

Orientations to Wellbeing in the Context of Medicine and Nursing-A Preliminary Study on Students' Perspective in Their Early University Years

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ABSTRACT: Medicine in the 21st century needs to be patient-or, rather, person-centered. Accordingly, medical education needs to adopt an authentic student-centered stance and also include an emphasis on wellbeing and quality of life-starting in medical students' university years. Studies on eudaimonic and hedonic aspects of wellbeing in academic contexts might offer valuable insights for conceptualizing and implementing medical teaching. Our research aimed at exploring eudaimonic and hedonic orientations in students in their first years of medical and nursing studies, in relation to outcomes like satisfaction, subjective meaning experience and engagement with university studies. We also wanted to evaluate the feasibility of using a translated version of HEMA (Hedonic and Eudaimonic Motives for Action) Scale in our university students. 120 1st and 2nd year students of our university completed HEMA and questionnaires evaluating the above-mentioned outcomes, in one session. The instrument demonstrated good reliability (assessed by Cronbach's alpha coefficients) and also captured valuable correlations with students satisfaction, subjective sense of meaning and engagement with their studies. Importantly, eudaimonic subscores were moderately but significantly correlated with Hedonic enjoyment ones, as previously reported. Exploratory Principal Component Analysis suggested two or three factors, but a larger group would be needed to confirm the factor structure of the Romanian version of the test. Conclusions: HEMA is applicable in this academic context, in Romanian, has good reliability and promises to offer valuable insights into students' orientations, helping us support their aspirations and shape our teaching so that they could benefit the most from it.

KEYWORDS: Hedonic/eudaimonic orientations, medical/nursing students, medical teaching.

Introduction

In the context of the well-recognized need for 21st century medicine to be *patient-centered*, or, rather, *person-centered*, medical teaching needs to be able to foster this orientation in medical students and simultaneously, to adopt an authentic *student-centered* stance.

The hidden curriculum represents the reflection of a microculture of a specific teaching environment and its transfer throughout the teaching process [1], beyond the overt transfer of medical knowledge.

A person-centered vision in the daily interactions with the patients has to be enacted simultaneously with a student-centered paradigm in the very act of teaching, so that this focus on the person permeates any instantiation of the educational process and becomes apt to efficiently support the development of an analogous mindset for the student-who will be therefore more able to apply it during future clinical encounters.

At the same time, for health-professionals, *health* should be the main focus-i.e. health which is conceived as much more than the absence of disease, "a positive concept emphasizing social and personal resources as well as physical capabilities" as stipulated in a document elaborated at the 1st First International Conference on Health Promotion (1986): the Ottawa Charter, which "*retains its relevance to the present day*" [2].

In this context, well-being and quality of life emerge as main themes, justifying an increasing attention.

Recent theoretical advances, supported by well-documented research, offer a clearer framework for conceptualizing wellbeing-by distinguishing hedonic and eudaimonic approaches to well-being.

Huta (2016) defines Eudaimonia (E) and hedonia (H) mainly as orientations: eudaimonia representing an orientation toward authenticity, meaning/broad concerns, excellence/morality, and growth/maturity and hedonia-an orientation

toward pleasure/satisfaction and comfort/ease [3].

An instrument able to pertinently evaluate these orientations is the HEMA (Hedonic and Eudaimonic Motives for Activities) scale [4].

It has been extensively used and assessed across many contexts and in various cultural environments [4-8] demonstrating very good reliability and allowing valuable insights into many aspects, from emotion regulation [8] to postcardiac rehabilitation [9].

Our aim was to explore the feasibility of implementing the Romanian version of HEMA in the specific context of medical and nursing studies in our university and to assess the reliability of this instrument in this setting.

Also, we wanted to explore potential correlations between the eudaimonic and hedonic components of the test and with specific academic outcomes: university studies-related satisfaction, engagement and subjective experience of meaning.

We reasoned that studies on eudaimonic and hedonic aspects of wellbeing in academic contexts might offer valuable insights for designing and implementing high quality teaching.

Although research on eudaimonia and hedonia is frequently performed with students as participants, the focus on specific contextual aspects of academic settings is surprisingly rare, as emphasized by a recent study [10].

