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# HAPPINESS AND WELL-BEING 2023

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# "INTERNATIONAL CONFERENCE ON HAPPINESS AND WELL-BEING 2023"

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# Table of Contents:

Beating Burnout: Practices for Renewed Happiness	Elisabeth Power, PhD	Saint Martin's University, USA	5
Boosting Indigenous Happiness through Cultural Revitalization	Dr. Amoneeta	Fort Lewis College, USA	6
Effects of upper and lower extremity massage on electroencephalographic activity in older adults	Hideki Nakano	Kyoto Tachibana	7
with dementia	Shin Murata	University, Japan	
Finding lasting happiness through psycho-	His Holiness Dr Jayant Balaji Athavale	Maharshi University of	9
spiritual techniques	Sean Clarke	Spirituality, Goa, India	9
Happiness and Innovation - A Consideration at the University of Applied Sciences	Sabrina Schork	University of Applied Sciences Aschaffenburg, Germany	10
Impact of the COVID-19 pandemic on the amount and structure of indirect costs of diseases and health problems in Poland	Prof. Tomasz Holecki	Medical University of Silesia in Katowice, Poland	27
Integrating Objective Measurement in Measuring the Malaysian Family Well-Being	Irwan Nadzif Mahpul	National Population and Family Development Board, Malaysia	28
REFLECTIONS AND NEW DIRECTIONS: Advocating an Ethical Framework in Decision Making to Promote Mental Wellbeing	Dr. Judith Blaine	Rhodes University, South Africa	29
Relationship between Changes in Exercise Behavior and Pain as well as Neuropsychological Function in Community-dwelling elderly	Soma Masayuki	Tohoku Fukushi University, Japan	30
The role of the dietitian profession in creating a healthy lifestyle in Poland	Prof. Joanna Woźniak- Holecka	Medical University of Silesia in Katowice, Poland	37
What Makes YOU Unhappy?	Venerable Tenzin Dorjee	International Buddhist Studies College, Thailand	38
Work, Relax and Play (WRAP) an extra-	Emma Geis	Keele University, UK	20
curricular wellbeing program for healthcare students	Charlotte Phillips	Staffordshire University, UK	39



# **Index Of Authors:**

Amoneeta	6
Athavale, Jayant Balaji	9
Blaine, Judith	29
Clarke, Sean	9
Dorjee, Tenzin	38
Geis, Emma	39
Holecki, Tomasz	27
Mahpul, Irwan Nadzif	28
Masayuki, Soma	30
Murata, Shin	7
Nakano, Hideki	7
Phillips, Charlotte	39
Power, Elisabeth	5
Schork, Sabrina	10
Woźniak-Holecka, Joanna	37

# **Beating Burnout: Practices for Renewed Happiness**

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# ABSTRACT

Self-care and work/life balance have become mantras for workers in an increasingly complex world. Despite renewed effort to reduce stress, people continue to struggle with exhaustion and burnout at unprecedented levels. Burnout, while hardly a new phenomenon, remains ambiguous and difficult to correct. Medical professionals and managers can mitigate symptoms of a worker's burnout, yet the literature offers little consensus on how to treat this phenomenon. Workers wanting or needing to take part in their own recovery must first identify desirable and practical opportunities for behavioral change. This difficult work begins with self-discovery.

The Beckhard–Harris Change Equation provides a model for understanding the factors that contribute to successful change. Dissatisfaction with a present state leads to the emergence of desirable and practical solutions. Paradoxically, in a state of constant stress, comfort can inhibit change by easing dissatisfaction. Change succeeds at the point where the impact of dissatisfaction and solutions is greater than the reluctance to change.

To overcome burnout during sabbatical from teaching, the author found opportunities to leverage feelings of discomfort and uncertainty in a variety of contexts. Key insights from this journey serve people seeking to overcome occupational burnout, exhaustion, and work-related stress, using a personal lens framed by authentic leadership and behavioral change. Reducing discomfort, resetting the body and brain, learning from dissatisfaction, engaging authentically, and refusing unwanted tasks can lead to change. These practices, along with other treatments and healthy behaviors enable burned out workers to live up to realistic, life-affirming, and balanced expectations.

**KEYWORDS**: occupational burnout, exhaustion, pandemic, happiness, meditation, leadership, change management, sabbatical, change equation

# **Boosting Indigenous Happiness through Cultural Revitalization**

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#### ABSTRACT

Indigenous peoples across the globe have faced tremendous changes to their traditional cultures and ways of being due to forces such as colonization, globalization, genocide, discrimination, and more. The subsequent intergenerational traumas experienced tend to be associated with decreases in important health and well-being indicators with oftentimes devastating consequences to mental health and happiness. However, these deficit perspectives can be flipped to strength-based ones that empower indigenous peoples to heal, thrive, and be resilient.

