

The Relationship Between work Engagement And Meaningful work To well-Being And Aspiration Index In The Health Field: The Case Of Physicians

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Abstract

Background: During the pandemic period, medical personnel became the focus of society's attention. The pandemic appeared to have significantly affected the professional performance of doctors and led to an increase in medical errors. And while research interest so far has focused on burnout and occupational stress in physicians, the study of more positive concepts such as work engagement, meaning at work, and personal well-being may have equally important benefits for the health field for the design of targeted interventions in order to strengthen the human resources of health structures.

Aim: The purpose of this study is to investigate the work engagement of physicians and the finding of meaning in their work in relation to their personal well-being and future life-goals.

Method: For the purpose of the study, a point-in-time study was conducted using questionnaires, in which a total of 116 men and women participated.

Results: The findings indicate that physicians' work engagement indeed contributes to their well-being and confirm that experiencing meaning at work enhances personal well-being.

Conclusion: Taking measures as well as implementing policies that emphasize work engagement and finding meaning in work can improve physician performance and help reduce medical errors.

Keywords: Work Engagement, Work Meaning, Wellbeing, Aspiration Index, Physicians

Introduction

It is a fact that the new epidemiological reality and the recent data in the field of health have put the medical staff at the center of society's interest. During the pandemic, healthcare professionals were called upon to respond to increased caregiving needs and to function effectively under intense psychological stress. Their professional performance was significantly affected and the number of medical errors and inaccuracies in results increased [1].

And while the research interest until now has focused on the professional burnout and work stress of doctors in an attempt to deal with the risk factors that affect their mental well-being and therefore their efficiency at work, the study of more positive concepts such as work engagement, meaningful work and personal well-being can have equally important benefits for the health field as targeted interventions to strengthen the human resources of health organizations.

From the study of the existing literature, it seems that the achievement of high work engagement is associated with better physician-reported care the provision of more effective health services with the condition of ensuring the satisfaction of the workers in this sector [2]. In particular, in the health sector, work engagement appears to be a crucial factor contributing to help physicians work productively and create a healthy medical workforce [3].

In the same direction, the job satisfaction and individual well-being of the employees in this area are essential conditions for the creation of a dynamic working environment, which uses individual potential and promotes teamwork and cooperation.

Personal development by cultivating feelings of lust for life and creativity combined with the acquisition of new knowledge proceedings of work can contribute to giving meaningful meaning to work by mobilizing workers in this area to actively participate in

the changes and challenges that are called to face. The development and evolution of health organizations cannot succeed without giving importance to the needs and individual goals of employees. According to the above, it seems that the attribution of meaning to work is an intended psychological condition for these organizations as it can not only align the organizational with individual goals but also contribute to the utilization of the potential of human resources with multiplying benefits for both the organization itself as well as for the employees in it [4].

Thus, meaningful work has mostly been shown to be an important factor contributing to employee well-being [5,6].

In this regard, according to organizational psychology, work engagement may be conceptualized as the beneficial counterpart of burnout and is characterized by three dimensions referred to as vigor (i.e. high energy levels and work-related persistence), dedication (i.e. pronounced emotional involvement in and enthusiasm about one's work) and absorption (i.e. being fully focused on and completely immersed in one's job with the perception that time flies). According to Kahn (1992), engagement is considered as the utilization of members of an organization in their work roles, where people are engaged and express themselves physically, mentally, emotionally and intellectually while performing their role. That is why there is a strong business case for healthcare organizations worldwide to invest in efforts to reduce physician burnout and promote work engagement[7-9].

Attempting a conceptual approach to the term "meaning of work" becomes more difficult since in the existing literature there are various definitions that have been adopted. Emphasizing the individual's subjective perception of the meaning he assigns to his work and not the social perspective attributed to him, it can be defined as the subjective experience that expresses the ideas, values and goals of the worker through interaction with his work [10]. According to Steger & Dik, the meaning of work is framed by two factors: the individual's perception of his work environment and his adaptation to it, based on his identity, skills and special needs [11]. The normal integration of the individual into the organization is only possible through the recognition of the special conditions that prevail in each working environment (tasks, roles, purpose, working relationships).

