 (0,77) | 5,04 (1,11) | 4,57 (1,28) | 5,51 (1,00) | 5,40 (0,93) | 4,78 (1,21) | 4,38 (1,36) | 5,61 (0,88) |
| Job Satisfaction | 3,98 (1,07) | 3,19 (0,99) | 2,81 (1,00) | 3,59 (1,00) | 3,59 (1,00) | 2,86 (0,92) | 2,80 (1,08) | 3,68 (0,96) |
| Affective Organizational Commitment | 5,09 (1,51) | 4,72 (1,23) | 4,09 (1,39) | 5,23 (1,31) | 4,83 (1,34) | 4,46 (1,31) | 4,12 (1,55) | 5,37 (1,17) |

**Note:** M = mean; SD = standard deviation.

**DOI:** https://doi.org/10.29352/mill0224e.41504

## 4. DISCUSSION

In the present study, healthcare professionals demonstrated average levels of HAW, with Engagement emerging as the highest-rated dimension, indicating involvement and dedication even in challenging contexts such as oncology. Affective Organizational Commitment showed greater variability, reflecting different levels of emotional identification with the institution. Job Satisfaction recorded the lowest scores, particularly in items related to salary and career advancement. These findings are consistent with previous studies conducted in hospital settings (Cunha, 2023; Loureiro et al., 2024), where Engagement consistently appears as the highest-rated dimension, and satisfaction as the most critical. This pattern can also be understood in light of career cycle models, in which more advanced stages are associated with greater psychological stability, higher organizational adjustment, and reduced work–role conflict, fostering higher levels of HAW. In emotionally demanding contexts, such as oncology, work engagement, the perception of social utility, and a sense of purpose may act as protective factors for HAW (V. Silva et al., 2022). However, negative perceptions regarding salary fairness and career progression continue to limit overall satisfaction (Javanmardnejad et al., 2021).

Regarding sociodemographic variables, professionals in the 51-60 and >60 age groups showed significantly higher levels across all three HAW dimensions, particularly in Engagement and Affective Organizational Commitment. This pattern may reflect more consolidated emotional bonds and greater identification with professional responsibilities, and can also be understood in light of career cycle models, in which more advanced stages are associated with greater psychological stability, higher organizational adjustment, and reduced work - role conflict, fostering higher levels of HAW. Although some studies report higher levels of Engagement among younger professionals, attributing it to greater initial enthusiasm (Feitor et al., 2024), others observe a trend of increasing Engagement with age, associated with social support and professional maturity (Loureiro et al., 2024).

In Job Satisfaction, older professionals also stood out. Greater stability, access to positions of responsibility, and adaptation to institutional dynamics may explain these results, in line with previous research on the impact of accumulated experience (Cunha, 2023; Feitor, 2020).

Regarding the results obtained in the Affective Organizational Commitment dimension, the findings suggest that accumulated career experience fosters the development of a stronger emotional bond with the institution. This trend is consistent with the findings of Fantahun et al. (2023), who associate length of service and a sense of belonging with higher levels of organizational commitment.

Interestingly, professionals with lower academic qualifications showed higher mean levels of both Engagement and Affective Organizational Commitment. This result contrasts with part of the literature that links higher commitment levels to professionals with higher educational qualifications (Fantahun et al., 2023), but supports the findings of Cunha (2023), who highlight the influence of educational level on how individuals engage with their organization. In such cases, work may be perceived as a source of stability, recognition, and personal valorisation, especially when access to these positions represents significant social and professional advancement.

Regarding professional variables, differences in Engagement levels were observed among nursing categories. While generalist nurses showed lower mean levels, specialist nurses with management roles stood out with higher values. These results are consistent with the findings of Loureiro et al. (2024), who identified greater involvement among professionals in leadership roles, emphasizing the influence of institutional recognition and the valorisation associated with management responsibilities in strengthening both affective commitment and Engagement. However, this trend is not universally supported in the literature. Feitor (2020), for instance, observed higher levels of Engagement among generalist nurses. This discrepancy may be related to the context in which the study was conducted-the Azores-where factors such as more favourable working conditions, more effective support structures, or a more positive organizational culture could influence professional engagement and satisfaction. Thus, the data suggest that institutional and sociocultural contexts may mediate the impact of professional category on Engagement and organizational commitment.