Many indigenous groups are choosing to decolonize by revitalizing their traditional cultures through traditional languages, songs, stories, practices, spirituality, ceremonies, food, customs, environmentalism, etc. There are examples of such cultural revitalization programs which have already been shown to reverse the aforementioned health and well-being disparities, including improving positive mental health and happiness outcomes. Therefore, one avenue to boost indigenous happiness appears to be via more widespread and culturally appropriate cultural revitalization. Culture becomes the treatment.

The current programs can be used as examples but will need to be both improved and adapted to specific indigenous communities. Integrating the knowledge and collaboration of the indigenous communities while also harnessing multiculturally appropriate academic tools, literature, and resources is necessary to design and implement community-specific and community-generated programs.

The use of culture as treatment to boost happiness has important implications for mental health practitioners, researchers, policy makers, and social justice advocates.

Keywords: culture as treatment; cultural revitalization; decolonization; indigenous peoples; happiness; well-being



# Effects of upper and lower extremity massage on electroencephalographic activity in older adults with dementia

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# ABSTRACT

Behavioral and psychological symptoms of dementia (BPSD) are among the most critical issues to be targeted in older adults with dementia because they increase family and caregiver burden. Recently, body massage has been found to effectively improve BPSD in older adults with dementia, but the neural basis of this effect remains to be clarified. This study aimed to clarify the effects of upper and lower extremity massage on electroencephalographic (EEG) activity in older adults with dementia. We randomly assigned 17 older adults with dementia to group A or B. On day 1 of the experiment, group A received an upper limb massage and group B received a lower extremity massage. On day 2, the massage sites were switched; group A received a lower extremity massage and group B received an upper extremity massage. EEGLAB and exact low-resolution brain electromagnetic tomography were used to estimate the three-dimensional current density distribution in the brain. Beta-band activity increased in the anterior cingulate cortex after upper limb massage and in the insular cortex after lower limb massage. Our findings suggest that upper and lower extremity massage activates brain regions involved in pleasant emotions in older adults with dementia.

**KEYWORDS**: older adults, dementia, behavioral and psychological symptoms of dementia, massage, electroencephalographic activity, emotion



# Finding lasting happiness through psycho-spiritual techniques

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#### ABSTRACT

While modern science has provided mankind with various amenities and luxuries, it has not been able to provide mankind with inherent solutions to overcoming stress and finding happiness that is long-lasting.

The team at the Maharshi University of Spirituality has 38 years of spiritual research experience. This research has been conducted by using surveys, aura and subtle-energy scanners along with the advanced sixth sense of its research team.

It was found that the main causes of stress, unhappiness and mental instability are various negative impressions or personality defects such as self-centeredness, anxiety and insecurity in the subconscious mind. These impressions are formed over many lifetimes and cannot be overcome by efforts merely at the psychological level. The University has had much success in overcoming such negative impressions in people by the spiritual practices of chanting the Name of God along with the Personality Defect Removal (PDR) process and Ego Removal (ER) process developed by the Author. It was found that chanting the Name of God for just 30 minutes positively affected the aura of people chanting resulting in a calmer state of mind. In a survey, the respondents stated that these techniques had a significant positive effect on the quality of their lives, despite facing stressful situations. The findings showed that the average time taken to reduce the intensity of their 3 main personality defects by 50-80% was 2 years and 5 months.

**Discussion and conclusion:** If people were encouraged to incorporate such spiritual practice techniques into their daily routines at home and at work, it would enhance the happiness index in their lives and also at an organisational level.

Keywords: Spirituality, Well-being, Happiness, Stress



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# **Happiness and Innovation**

# A Consideration at the University of Applied Sciences

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## ABSTRACT

Personal happiness is described as a positive emotion emerging from a fortunate experience or result. Psychologists assume that one's own happiness depends on a person's behavior and personality. In the context of two master's degree programs, the personality and sensitivity types of students are determined at the start of the semester. The participants go through an innovation process completing different tasks. After each task, the students report their emotions and root causes on a voluntary basis. A study's core finding is that happiness and excitement are rarely reported back. The emotion of satisfaction is mentioned much more frequently. The analysis of the reasons for the emergence of satisfaction, excitement, or happiness does not reveal any apparent distinguishing features. In the case of experienced happiness, there is a tendency to identify more quality or a wow experience through reflection processes. Causes of happiness are valuable reflections with peers, the quality of results, the task itself, critical thinking, and very good discussions or reflections. Time pressure and too high cognitive load can trigger negative emotions. The survey of creative potential and performance as the basis of innovation was unsatisfactory. Moreover, no correlations with personality or sensitivity type could be identified. Sensitivity types and personality can help understand emotional reactions. However, in addition to collecting data, a qualitative description of the cause and, ideally, regular reflection interviews are needed to draw correct conclusions. This study is a start and should be continued with more in-depth experiments and an increased database.