If the meaning that each person attributes to their work does not fit with the basic principles they espouse in their life and the goals they have set, then a deeper understanding of the work context cannot be achieved. Through the meaning of work, the person knows himself better and, by extension, gives meaning to his life [12].

A concept equally important as the meaning of work for the self-determination of people is the concept of life-goal setting, i.e. the goals that prompts each individual to take action. According to

Deci and Ryan, who made an attempt to fit the concept of life-goal setting into a broader theoretical framework with the self-determination theory, people's actions are guided by three basic psychological needs: autonomy, competence, and relatedness [13]. Autonomy refers to feeling one has choice and is willingly endorsing one's behavior. The opposite experience is feeling compelled or controlled in one's behavior. Competence refers to the experience of mastery and being effective in one's activity. Relatedness refers to the need to feel connected and a sense of belongingness with others [13-16].

In this theory, intrinsic and extrinsic goals are the ends of a continuum. Intrinsic goals include social contribution, health, personal growth, competence, and interpersonal relationships, while extrinsic goals include financial success, fame, appearance, and social prestige. This qualitative differentiation of the goals is done based on the three needs mentioned above, which categorize environmental conditions into supportive or competitive with the ultimate goal of the development and well-being of the employee. Hence, the implementation of the goals can lead to personal well-being. This is a state of harmony of body and spirit, which comes through the conscious attitude of caring for health and beauty, healthy diet, mental concentration, learning, physical activity, sensitivity to the environment and healthy social relationships in all the areas of his personal and social life well-being incorporates environmental, intellectual, spiritual, emotional, occupational and social factors [15-17].

In an attempt to bring together the concepts described in detail above, the present re-search is expected to examine how work engagement of physicians working in public hospitals and the experience of meaning in their work affect their well-being and the content of their future goals.

It is worth mentioning that in Greek literature there is no similar research that measures well-being and life-goal setting in this professional field. Thus, her contribution can be important as it introduces new concepts to the Greek research field that are practically related to the job satisfaction of doctors, the reduction of burnout, the reduction of medical errors, the provision of effective health care and the promotion of health generally. .

Methodology

Participants

The population of the study consists of Doctors working in public hospitals in Greece.

Selection of the sample

For the selection of the sample, judgment sampling was initially used, i.e. non-probability sampling, in which participants are selected in such a way that it is more likely to gather the information that will be more suitable for the research. Participants should meet the following inclusion criteria: a) be doctors, b) work in the

public sector and 3) have the knowledge of the Greek language.

Investigation Procedure During the research, the following procedure was followed:

- At first, the questionnaire was forwarded to the sample of doctors online through emails or by using the social media platforms of Facebook and Instagram. In this message, there was a detailed description of the purpose and the side aims of the study and participation in the study was requested.
- Then, completion of the questionnaires was followed by the sample contacted between June 2022-August 2022. Since the study questionnaire was constructed on the electronic platform of Google Forms, it was possible to statistically process the responses, which were automatically saved on its page. Completion of the questionnaire was anonymous. It is noted that the doctors, who accepted to participate in the research, were asked to invite other colleagues to fill in the questionnaire, as long as they met the criteria that had been defined. Consequently, in addition to judgment sampling, snowball sampling was also followed, which enlists the participants in the invitation to urge other people with common characteristics who meet the research criteria.

Design

This study was a descriptive and quantitative study using questionnaires, in order to describe the characteristics of the population and the frequency distribution of the variables, as well as the systematic research of the concepts of work engagement and work meaning with numerical data by measuring those characteristics, which caused the greatest interest

Materials

Then follows a description of the research tools used in the research

Work engagement

- Work engagement was measured using a valid and reliable self-report questionnaire, Utrecht Work Engagement Scale (UWES). UWES includes three scales to determine the level of work engagement: a) vigor, b) dedication, and c) absorption. It is a test of how to measure work engagement at both individual and team levels. It includes seven response options according to which 0 means (never) and 6 means (always) This questionnaire is freely available online and translated into the Greek language, if the terms of use are accepted [18].

Well-being

- In order to measure the indicators of the well-being factor of the participants, the PERMA Profiler questionnaire was used, which is based on the theory of Seligman and measures the five dimensions of well-being: positive emotions, engagement, positive relationships, meaning in life and achievements. The questionnaire in its original form consists of 23 self-report questions, which refer to the five dimensions of well-being, a general index of well-being and three additional dimensions measuring: negative emotions, loneliness and physical health. This questionnaire has been

validated in the Greek population and shows satisfactory reliability indicators. Written permission was given by the manufacturers for the validated scale in Greek [19,20].