Work schedule showed a significant association with the SHAW dimensions, with professionals on fixed schedules presenting higher levels across all dimensions, especially in Affective Organizational Commitment. This pattern may be related to the predictability and stability provided by this type of schedule, which supports a better work-life balance and strengthens emotional bonds with the institution (Douglas & Roberts, 2020). In contrast, rotating schedules, which are more irregular and demanding, tend to negatively impact professionals' well-being and engagement, especially in emotionally demanding contexts such as oncology (Hisel, 2020).

Regarding Affective Organizational Commitment, operational assistants stood out by presenting higher levels compared to nurses. This result may reflect a stronger connection to the immediate work environment and teams, as well as more stable professional expectations with less pressure for career advancement, which may contribute to a more consolidated sense of belonging (Cunha, 2023).

Regarding the department variable, significant differences were observed in the mean levels of Engagement among professionals from Oncology Medicine (aa), Oncology Medicine (bb), and Paediatrics. Although the two Oncology Medicine departments deal

**DOI:** https://doi.org/10.29352/mill0224e.41504

with similar clinical profiles-particularly in terms of workload, care complexity, and available resources-the data suggest a differentiated organizational climate between departments, impacting professional Engagement.

In Oncology Medicine (bb), the higher levels of Engagement may be associated with the valorisation of teamwork, the recognition of individual competencies, and a shared sense of mission, aspects that, according to the literature, strengthen organizational Engagement. In the Paediatrics Department, the nature of the work-marked by interaction with children and families, the perception of social utility, and intrinsic motivation to promote well-being- appears to be a central factor in strengthening Engagement.

These findings are consistent with studies by Cunha (2023) and Loureiro et al. (2024), who identified women's and children's departments as contexts where higher levels of Engagement and Affective Organizational Commitment are recorded, compared to medical and surgical services. These results can be interpreted in light of contextual differences between clinical units and the motivational role of pediatric settings.

Regarding multiple employment, the data indicated lower levels across all SHAW dimensions. This difference may be associated with the fragmentation of professional focus, greater physical and emotional exhaustion, and difficulties in establishing a strong bond with a single organization. Exclusive dedication, on the other hand, seems to favour the construction of a stronger organizational bond, resulting in higher levels of satisfaction, engagement, and commitment (Apaydin et al., 2023). Regarding total professional experience, higher levels of Job Satisfaction were observed among professionals with less experience, contradicting the trend reported by Loureiro et al. (2024) and Cunha (2023), who associate accumulated experience with better salary conditions, growth opportunities, and consequently, greater satisfaction. This finding suggests that the relationship between experience and job satisfaction is not linear and may vary depending on the stage of the career cycle and professional expectations. However, in the present study, it is plausible that professionals with less career time are in an initial phase characterized by enthusiasm, recognition, and a sense of achievement, which enhances positive perceptions of work. In addition, lower accumulated exposure to emotional exhaustion-typical of oncology contexts-may contribute to higher satisfaction levels in this group. This pattern is supported by Beserra & Brito (2024), who highlight that the early career phase is often marked by an increased appreciation of professional opportunities, which can strengthen satisfaction.

Conversely, professionals with more than 20 years in their current department exhibited higher levels of Job Satisfaction. This result may be interpreted through greater clarity about the positive impact of their contribution, generating a sense of accomplishment and social utility. Sardinha et al. (2023) corroborate this idea, arguing that prolonged experience facilitates the perception of the value and impact of the work performed, consequently increasing satisfaction. In contrast, less experienced professionals may still be in a process of adaptation and opportunity exploration, which tends to moderate-or even diminish-satisfaction during the early stages of their careers.