**KEYWORDS**: Happiness, Higher-Education, Innovation

# INTRODUCTION

# 1.1 Happiness

- The understanding of the concept of personal happiness differs between countries (Oishi et al. (2013, pp. 1-2). While Americans assume that the positive emotions generated by happiness lead to the pursuit of happiness at the individual level, Japanese assume that happiness is also determined by the support provided by the environment (Uchida & Oishi, 2016, p. 128). The German Duden definition of happiness in 2013 was, and it did not change ever since (Duden, 2023; Oishi et al., 2013, p. 7): Something which is the result of a concurrence of especially opportune or fortunate circumstances, exceptionally fortunate or opportune coincidence, the fortunate or opportune destiny of fate. 2. The personified imaginary "Glück"; fortune. 3. a. Pleasant and joyful state of mind, in which one finds oneself when they come into possession or pleasure of something they had wished for; state of inner satisfaction and high spirits. b. Single happy/fortunate situation, happy/good result, experience.
- In the past, American philosophers viewed happiness as something uncontrollable. Today, they assume that happiness can be actively shaped and is thus controllable. Scientists measure happiness with simple questions such as "How happy are you compared to...?" (i.e., Hartmann, 1934; Santos, 2023) or with Russell's (1980) valence-arousal model.
- The terms happiness, satisfaction, and wellbeing blur in Higher Education literature. Often, happiness and satisfaction are used interchangeably. Happiness in life relates to achieving one's primary goals and the direction a person travels. Eudaimonic happiness can develop through a proactive journey focusing on how personal capacities are best used in life. Happy students are more engaged in experiences and satisfied students seem to be more concerned with external loci. Students express satisfaction when teachers challenge them the least, and happiness also arises through some level of discontent. Happiness should not be conceived as the avoidance of suffering; it is the ability to work productively with it (Elwick & Cannizzano, 2017). An Iranian study found that happiness can positively affect academic achievement (Otaghi et al., 2020). Chinese researchers state that higher education can improve residents' happiness and health (Tan et al., 2020). Publications on personal happiness (Diener, 1984; Diener et al., 1985; Emmons & Diener, 1985; Ryff, 1989; Watson, Clark, & Tellegen, 1988) and subjective wellbeing (Diener, Oishi & Park, 2014) have increased significantly since the 1980s.
- ChatGBT (2023) states that happiness is often described as a positive emotion or mood. Influencers are, for example, relationships or personal accomplishments. Students can feel happy when they feel they are achieving their life goals and realizing their dreams. Happiness is a subjective concept that relates to diverse aspects of life. Wellbeing refers to the state of being happy. It encompasses physical, mental, and emotional health and overall satisfaction with one's life.

In summary, happiness...

- is a positive emotion, a positive state of mind, evolving from a favorable result.
- is determined by a person's personality (person) and their surroundings (place).
- leads to productive and engaged students.
- can have a positive effect on academic achievement, wellbeing and health.



# 1.2 Innovation

- Innovation has various definitions. Schumpeter was one of the first economists to draw attention to innovation. In 1930 he specified five types of innovation: 1. product innovation, 2. process innovation, 3. new market, 4. new sources, and 5. changes in the organization. The OECD differs between technological product innovation and technological process innovation. There exist input and output measures (input: acquisition of technology; output: percentage of sales from newly invented products) for innovation (Rogers & Rogers, 1998).
- Next to the type of innovation, such as product, process, service, or business model, also the nature can be different. Innovation can be new, improved, radical, incremental, transformative, or disruptive (Schork, 2017, p. 10). Innovation evolves during a process starting from an analysis, creating and testing ideas and ending with the commercialization of a new solution (Pavitt, 2009). Innovation depends on the people involved and the aim an organization is trying to achieve by developing innovation (Baregheh et al., 2009, pp. 1331-1332). Innovation, like happiness, depends on the environment (Füller et al., 2007, p. 60). The environment can be the organization's strategy, culture, knowledge, structure, R&D, financial performance, and markets or networks (Dziallas & Blind, 2019, p. 10).
- Innovation is typically a group effort (Fleming, 2006, p. 8). Furthermore, its creation depends on the creativity of individuals engaging in a group. Creativity is the production of novel and useful ideas in any domain. And innovation is the successful implementation of creative ideas within an organization (Amabile, 1996, p. 1). Renzulli (1978) understands creativity the will to create and productivity, as a particular form of solving tasks, the richness of imagination, flexibility and originality of thought, openness and sensitivity to new openness and sensitivity for new things, curiosity, adventurous and intellectually playful behavior, and sensitivity to details. Gagné (2010, p. 83) understands creativity as inventiveness (problem-solving), resourcefulness, and originality.