Meaning in work

- To measure work meaning, the Work and Meaning Inventory of Steger, Dik and Duffy was used. It is a self-report questionnaire that includes 10 statements in which the person is asked to answer whether they agree or disagree based on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). According to its creators, the questionnaire is divided into three subscales that respectively detect the following: (a) Positive Personal Meaning, includes 4 statements, e.g. "I have discovered work that has a satisfying purpose", (b) Meaning-Making through Work, includes 3 statements, e.g., "My work helps me understand the world around me" and (c) Greater Good Motivations, includes 3 statements, e.g., "I know my work makes a positive difference in the world. Question 3 is an internal consistency reliability check question for the questionnaire and is therefore reverse scored. The questionnaire is freely available online, translated by the author, and its reliability and validity have been tested on a sample (N=370) of university employees of various specialties [5].

Aspiration Index

- The Aspirations Index questionnaire (Kasser & Ryan, 2004), which includes seven main goal categories, was used to measure future life-goal setting (intrinsic and extrinsic future goals). The Work and Meaning Inventory was formulated within the framework of the theory of self-determination and has been used in international scientific research, while at the same time its reliability has also been checked. The 2004 version of the scale uses a seven-point Likert scale there are 7 categories of aspirations with five specific items within each category. The seven categories include: the extrinsic aspirations of wealth, fame, and image; the intrinsic aspirations of meaningful relationships, personal growth, and community contributions, and the aspiration of good health which turned out not to be clearly either extrinsic or intrinsic. Participants rate: (1) the importance to themselves of each aspiration, (2) their beliefs about the likelihood of attaining each, and (3) the degree to which they have already attained each. The scale is freely available online and was translated by the writer in collaboration with the supervising professor. In the present study, the aspiration of good health was removed, as according to the literature, it is not clear whether it expresses an intrinsic or extrinsic goal [21-24].

Statistical Analysis

SPSS 28.0 was used for the statistical analysis of the data. Descriptive statistical analysis of participants' demographic data was first performed. The control of the normality of the variables showed that all the variables followed a normal distribution. For this reason, the statistical method applied to compare the total scores of the questionnaires on the categorical variables and to test for differences in the means of the variables was the Independent Samples T-Test and the one-way ANOVA. For subgroup

comparisons of variables that had more than two categories, the Bonferroni statistical test was used. Pearson's correlation coefficient was used to study correlations between quantitative variables. The results of all statistical analyzes are presented in detail in the next section.

Results

Sample

The research sample consists of 116 doctors working in the public sector. The participants come from all over the Greek territory, although the majority of them come from the two major urban centers of the country, Athens and Thessaloniki. Of these, 63 are men and 53 are women. More specifically, 74 are residents and 42 are specialist doctors.

The frequencies for the age group to which the sample belongs are as follows: The mean age of the sample is 37.35 and the standard deviation is 10.39. (SD=10.39). Most of the sample (60 people) are married or cohabiting (51.7%), several (52 people) are single (44.8%) and a few (4) are divorced (2.6%) or widowed /s (0.9%). Of these, 60.3% of the sample has children and the remaining 39.7% of the sample do not have children. Children's mean is 1.83 with a standard deviation of 0.64 (SD=0.64).

Regarding the representativeness of the sample, it seems to be satisfactory since it includes various specialties, both residents and specialist doctors, doctors from the entire territory and doctors from different public hospitals.