Interestingly, professionals with precarious contracts reported higher levels of job satisfaction. Although this finding appears to contradict much of the existing literature-which typically links stable contracts to greater well-being and satisfaction-it can be interpreted within the specific context of this study. This finding may reflect a contrast effect between expectations and work reality, in which obtaining employment in contexts of high economic uncertainty is interpreted as a significant gain, positively influencing perceived satisfaction.The perceived value of having a job opportunity, particularly in a labour market marked by professional instability and high competition, may heighten appreciation for the available working conditions. However, this interpretation should be approached with caution. As noted by Beserra & Brito (2024), professionals with permanent contracts tend to exhibit higher levels of HAW, suggesting that long-term job stability is an important factor in promoting lasting satisfaction and well-being. These results can be interpreted in light of different theoretical perspectives, but they raise questions about the role of contractual stability in job satisfaction. This highlights the importance of considering both subjective perceptions and structural conditions when analysing job satisfaction in healthcare settings.

Prolonged experience within the same department appears to reinforce professionals' Affective Organizational Commitment to the institution, reflecting the recognition of their competencies and the bond built over time (Loureiro et al., 2024). These findings highlight that caring for professionals is a strategic requirement, especially in oncology, where recognition, organizational justice, and emotional support are fundamental to promoting healthy work environments and ensuring the quality of care (Bellet et al., 2023; Borges, 2023).

## CONCLUSION

Among oncology professionals, HAW showed higher mean scores in Engagement and lower scores in Job Satisfaction, suggesting a sense of fulfilment despite emotional exhaustion. Sociodemographic and professional characteristics are essential for understanding HAW and guiding personalized strategies. Variables such as age, educational qualifications, career, professional category, department, employment contract, work schedule, multiple employment, professional experience, and time in the current department confirm this relevance. The role of nurse managers in promoting healthy work environments is particularly highlighted, as different services - with similar patient profiles - revealed different levels of HAW. Some limitations were identified, namely the use of a convenience sample and the focus on a single hospital in the northern region of Portugal, which limits the

**DOI:** https://doi.org/10.29352/mill0224e.41504

generalization of the results. Furthermore, the cross-sectional nature of the study prevents establishing causal relationships between sociodemographic/professional variables and HAW levels. Future longitudinal studies could help clarify the direction of these relationships.

In summary, the results of this study highlight the complexity of HAW in demanding contexts such as oncology and reveal the central role of Engagement, Job Satisfaction, and Affective Organizational Commitment. Factors such as professional stability and organizational recognition emerge as determinants of professionals' well-being. These results contribute to the scientific knowledge on HAW, reinforcing its multidimensional nature and the influence of organizational and professional factors. In this sense, organizational management faces the challenge of building emotionally sustainable work environments, where institutional support, organizational justice, and the valorisation of professional trajectories are strategic priorities. In terms of management implications, it is recommended to invest in close and participative leadership and in strategies for the retention and valorisation of professionals in contexts such as oncology. Future longitudinal and multicentre studies may further explore the relationships between the variables analysed and HAW, as well as the impact of organizational interventions on well-being. Promoting HAW is not only an ethical imperative but also an essential condition for ensuring quality care in emotionally demanding contexts such as oncology.

## ACKNOWLEDGMENTS

To all healthcare professionals working in oncology care contexts, who, with compassion, dedicate themselves unconditionally to the people they care for.

## AUTHORS' CONTRIBUTION

Conceptualization, E.B.; data curation, S.S., R.S. and E.B.; formal analysis, S.S., R.S. and E.B.; investigation, S.S., R.S. and E.B.; methodology, S.S., R.S. and E.B.; project administration, S.S., R.S. and E.B.; resources, S.S., R.S. and E.B.; software, S.S., R.S. and E.B.; supervision, S.S., R.S. and E.B.; validation, S.S., R.S. and E.B.; visualization, S.S., R.S. and E.B.; writing – original draft, S.S., R.S. and E.B.; writing – review & editing, S.S., R.S. and E.B.

## CONFLICT OF INTERESTS

The authors declare no conflict of interest.