In summary, innovation...

- can take different forms (i.e., product, service, process) and different natures (i.e., incremental, radical, disruptive).
- depends on the creativity of people (i.e., problem-solving, originality, flexibility).
- is a group effort.
- follows a process (i.e., analysis, idea creation, idea development, idea diffusion).
- depends on the environment (i.e., group, network, organization, market)



# **1.3** Innovation and Happiness in Higher Education

- Research studies show that innovation and subjective wellbeing are correlated (Dolan & Metcalfe, 2012, p. 1489). Since happiness and subjective wellbeing are used synonymously in literature (Elwick & Cannizzano, 2017), the study from Dolan & Metcalfe is of high interest. They did a literature review and found two relevant studies using creativity and positive affect. Frederickson (1998) suggests that positive affect increases the scope of attention and cognition. Isen (1999) suggests that positive affect makes additional cognitive material available for processing and increases cognitive flexibility, increasing the number. Negative affect describes the degree of negative tension. High negative affect is characterized by irritability, nervousness, and anxiety, and low negative affect by calmness and balance. Negative affect describes the extent to which a person is interested, enthusiastic, active, and attentive. High positive affect includes energy, concentration, joyful engagement, and low positive affect lethargy and sadness. Positive affectivity corresponds with extraversion (Dorsch, 2023).
- Human relations determine the outcome of social processes along the innovation process (West & Farr, 1990). Creative work can be influenced by the affective climate, the team's intrinsic motivation, transformational leadership, and reflexivity (Kim et al., 2016; Wang et al., 2016).
- Several frameworks exist supporting educators in universities to create learning environments for creativity (i.e., Richardson & Mishra, 2019; Renzulli, 1998). Based on those inspirations the author develops the course structure presented in the following chapter.

# METHODOLOGY

The researcher is using the 4P model of creativity to build the data setting (see **Figure 1**). A variety of studies have already successfully implemented this approach in the higher education context to research creativity (i.e., Horng et al, 2015; Hasirci & Demirkan, 2007). The 4Ps stand for process, place, people, and product. In this study, the people are master's students in strategic innovation management courses at the University of Applied Sciences Aschaffenburg. The process is the innovation process, the product is the outcome of the tasks given along the innovation process to the students, and the place is the lecture hall at the University of Applied Sciences in Aschaffenburg.

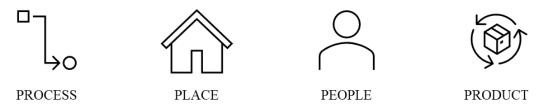


Figure 1: Research Setup adopting the 4P Model, Source: Microsoft Piktocharts

**Table 1** shows the structure of the master course. In each stage of the innovation process, the students use diverse innovation methods to execute the given tasks. As input, the students get market analysis, information aggregated in presentations, and video material. Most of the tasks are group exercises; only the market report reading exercise could also be done individually. Students got regular feedback from their peers and the facilitating professor.

Category	Description
	1: Problem definition
	2. Vision creation
Tasks	3. Idea generation
	4. Idea development
	5. Diffusion
	1: Market Report Reading, Empathy Map, Startup Scouting
	2: Brain Painting & Writing
Methods	3: How Might We Question, 635-Method
	4: Wireframe
	5: Sustainable Business Model Canvas & Design Thinking Voting
	Reports
Inputs	Aggregated information
	Videos
Feedback	From peers
recuback	From the professor

#### Table 1 Structure of the Master Course

- To understand the people engaging in the innovation process, executing the tasks to create innovations, they participate in a voluntary and pseudonymized BIG5 personality test and a self-created test of sensitivities. After each task, students feedback felt emotions and their root-causes.
- The quantitative and qualitative data was collected with Google Formular and analyzed with Microsoft Excel. Descriptive statistics and some techniques from the Grounded Theory were used to evaluate the numbers and words.