Table 1: shows in detail the medical specialties that make up the sample

A/A	Medical Specialty	Frequency	Percentage
1	Anesthesiologists	14	12,07
2	Pathologists	13	11,20
3	Pediatricians	8	6,90
4	Pneumonologists	7	6,03
5	Otolaryngologists	6	5,17
6	Hematologists	6	5,17
7	General Practitioners	6	5,17
8	Psychiatrists	6	5,17
9	Gastroenterologists	5	4,31
10	Radiologists	5	3,45
11	Orthopedics	4	3,45
12	General Surgeons	4	2,59
13	Pathologists- Oncologists	3	3,45
14	Neurologists	3	2,59
15	Ophthalmologists	3	2,59
16	Rheumatologists	3	2,59
17	Nephrologists	3	2,59
18	Histopathologists	2	1,72
19	Gynecologists	2	1,72
20	Cardiologists	2	1,72
21	Endocrinologists	2	1,72
22	No specialty	2	1,72
23	Cytologists	2	1,72
24	Dermatologists	1	1,72
25	Geneticists	1	0,86
26	Allergists	1	0,86
27	Plastic Surgeons	1	0,86
28	Occupational and Environmental Physicians	1	0,86
Total	116	100	

Sample's distribution by specialty

Regarding the level of education, 46.6% have a university degree, 30.2% hold a Master's Degree, 9.5% a Ph.D. and 13.7% are professors. Regarding their previous experience, 49.1% have been working for 2-5 years since the beginning of their residency, 17.2% have been working for more than 20 years, 14.7% have been working for just 1 year, 11.2% have 11-20 years of experience and 7.8% have 6-10 years of work experience.

Regarding the working hours, 84.5% reported working more than 40 hours per week, 13.8% 40 hours, and 1.7% more than 50 hours. Moreover, 49 physicians stated that they perform more than 6

shifts, 42 physicians reported 4 to 6 shifts per month, while 25 physicians reported 1 to 3 shifts per month.

Finally, other data were collected related to smoking. 87% reported not smoking and 13% reported smoking. Of the 15 participants who reported smoking, 8 smoked 1 to 15 cigarettes per day, 4 reported 20 cigarettes, and 3 reported smoking 25 to 30 cigarettes per day. The average number of cigarettes in smokers is 17.45 with a standard deviation of 8.65 (SD= 8.65). In summary, the results regarding the demographic characteristics of the sample are listed in Table 2.

Table 2: Demographic data of the sample

Characteristics	Frequency	Percentage
Sex		
Men	63	54,30
Women	53	45,70
Total	116	
Age		
Mean	37,35	
Marital status		
Married/ Cohabiting	60	51,70
Singles	52	44,80
Divorced/Widowed	4	3,50
Total	116	
Residents		
Residents	42	63,80
Specialists	74	36,20
Total	116	
Years of work		
0-1 years	17	14,70
2-5 years	57	49,10
6-10 years	9	7,80
11-20 years	13	11,20
Over 20 years	20	17,20
Total	116	
Level of education		
University degree	54	46,60
Master's Degree	35	30,20
Ph.D	11	9,50
Deputy and Assistant Professors	16	13,70
Total	116	
Working Hours (weekly)		
40 hours	16	13,80
Over 40 hours	98	84,50
Over 50 hours	2	1,70

Total	116	
Shifts per month		
1-3 shifts	25	21,60
4-6 shifts	42	36,20
Over 6 shifts	49	42,20
Total	116	
Smoking		
YES	100	13
NO	16	87
Total	116	

Descriptive Statistics and reliability check of Scaled

The first statistical tests performed were internal validity reliability tests (Cronbach's α) of the survey questionnaires. Internal validity reliability checks for all questionnaires yielded very high reliability leading to values greater than the internal consistency limit of

0.700, indicating a relatively high internal consistency. In Table 3 below, the dimensions (subscales) of the examined variables are listed in detail, the corresponding descriptive indices as well as the Cronbach's Alpha internal consistency indices.

Table 3: Average scores, standard deviations and Cronbach's α indices of the survey variables

Factors	Dimensions	Frequency	Mean	SD	Cronbach's Alpha
Work engagement		114	4,08	0,87	0,91
	Vigor	116	3,77	0,94	
	Dedication	114	4,56	1,12	
	Absorption	116	4,00	0,89	
Well-being					0,79
	Positive feelings	115	6,75	1,31	
	Engagement	115	6,76	1,26	
	Positive Relationships	115	7,53	1,48	
	Meaning	116	7,46	1,17	
	Accomplishment	115	6,88	1,86	
	Overall Well-being	113	7,09	1,06	
	Negative Emotions	116	5,54	1,44	
	Health	115	7,06	1,34	
	Loneliness	116	4,38	2,70	
	Life satisfaction	116	7,16	1,86	
Meaning in work		116	37,85	6,14	0,82
	Positive Meaning	116	16,37	3,24	
	Meaning-Making through Work	116	11,39	2,47	
	Greater Good Motivations	116	10,07	1,55	
Aspiration Index					0,95
	Extrinsic Goals/ Importance	116	3,63	1,12	
	Extrinsic Goals / Likelihood	114	3,60	1,06	
	Extrinsic Goals / Achievement	113	3,22	97994	
	Intrinsic Goals / Importance	115	6,05	57470	