## REFERENCES

Apaydin, E. A., Rose, D. E., McClean, M. R., Mohr, D. C., Yano, E. M., Shekelle, P. G., Nelson, K. M., Guo, R., Yoo, C. K, & Stockdale, S. E. (2023). Burnout, employee engagement, and changing organizational contexts in VA primary care during the early COVID-19 pandemic. *BMC Health Services Research*, *23*(1), 1306. https://doi.org/10.1186/s12913-023-10270-8

Balaminut, T., Godoy, G. A., Carmona, E. V., & Dini, A. P. (2024). Factors related to nursing workload in the oncology assistance provided to hospitalizes women. *Revista Latino-Americana de Enfermagem, 32*, e4107, 1-13. https://doi.org/10.1590/1518-8345.6787.4106

Bellet, C. S., Neve, J. E., & Ward, G. (2023). Does employee happiness have na impact on productivity? *Management Science*, *70*(3), 1656-1679. https://doi.org/10.1287/mnsc.2023.4766

Beserra, V. D. S., & Brito, C. (2024). Situações difíceis e sentimentos no cuidado paliativo oncológico. *Cadernos de Saúde Pública*, *40*(1), e00116823, 1-15. https://doi.org/10.1590/0102-311XPT116823

Borges, E. (2023). Promoção de saúde do trabalhador e grupos. In E. Borges (Ed). *Enfermagem do trabalho* (2ª ed., cap. 11, p. 141). Lidel.

Costa, R. (2024). Cuidar das pessoas – O centro das organizações In R. Costa (Ed). *A felicidade é lucrativa. Como pessoas felizes podem tornar as empresas mais produtivas* (1ª ed., cap. 2, pp. 33-35). Contraponto.

Cunha, M. E. (2023). *Bullying e felicidade no trabalho: Um estudo com profissionais de saúde em contexto hospitalar*. [Dissertação de mestrado, Escola Superior de Enfermagem do Porto]. Repositório Comum da Escola Superior de Enfermagem do Porto. http://hdl.handle.net/10400.26/49605

Douglas, S., & Roberts, R. (2020). Employee age and the impact on work engagement. *Strategic HR Review*, *19*(5), 209-213. https://doi.org/10.1108/SHR-05-2020-0049

European Agency for Safety and Health at Work. (2022). *Psychosocial risks and workers health*. OSHwiki. https://shre.ink/3DjC

Fantahun, B., Dellie, E., Worku, N., & Debie, A. (2023). Organizational commitment and associated factors among health professionals working in public hospitals of southwestern Oromia, Ethiopia. *BMC Health Services Research*, *23*(1), 180. https://doi.org/10.1186/s12913-023-09167-3

**DOI:** https://doi.org/10.29352/mill0224e.41504

Feitor, S. (2020). *Felicidade no trabalho e eventos potencialmente traumáticos: Um estudo com enfermeiros açorianos.* [Dissertação de mestrado, Escola Superior de Enfermagem do Porto]. Repositório Comum da Escola Superior de Enfermagem do Porto. http://hdl.handle.net/10400.26/36080

Feitor, S., Martins, T., & Loureiro, S. (2024). Felicidade no trabalho: Concetualização e estudos em enfermeiros portugueses. In L. L. Trindade, J. Carneiro, M. Schoeninger, & E. Borges (Eds). *Health Work International Project – HWOPI: Teorias e vivências para a saúde ocupacional* (cap. 8, pp. 121-135). Editora Argos. https://shre.ink/3Dj1

Fisher, C. D. (2010). Happiness at work. *International Journal of Management Reviews, 12*(4), 384-412. https://doi.org/10.1111/j.1468-2370.2009.00270.x

Grande, C., & Neto, H. V. (2021). Condições psicossociais de trabalho de enfermeiros e assistentes operacionais num serviço de internamento hospitalar. *Cesqua-Cadernos de Engenharia de Segurança, Qualidade e Ambiente, 1*(4), 61-82. https://cesqua.org/index.php/cesqua/article/view/65/44

Hisel, M. E. (2020). Measuring work engagement in a multigenerational nursing workforce. *Journal of nursing management*, *28*(2), 294-305. https://doi.org/10.1111/jonm.12921

Instituto Português da Qualidade. (2023). *Norma Portuguesa 4590: Sistema de gestão do bem-estar e felicidade organizacional. Requisitos e linhas de orientação para a sua utilização*. https://shre.ink/3DG6

Javanmardnejad, S., Bandari, R., Heravi-Karimooi, M., Rejeh, N., Sharif Nia, H., & Montazeri, A. (2021). Happiness, quality of working life, and job satisfaction among nurses working inemergency departments in Iran. *Health and Quality of Life Outcomes*, *19*(1): 112, 1-8. https://doi.org/10.1186/s12955-021-01755-3