We believe that, along recent research in university students, exploring eudaimonic and hedonic orientations in medicine and nursing students could prove particularly relevant, given the specificity of this teaching context, with a profound humanistic orientation.

Previous research has focused on students with a more ample university experience, as they are considered more apt to judge their studies in general and their approach to study activities after a longer exposure to the university environment [10].

We aimed at extending the exploration of eudaimonic and hedonic orientations to students *in their first two years of study*, as we felt this early interval should also be investigated, as previous research has documented the longer-term effects of early approaches to study [11].

Materials and Method

Participants

120 students in their 1st and 2nd year of study, from the Faculty of Medicine and the Faculty of Nursing of the University of Medicine and Pharmacy of Craiova took part in the study.

The 1st year students had completed a full semester plus an entire session of exams before their testing; therefore it was considered they did have sufficient-albeit short-experience with their university studies for pertinent evaluations of the studied aspects.

Instruments used in the current study:

HEMA R-Hedonic and Eudaimonic Motives for Action-Revised Scale [3,4] comprises 11 items (the last one being optional). Participants were invited to respond, on a scale from 1 (not at all) to 7 (very much), to questions regarding hedonic (6 items) (e.g. "Seeking enjoyment?") or eudaimonic (5 items) (e.g. "Seeking to pursue excellence or a personal ideal?") motives for activities-in our case: for activities related to their university studies, as previously described by Braaten A, Huta V, Tyranny L, Thompson A (2019) [10]. The items related to hedonic motives referred to hedonic enjoyment ("Seeking enjoyment?")-3 items and to hedonic comfort ("Seeking relaxation?")-3 items.

The Romanian version for HEMA was developed through an iterative process, implying backtranslations and pilot testing in a different group of students. Throughout this process, we aimed for conceptual, rather than literal translation. We also contacted the author of the scale and benefitted from valuable suggestions regarding fine adjustments of the wording of specific items. For its current form, following this study, we are considering minor refinements of two items.

The focus of our exploratory research was on HEMA, but we also employed other instruments, with a preference for the short versions, due to time constraints as we envisaged an efficient, reasonable length of testing, minimizing fatigue.

The Satisfaction with Life Scale, adapted for the academic environment [10,12]. The original Satisfaction with Life Scale [12] has been largely used and demonstrated excellent reliability and validity in various contexts.

It has also already been employed in studies with university students, either in its original version, assessing satisfaction with life in general [4,5,8] or as an adapted version

specifically addressing satisfaction with the university studies [10]-as was the case of our study.

Meaning as a subjective experience is a scale that has been used before, in conjunction with HEMA and has offered valuable insights into the meaningfulness attributed to various activities and experiences [4,8].

It has also already been employed in an academic context, for assessing the experience of meaning related to university studies [10].

Utrecht Work Engagement Scale (UWES) is a frequently used scale, developed in its 9-items version, by Schaufeli, Bakker and Salanova (2006) [13].

It has a version adapted for university studies with 9 items [14] and an ultra-short version with 3 items [15].

Our study used the items of the ultra-short version, from the Romanian adaptation [16].

All the questionnaires collected were entirely anonymous and the study was approved by the University Ethics Committee.

Statistical analysis

We have employed SPSS to perform computations of Cronbach`s alpha coefficients, means and standard deviations, zero-order correlations and exploratory Principal Component Analysis (EPCA).

Results

Descriptive statistics

The group structure according to gender was.82.5 % women and 17.5% men, reflecting the gender distribution in our university. The age in this group ranged from 18 to 46 years, with a mean of 20.68.

The means and standard deviations for the variables that were analysed are included in Table 1. Cronbach`s alpha coefficients supported good internal consistency of the HEMA components and of the other tests (Table 1). In general, values >0.70 are accepted as supporting good reliability; however, in exploratory research contexts, values 0.60 are considered acceptable.

We also calculated zero-order correlations among the variables; these are included in Table 2.

Table 1. Cronbach`s alpha coefficients, Mean, Variance and Standard deviations (SD) for the scores of the assessed variables. (E/H/He/Hp=Eudaimonic/Hedonic/Hedonic enjoyment/Hedonic comfort motives for activities related to university studies; SWU=Satisfaction With Life-adapted to University studies; MeU=Meaning (subjective experience) related to University studies; UUE=Utrecht Work Engagement Scale-adapted to University studies).