	Intrinsic Goals / Likelihood	115	5,51	69932	
	Intrinsic Goals / Achievement	115	4,91	83876	

Results of influence of demographic data on variables

Table 4 lists the data concerning the correlations that were statistically significant between the demographic characteristics and the variables under study. First, it should be noted that there seems to be no statistically significant relationship between age, gender, job position, specialty, length of service, number of duties and work engagement, as well as the attribution of work meaning. The only demographic factor that appears to influence physicians' well-being is marital status. Thus, from the subscale of personal relationships it appears that there is a significant difference between the category of widows and the divorced, while from the subscale of negative emotions it appears that the divorced experience less negative emotions than the married and the unmarried.

Also, from the intrinsic goals subscale, it appears that female doctors move more towards the realization of intrinsic goals such as meaningful relationships, personal development and social contribution. It was also found that those doctors who have had children or they are specialists or they work at university have either already achieved their intrinsic goals or they are working towards them. In fact, it is worth noting that from the subscale of the attainment of intrinsic goals, it seems that married doctors, in relation to divorced doctors, are more oriented towards intrinsic goals. Conversely, from the extrinsic goal attainment subscale (wealth, self-image, fame), it appears that non-smokers and university degree and PhD holders are more oriented towards extrinsic goals.

Table 4: Differences based on demographic data

FACTORS	DEMOGRAPHIC DATA	FREQUENCY	MEAN	SD	PEARSON FACTOR
SEX					
Intrinsic Goals / Importance	MEN	63	5,92	0,61	<0,05
	WOMEN	51	6,22	0,47	
	CHILDREN				
Intrinsic Goals / Likelihood	YES	46	5,06	0,78	<0,05
	NO	69	4,81	0,86	
	YOU ARE A SPECIALIST OR RESIDENT:				
Intrinsic Goals / Achievement	Resident	73	4,78	0,76	<0,05
	Specialist	42	5,14	0,91	
	SMOKING				
Intrinsic Goals / Achievement	YES	97	3,25	1,02	<0,05
	NO	15	3,16	0,65	
Maritus Status					
WELL BEING-RELATIONSHIPS	Married	60	7,85	1,42	<0,05
	Single	52	7,33	1,37	
	Widowed	1	5,00	.	
	Divorced	3	5,33	2,18	
	Total	116	7,53	1,48	
WELL BEING-NEGATIVE EMOTIONS	Married	60	5,65	1,46	<0,05
	Single	52	5,53	1,35	
	Widowed	1	6,33	.	
	Divorced	3	3,11	0,83	
	Total	116	5,54	1,44	

Intrinsic Goals / Achievement	Married	60	5,10	0,85	<0,05
	Single	51	4,76	0,74	
	Widowed	1	4,46	.	
	Divorced	3	3,80	1,10	
	Total	115	4,91	0,83	
Level of education					
Extrinsic Goals / Likelihood	University degree	54	3,41	0,98	<0,05
	Master's Degree	33	3,94	1,14	
	Ph.D	11	4,09	1,09	
	Deputy and Assistant Professors	16	3,20	0,86	
	Total	114	3,60	1,06	
Extrinsic Goals / Achievement	University degree	54	3,00	0,95	<0,05
	Master's Degree	34	3,32	0,97	
	Ph.D	10	4,20	0,73	
	Deputy and Assistant Professors	15	3,17	,84	
	Total	113	3,22	,97	
Extrinsic Goals/ Achievement	University degree	54	4,68	,83	<0,05
	Master's Degree	34	4,94	0,80	
	Ph.D	11	5,34	0,90	
	Deputy and Assistant Professors	16	5,33	0,61	
	Total	115	4,91	0,83	

Results of Statistical analyzes for the control of research hypotheses

1st Research Question

The first research question examined the degree of correlation between work engagement and personal well-being of doctors. The results are presented in Table 5.