Junior, R. S., Amaral, L., Gusmão, R., Nunes, N., Araújo, D., Barbosa, H., & Silva, C. (2022). Sentimentos vivenciados pelos profissionais com fadiga por compaixão na assistência em oncologia. *Revista Psicologia, Saúde & Doenças, 23*(3), 683-694. https://doi.org/10.15309/22psd230308

Lei nº 13/2023 da Assembleia da República. (2023). Altera o Código do Trabalho e legislação conexa, no âmbito da agenda do trabalho digno. *Diário da República*, nº 66/2023, Série I, pp. 2-85. https://shre.ink/3DGw

Loureiro, S., Loureiro, H., Trindade, L., & Borges, E. (2024). Preditores da felicidade no trabalho e interação familiar em enfermeiros. *Journal Nursing and Health. 13*(3), e13324857, 1-11. https://doi.org/10.15210/jonah.v13i3.24857

Nowacka, A., Gniadek, A., Micek, A., Świątek, P., Wadas, T., & Wolfshaut-Wolak, R. (2025). Occupational burnout in nurses and corporate employees in Małopolska region, Poland. *Healthcare, 13*(2), 123. https://doi.org/10.3390/healthcare13020123

Oliveira, M. M. L. S., Butrico, G. F. O., Vila, V. S. C., Moraes, K. L., Rezende, M. A. D., Santos, L. T. Z., Magalhães, L. S., & Alves, S. B. (2024). Qualidade de vida no trabalho de profissionais da saúde durante a pandemia da covid-19. *Revista Brasileira de Enfermagem*, *77*, e20230461, 1-8. https://doi.org/10.1590/0034-7167-2023-0461pt

Porfírio, C., Moreira, I., Mota, M., Sequeira, C., Reis Santos, M., & Pires, R. (2025). Programas de literacia emocional para enfermeiros gestores: Um protocolo de scoping review. *Millenium - Journal of Education, Technologies, and Health*, *2*(17e), e39056. https://doi.org/10.29352/mill0217e.39056

Salas-Vallina, A., & Alegre, J. (2018). Happiness at work: Developing a shorter measure. *Journalof Management & Organization*, *27*(3), 460−480. https://doi.org/10.1017/jmo.2018.24

Sardinha, A. H. L., Nascimento, K. F. S., Sales, M. F. S., Sousa, S. M. F., Oliveira, A. S., Lopes, A. R. S., & Cacau, M. P. (2023). Avaliação da satisfação da autonomia profissional de enfermeiros no cuidado oncológico. *Nursing Edição Brasileira*, *26*(298), 9453-9462. https://shre.ink/3DGi

Silva, C., Santos, D., Morais, J., Dias, R., Oliveira, S., & Figueiredo, S. (2024). Impacto das estratégias de comunicação do enfermeiro gestor nos ambientes de trabalho em enfermagem. *Millenium - Journal of Education, Technologies, and Health*, *2*(16e), e37492. https://doi.org/10.29352/mill0216e.37492

Silva, K. M., Pessi, L., Penido, V. S. N., Silva, F. A., Carvalho, F. E., & Boas, A. A. V. (2022). Stresse, Carga de Trabalho, Burnout e Satisfação no Trabalho: Algumas Considerações Teóricas. *Revista FSA*, *19*(12), 268-278. https://doi.org/10.12819/2022.19.12.13

Silva, V. R. D., Gradim, C. V. C., & Tonini, T. (2022). Enfermeiros oncológicos: felicidade profissional frente à psicologia positiva. *International Journal of Development Research*, *12*(01), 53161-53164. https://doi.org/10.37118/ijdr.23558.01.2022

Toebe, T. R. P., Constant, H. M. R. M., Brandão, M. L., Silva, G. B., Medeiros, J. G. T., & Rabin, E. G. (2023). Identificação de fadiga por compaixão em enfermeiros de um hospital oncológico. *Revista Foco, Interdisciplinary Studies, 16*(1), e768, 1-16. https://doi.org/10.54751/revistafoco.v16n1-064