	Cronbach`s alpha	Mean	Variance	SD	N of items
E	0.73	31.73	10.77	3.28	5
H	0.75	30.48	35.19	5.93	6
He	0.71	17.41	9.62	3.1	3
Hc	0.57	13.07	13.021	3.6	3
SWU	0.76	27.3	23.89	4.89	5
MeU	0.8	23.07	12.13	3.48	4
UEU	0.76	13.38	6.2	2.5	3

Table 2. Zero-order correlations for the assessed variables. E/H/He/Hc=Eudaimonic/Hedonic/Hedonic enjoyment/Hedonic comfort motives for activities related to university studies; SWU=Satisfaction With Life-adapted to University studies; MeU=Meaning (subjective experience) related to University studies; UUE=Utrecht Work Engagement Scale-adapted to University studies; p-values: *=significant (0.01 to 0.05); **="very significant" (0.001 to 0.01); *="highly significant" (<0.001).**

	H	Hc	He	E	SWU	MeU
H	1					
Hc		1				
He		0.56***	1			
E	0.3***	0.13	0.42***	1		
SWU	0.18*	0.08	0.26**	0.49***	1	
MeU	0.04	-0.1	0.2*	0.63***	0.61***	1
UEU	0.17*	0.04	0.27**	0.42***	0.61***	0.49***

Exploratory Principal Component Analysis suggested a two- or three-factor structure. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.784.

After rotation, the first two components accounted for 52.39% of the variance and the first three components accounted for 61.91% of the variance. All these components had eigenvalues >1 .

Discussions

Distinguishing between hedonic and eudaimonic aspects of wellbeing has proven its usefulness [3,4], and over the last years has elicited increasing interest, to the extent that researchers talk about *homo eudaimonicus* and even name eudaimonia as potentially “the most important idea in the world.” [17]

Our study adds to previous research supporting the value of studying eudaimonic and hedonic orientations and suggests that looking into eudaimonic and hedonic orientations within the specific medical academic context can provide valuable insights for improving our teaching and ultimately for the benefit of our students. HEMA emerges as a simple and reliable instrument that can be used in this respect (please refer to Table 1 for Cronbach’s alpha coefficients).

Correlations

We found moderate correlations (0.56, $p < 0.0001$) for He (Hedonic enjoyment) and Hedonic comfort (Hc) scores (Table 2), which was expected as these two dimensions are both part of a hedonic orientation.

As documented by previous research, hedonia and eudaimonia are distinct, but do correlate (0.3, $p = 0.005$); however this seems to be driven mainly by the correlation of hedonic *enjoyment* motives with eudaimonic ones (0.42, $p < 0.0001$), (comparatively, Hc motives have a very low correlation with E), which is in line with the evidence for grouping He with E [3-5], including in a university context [10].

The enjoyment component of hedonia appears, once again, to lend valuable support to eudaimonic orientations, emerging as possibly the main hedonic segment able to “charge up the psychological battery” [3].

Also, eudaimonic motives correlate well with university-related engagement, experience of meaning and satisfaction (as discussed further), and this is “paralleled” to some extent by lower magnitude, but significant correlations of He with these outcome variables, while the

corresponding correlations for Hc are remarkably low and even negative.

The correlations of motives for activities and *engagement* suggest that students who are eudaimonically oriented tend to be more engaged with their university studies (0.42; $p < 0.0001$); a hedonic orientation towards enjoyment also appears to support their engagement to some extent (0.27, $p = 0.0012$), whereas a hedonic orientation towards comfort does not. Engagement, in its turn, is associated with students’ academic achievements—an idea supported by a recent review of the concept [18].

On the other hand, it was documented that an eudaimonic orientation correlates with academic success: eudaimonically-oriented students tend to have higher GDPs (grade point averages) [19].

We are therefore tempted to consider engagement as a potential mechanism through which eudaimonic orientations can have a positive impact on academic achievement.

Nevertheless, engagement with study represents an important aspect that needs to be considered when exploring ways to improve teaching, especially as it can be acted upon—and one way to augment it might be through supporting students’ eudaimonic aspirations.