Table 5: Correlation between work engagement and well-being

Factors of Well-Being		Work engagement
Positive Emotions	Pearson Correlation	0,48
	Sig. (2-tailed)	0,00
Engagement	Pearson Correlation	0,46
	Sig. (2-tailed)	0,00
Relationships	Pearson Correlation	0,20
	Sig. (2-tailed)	0,03
Meaning	Pearson Correlation	0,58
	Sig. (2-tailed)	0,00
Achievement	Pearson Correlation	0,57
	Sig. (2-tailed)	0,00
Overall Well-being	Pearson Correlation	0,59
	Sig. (2-tailed)	0,00

Negative Emotions	Pearson Correlation	-0,24
	Sig. (2-tailed)	,008
Health	Pearson Correlation	0,10
	Sig. (2-tailed)	0,26
Loneliness	Pearson Correlation	0,12
	Sig. (2-tailed)	0,18
Life Satisfaction	Pearson Correlation	0,42
	Sig. (2-tailed)	0,00

These results positively answer the first research question, as a strong and statistically significant relationship is established between work involvement and dimensions of well-being. So, it seems that work engagement affects personal well-being.

2nd Research Question

The second research question investigated the relationship between experiencing meaning at work and the subjective well-being of physicians. Below are the results.

Table 6: Correlation between meaning at work and well-being

Meaningful Work					
Factors of well-being		Positive Meaning	Meaning-Making through Work	Greater Good Motivations	Overall Meaningful Work score
Positive Emotions	Pearson Correlation	0,45	0,38	0,17	0,43
	Sig. (2-tailed)	<,001	<,001	0,06	<,001
Engagement	Pearson Correlation	0,42	0,39	0,26	0,44
	Sig. (2-tailed)	<,001	<,001	,005	<,001
Relationship	Pearson Correlation	0,24	0,26	0,01	0,24
	Sig. (2-tailed)	0,008	0,004	0,88	0,009
Meaning	Pearson Correlation	0,60	0,58	0,18	0,59
	Sig. (2-tailed)	<,001	<,001	,053	<,001
Achievement	Pearson Correlation	0,54	0,47	0,10	0,50
	Sig. (2-tailed)	<,001	<,001	,244	<,001
Overall Well-being	Pearson Correlation	0,58	0,55	0,20	0,58
	Sig. (2-tailed)	<,001	<,001	,029	<,001
Negative Emotions	Pearson Correlation	-0,21	-0,09	-0,09	-0,17
	Sig. (2-tailed)	0,02	0,29	0,30	0,06
Health	Pearson Correlation	0,04	,036	0,00	0,04
	Sig. (2-tailed)	0,65	0,70	0,98	0,69
Loneliness	Pearson Correlation	0,00	0,16	0,04	0,07
	Sig. (2-tailed)	0,99	0,084	0,68	0,42
Life Satisfaction	Pearson Correlation	0,39	0,36	0,13	0,39
	Sig. (2-tailed)	<,001	<,001	0,163	<,001

These findings partially verify the second research hypothesis, as the dimensions of work meaning performance are not correlated with all factors of well-being. The same is true of the overall work meaning score. Specifically, it appears that the subscale of positive personal meaning presents a statistically significant correlation ($p<0.001$) with positive emotions, commitment, meaning,

achievements, general well-being index and life satisfaction, while with the dimensions of positive relationships, negative emotions, physical health and loneliness do not. The same is the case with the second subscale of Finding Meaning in Life through Work. In contrast, the third subscale of positive contribution to the common good is not correlated with any of the well-being subscales.

3rd Research Question

To examine the third research question, a possible positive

correlation between work engagement and physicians' future goals was investigated. The results are presented in Table 7.

Table 7: Correlation between work engagement and extrinsic- intrinsic aspiration

Factors of extrinsic- intrinsic aspiration		Work engagement
Extrinsic Goals/ Importance	Pearson Correlation	0,19
	Sig. (2-tailed)	0,04
Extrinsic Goals/ Likelihood	Pearson Correlation	0,36
	Sig. (2-tailed)	0,00
Extrinsic Goals/ Achievement	Pearson Correlation	0,35
	Sig. (2-tailed)	0,00
Intrinsic Goals / Importance	Pearson Correlation	0,29
	Sig. (2-tailed)	0,00
Intrinsic Goals / Likelihood	Pearson Correlation	0,46
	Sig. (2-tailed)	0,00
Intrinsic Goals / Achievement	Pearson Correlation	0,39
	Sig. (2-tailed)	0,00

These findings positively answer the third research question, according to which both extrinsic and intrinsic future goals are positively related to work engagement.

4th Research Question

To test the last research question of the research, the degree of correlation between experiencing meaning at work and future goal setting was studied. The results are summarized in Table 8.

Table 8:Correlation between meaningful work and extrinsic- intrinsic aspiration

Factors of extrinsic- intrinsic aspiration		Meaningful Work			
		Positive Meaning	Meaning-Making through Work	Greater Good Motivations	Overall Meaningful Work score
Extrinsic Goals/ Importance	Pearson Correlation	0,11	0,008	-0,006	0,06
	Sig. (2-tailed)	0,23	0,92	0,94	0,51
Extrinsic Goals/ Likelihood	Pearson Correlation	0,26	0,19	0,09	0,24
	Sig. (2-tailed)	,005	,042	0,29	0,01
Extrinsic Goals/ Achievement	Pearson Correlation	0,20	0,19	-0,001	0,18
	Sig. (2-tailed)	0,03	0,04	0,99	0,05
Intrinsic Goals / Importance	Pearson Correlation	0,24	0,23	0,07	0,24
	Sig. (2-tailed)	0,007	0,01	0,43	0,008
Intrinsic Goals / Likelihood	Pearson Correlation	0,48	0,50	0,17	0,50
	Sig. (2-tailed)	<,001	<,001	0,06	<,001
Intrinsic Goals / Achievement	Pearson Correlation	0,40	0,50	0,19	<,001
	Sig. (2-tailed)	<,001	<,001	0,041	115

It is found that overall there is no statistically significant correlation between the future goals of doctors and the experience of meaning in their work. Specifically, a strong and statistically significant correlation is observed only between the dimensions of personal positive meaning and finding meaning in life through work with the dimensions of possibility and achievement of intrinsic future goals.

Finally, although it does not belong to the research questions, it is worth noting that a positive correlation was found between the meaning of work and work engagement. Thus, it appears that the more physicians attribute meaning to their work, the more engaged they are to it and utilized in their work role.

Table 9: Correlation between work engagement and meaningful work

		Work engagement	Vigor	Dedication	Absorption
Overall Meaningful	Pearson Correlation	0,70	0,63	0,73	0,50
Work score	Sig. (2-tailed)	<,001	<,001	<,001	<,001
	N	114	116	114	116

Discussion Summary of results Taking into account that the development of health organizations cannot take place without paying the necessary attention to the well-being of the workers in them, this research attempted to bring back into focus concepts such as work engagement and the meaning of work in an attempt to understand if these are variables that can operate as protective factors for well-being against risk factors such as burnout and work stress. Indeed, the findings are revealing of how work engagement and experiencing meaning at work affect the individual well-being of this vulnerable group of workers. It appears that physicians are highly engaged to their work and attach significant meaning to it, while also rating both of these concepts as very important.

First, it should be noted that the demographic and occupational characteristics of the physician survey participants did not influence their degree of work engagement or their sense of the meaning they attribute to their work. From this evidence, it is notable that female physicians focus more on future intrinsic goals such as meaningful relationships, personal growth, and social contribution, which are indicators of good mental health, than on extrinsic ones. In this direction, in the context of their research, have confirmed that the orientation towards the realization of intrinsic goals is closely related to the achievement of individual well-being [25,26].

Regarding the first research hypothesis, it seems that the greater the engagement of doctors in their work, i.e. their utilization in positions where they fulfill their role, the happier they feel. Indeed, experiencing positive emotions at work can counteract stress and burnout and lead to improved performance. In particular, similar research conducted on German medical specialists concluded that work engagement and especially vigor and dedication are related to the provision of more effective health care services (Loerbroks et al., 2017).