We also found a moderate correlation (0.49, $p < 0.0001$) of eudaimonic motives and study-related *satisfaction*. Students who have a more eudaimonical approach to their academic activities tend to experience more satisfaction with their studies.

Obviously, satisfaction with university studies depends on many other factors. However, students were at least exposed to the same environment. And even though a similar set of external factors can be perceived differently at an individual level, it is legitimate to suppose that at least a part of their study-related satisfaction (or lack thereof) is indeed dependent on their way of approaching study-eudaimonically or hedonically.

Satisfaction with life represents one aspect of the concept of subjective well-being. For reasons of parsimony, in this preliminary research we did not test for the affective component of subjective well-being derived from study, that is we did not assess positive and negative affect in relation to university studies.

Interestingly, these elements of subjective well-being are in fact interrelated to some extent, in the sense that affect appears to have an influence on subjective evaluations of life

satisfaction, but this effect is relatively small [20].

For future studies, we would like to evaluate affective aspects as well, more so as other research groups suggested emotion regulation as one potential mechanism for the predictive value of eudaimonic and hedonic orientations for well-being in general [8].

Of note, that research was also performed with undergraduate students, but without specifically analysing the role of the academic context.

Eudaimonically-oriented students are also capable of deriving more *meaning* from their university studies (Table 2)-one of the highest correlation coefficient obtained in this study (0.63, $p < 0.0001$). This is not surprising, as meaning is a pivotal element of eudaimonic orientations. However, we need to emphasize this is a distinct aspect of meaning, referring to a *subjective experience* (according to Huta V. and Waterman A.S., (2014), eudaimonia is defined at the levels of four categories: orientations, behaviours-representing “ways of living” and experiences and functionings, representing “outcomes of ways of living”) [3,21].

We can interpret this correlation in the sense that students who are eudaimonically oriented regarding their university studies-and who, most probably, consider meaning as a focal point of their university life-also tend to *experience* a “sense” of meaning regarding their university studies.

In HEMA, the question referring to meaning (Q10) focuses on “the others-beyond-the-self”, an altruistic orientation that is desirable in a future physician or nurse. The “good news” is that students who have this altruistic focus also tend to feel that their university studies are meaningful. Along these lines, previous research has shown that languishing individuals tend to be self-focused and to favor hedonic values, while flourishing people are focused on the others and appreciate eudaimonic values [22].

In the context of academic studies, an important desideratum is to promote educational activities with *objective* meaning, but we need to ensure that students can benefit from a *subjective experience* of meaning-activities which are perceived as meaningful by the students.

Reber R., (2020) proposes several modalities of increasing objective meaning in an educational context in general [23].

We believe it is remarkably relevant that the approaches with a *high* potential not only for

generating objective meaning, but also a high degree of subjective meaning are those of *caring for others* and of *supporting identity formation*. Both refer to aspects beyond the self, involving *others* and are very relevant for the field of medical teaching. Identity-and, more specifically, professional identity-is forged by relating to others. If in non-medical teaching the caring dimension is more visible in the case of community service learning and peer tutoring, in the context of medical studies it is even more conspicuous, with a richer palette available-through exercising empathy, concern not only towards peers, trainees, but also towards patients (e.g. in a clinical teaching session), and also fostering these feelings in the students-towards the patients who take part in their teaching. This will in turn contribute to shaping their approach to the patients they will encounter later in their professional lives. Again, the relation teacher-student should find a congruent counterpart in the one between the carer (medical student-future physician) and the patient, with empathy as a foundational element.

Other ways of generating objective meaning in educational settings, associated with creating *medium* levels of subjective meaning include:

- focusing on *the purpose* of students` university studies

- creating opportunities for the students to exercise agency, to increase their autonomy-in medical teaching, this could be achieved by more direct involvement in clinical activities, but also by participatory activities in class-e.g. during problem-based or case-based learning sessions, flipped classroom etc.

Reber (2020) also suggests fostering aesthetic experiences as another way to increase objective meaning [23]; this approach appears very relevant in the medical teaching context-from elaborating teaching materials that can generate a pleasant experience for the students, to including medical humanities in the curriculum.

In this context, it is relevant that a multi-institutional survey found that for medical students, exposure to humanities was associated with positive personal qualities, like empathy, wisdom, emotional appraisal, self-efficacy, tolerance for ambiguity, spatial skills and inversely correlated with elements of burnout [24].