In the same direction, other researches that have been conducted from time to time in the health sector agree, as it seems that employees motivated by positive work experiences adopt a more positive attitude and behavior towards the organization they serve, expressing job satisfaction, maintaining their organizational engagement and keeping a low turnover intention (Demerouti et al., 2001; Salanova et al., 2000; Schaufeli & Bakker, in press; Schaufeli [18]. while simultaneously developing personal initiative and learning motivation [28]. In fact, from the existing literature it becomes clear that high work commitment has been linked to lower levels of depression, discomfort, anxiety [7]. and the manifestation of psychosomatic symptoms [27].

Regarding the second research hypothesis, it seems that the more a doctor attributes personal meaning to his work, the happier he can feel, personally investing in it, since it is a source of flourishing in his life. On the contrary, according to the results the positive contribution of the medical profession to the greater good is not something that brings the medical staff feelings of fulfillment and happiness. In one way, it appears that finding meaning in work affects aspects of the physician's life.

Thus, it may have an impact on experiencing positive emotions, enhancing engagement, finding meaning in life, encouraging achievement and life satisfaction, but not affecting positive relationships, physical health, negative emotions and loneliness. It is clear, then, that even physically exhausted or lonely people can experience meaning in their work. But what cannot be ignored is that experiencing meaning at work affects the overall well-being of the physician. Besides, it is no coincidence that according to the Job Characteristics Model of Hackman and Oldham (1974) assigning meaning to work is the key to achieving employee well-being and is a condition for ensuring high motivation, drawing satisfaction from work, individual performance and low absenteeism intention. In fact, in a subsequent meta-analysis that included 259 studies the specific model was validated by highlighting the mediating role that the meaningfulness of work can play between motivational motives and obtaining positive work results [29].

Regarding the third research hypothesis, it seems that the content of the goals adopted by doctors is significantly influenced by the engagement they demonstrate to their work. Thus, what emerges is that the essential utilization in the work role has the result that the goals set by the doctors themselves for the future act as a driving force in the activities of the present. These findings have been confirmed by a series of researches, which have mainly been conducted in the educational context and confirm the theory of self-determination, where the goals set satisfy internal psychological needs and encourage action and the adoption of an active attitude in the management of situations [30].

Moreover, it is no coincidence that the existing literature in the field of education argues that intrinsic goals in relation to extrinsic ones contribute to the deeper and more meaningful engagement and participation of students in learning activities. As far as the health sector is concerned, it seems that corresponding investigations have not been carried out [14].

Finally, from the fourth research hypothesis, a qualitative

differentiation is found, in terms of finding meaning in work in relation to the type of goals set. Thus, it appears that the more physicians attribute meaning to what they do, the more likely they are to achieve future intrinsic goals such as meaningful relationships, personal growth, and social contribution. However, this does not apply to external goals as well, as experiencing meaning at work does not imply the need to achieve financial success, glory and social prestige in the future. From the extracted results it becomes clear that despite the fact that people create goals to satisfy basic psychological needs, in practice not all goals are inspired by the same needs.

However, people who have managed to discover the meaning of work for themselves, motivated by basic psychological needs, gradually attempt to readjust the goals they have set for the future. Therefore, the quality of the goals that are in a future time perspective largely determines the behaviors. This is also confirmed by the theory of self-determination [11-14]. Regarding the positive correlation between work engagement and work meaning, the results confirm previous studies that argue that re-meaning work is one of the three conditions for achieving a high level of work engagement [10].

In conclusion, it is of great importance to develop medical staff management practices in the public sector with a focus on work engagement and finding meaning in it, in order to give due importance to the satisfaction of basic psychological needs with the ultimate goal of improving the performance of employees as a whole

The research results confirm that work engagement contributes to personal well-being and encouraging finding meaning at work can be helpful in the same direction. However, a more comprehensive approach requires a larger sample so that the results are more representative. Unfortunately, the response and participation by completing the questionnaire was not satisfactory enough. Therefore, in the future, it is proposed to expand the sample with the participation of doctors who also work in the private sector. From the comparisons of the two categories, it is expected to gain knowledge regarding the well-being and aspiration index of physicians.

In addition, it should be noted that the sample of this research is to a great extent residents with few years of experience and seniority. Young doctors are usually more enthusiastic and likely to be more engaged with their work or to experience meaning in it more strongly. It is therefore recommended to collect data from a representative sample of various age groups and specialties, in order to identify possible differences in the data.

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