As this is the first research using a Romanian version of HEMA, we wanted to know more about this instrument factor structure and therefore conducted an Exploratory Principal

Component Analysis. It suggests the possibility of two or three factors, but at this point we consider that a larger sample would allow for a proper EPCA+CFA (Confirmatory Factor Analysis) to specify the factor structure. Although we were not able to include more participants for this current study, we plan to do so in the near future.

The years of university correspond to a very important interval in the emerging adults' lives, with inherent changes and potentially ample transformations, an interval that has been extensively studied, with lots of relevant findings [25-29].

Aspects like stress, burnout, resilience and coping with stressors have received a lot of attention.

We believe this research can be fruitfully complemented with insights gained through studies that explore students' attitudes, values, approaches to learning and that endeavour to identify the "positive" students' characteristics that need to be nourished and areas where the educators could intensify their support in order to improve the learning process and the growth of the learners.

Our study aimed to go along this latter approach-and we would like to continue this inquiry-focusing on the potential benefits of hedonic and eudaimonic orientations, *before* (and possibly precluding) the burnout or depression.

Our research explored the influence of hedonic and eudaimonic orientations of medical and nursing students in *their early university years* on study-related concurrent outcomes and we believe this is an area requiring further attention.

Previous studies have documented the persistent impact of students' early approaches to study for their future academic life; along these lines, it has been documented that overall engagement with studies at the beginning of university studies is capable of influencing the relationship between the perceived value of their activities and their emotions and predicted higher task-specific value-at least for the second year of study as well [11].

Although exposed for a short time to university life, we can assume that in general, after at least one semester and one session of exams, the participants in our study had developed a mature understanding of their studies and their requirements, challenges and potential gains, an aspect that was strengthened

by the pot-test informal discussions we had with a few of them.

In this attempt to concentrate on our students' early years of university we adopted a kind of "prophylaxis-inspired" paradigm-seeking to look "upstream", "early-on", for clues that might inform our ways of configuring and enacting medical teaching.

And if we were to apply this paradigm of going upstream to the word itself, we could be surprised to find that originally prophylaxis signified not only "to guard off before", but also "to cherish, to preserve".

Medicine is, after all, an "*art of health and not a science of illness*" (Gadamer).

Medical teaching, in its turn, needs to foster growth and flourishing of the students, so that they become *health* professionals, who are fully aware, considerate and engaging with the entirety of the reality of their patients.

Medical teaching staff need to recognize, welcome and cultivate students eudaimonic approach, along with a healthy hedonic orientation, treasuring enjoyment, to support their growth and their becoming complete physicians.

Limitations

The cross-sectional design of our study does not allow causality inferences.

However, the correlations we have found are meaningful and can help us gain insights into the influence of the students eudaimonic and hedonic orientations on valuable outcomes-like their academic engagement, satisfaction with their university studies, their subjective experience of finding meaning in their university studies.

The small number of participants does not allow for definitive conclusions regarding the factor structure-this will be addressed at the next stage of our research.

The group was quite homogenous, including only young, educated individuals in their 1st two years of medical sciences studies, so the findings cannot be extrapolated for other age groups or to different, nonmedical studies; this restricted focus was part of our design, as we were interested in this specific population of students in the earlier part of their university lives.

We did not use techniques to minimize the influence of social desirability, like CRS (Conscientious Responders Scale (CRS) [31], that uses five instructional items among other items of a test, in order to detect non-conscientious responders; but plan to use such an instrument in future research.

Overall, we believe our study addresses an area where there is a clear need for more studies and we plan to contribute further to this line of research.

Conclusions

The current version of the HEMA scale translated in Romanian, is applicable in the context of medical and nursing university teaching, has good reliability and promises to offer valuable insights into students' orientations.

Considering our students eudaimonic and hedonic approaches to their university studies can help us support their aspirations and shape our teaching so that they could benefit the most from it.

For the sake of symmetry with the beginning of our paper, where we mentioned 21st century medicine, we will take the liberty to close by paraphrasing André Malraux: "The twenty-first century medicine and medical teaching will be eudaimonic or they will not be."

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Conflict of interests

None to declare.

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