## ANALYSIS AND RESULTS

A total of five students from the master's program in Business and Law and 34 students from the master's program in International Real Estate Management were encouraged to participate in the data collection. The call was answered by 34 students, each of whom signed a data protection agreement. Thus, 87% of the students participated in the data collection. The participants assigned themselves a pseudonym, which was used as part of the collection and reflection of the results. Each person was free to choose what information they wanted to disclose about themselves. This resulted in 29 of the 34 subjects completing the sensitivity test (85% of the study participants). **Demographic information** was placed at the end of the survey to avoid bias. **Table 2** presents the distribution of gender, age, parents educational background, and ethnicity.

Demographic	Category	Answers
Participant's	22	2
Age	23	7
	24	13
	25	5
	26	2
Participant's	Female	11
Gender	Male	18
	Diverse	0
Parents	Vocational Training	2
Educational	High School Diploma	8
Background	University	16
	Doctorate	2
	Professorship	1
Participant's	German	20
Ethnics	German + 1	2
	Other <sup>1</sup>	7

Table 2 Demographics (N = 29)

The operationalization for the sensitivity types was derived from the contributions of Germann-Tillmann (2021) and Webb et al. (2020) - these include 1. intellectual, 2. imaginative, 3. emotional, 4. psychomotor, and 5. sensory sensitivity. Intellectually active people are characterized by the fact that they question a lot, proactively acquire knowledge, enjoy solving problems, are capable of self-reflection, and live a strong sense of justice. They are independent in their thinking, share ideas, and can concentrate very well. Imaginary people have incredible imaginations and live out their fantasies. They use metaphors to explain something, engage in fictional games, and sink into their thoughts. Emotional people feel their feelings very intensely. They think a lot about others, react or adapt to their environment, and empathize with others very well. Sometimes they overreact and want to get their way. Psychomotor active people move physically by bobbing their legs or scribbling on paper while listening to a lecture, for example. They babble, are enthusiastic, may talk incessantly when tense, and have a high energy level throughout. Sensory-sensitive people have more pronounced sensory perceptions, such as hearing, seeing, or feeling. This can lead to a more intense perception of noise, light, food, smells, hunger, or scratchy substances. Each construct was surveyed with an 8-item question battery and a Likert scale (1: disagree at all; 10: agree highly). Only the construct intellectual sensitivity was surveyed with a 9-item question battery. A pretest of the question battery took place once in an expert group of fifteen people consisting of

<sup>&</sup>lt;sup>1</sup> Syria, Turkey, Pakistan, Ghana and Colombia

professors, students, and scientists. Secondly, in the context of a survey over several semesters, with sixty participants.

Table 3 aggregates the data obtained from the sensitivity analysis.

	Intellectual	Imaginary	Emotional	Psycho- motor	Sensory
1	7,25	4,75	6,38	6,63	6,25
2	7,38	6,13	6,50	6,38	4,38
3	8,38	6,25	7,63	6,25	6,00
4	7,13	5,25	6,88	5,75	5,75
5	8,00	8,88	9,38	8,13	5,88
6	8,25	5,50	6,13	5,13	4,13
7	7,00	5,50	7,00	6,75	6,63
8	6,50	3,75	5,75	4,88	2,63
9	8,75	3,50	5,50	6,13	4,00
10	7,13	5,38	5,38	4,38	4,50
11	8,63	2,00	6,13	3,63	4,63
12	7,63	4,75	6,50	4,75	4,75
12	8,25	4,50	6,25	4,25	5,50
13	7,75	5,50	7,63	6,25	6,63
15	7,75	3,63	5,00	4,13	5,00
16	8,13	6,38	8,00	5,75	6,63
17	8,50	6,25	7,25	5,75	5,88
18	6,88	3,63	6,63	6,88	5,75
19	8,00	8,25	7,63	7,75	7,38
20	7,88	5,00	6,50	6,38	6,50
20	6,75	4,00	6,25	4,63	4,38
22	5,13	3,88	6,00	6,38	5,38
23	7,25	7,63	8,00	6,50	5,88
23	6,00	4,50	3,88	4,00	1,50
25	6,38	6,00	6,13	5,38	4,13
26	6,88	5,00	7,13	6,50	7,88
20	8,75	4,25	3,63	4,88	5,50
28	7,88	5,88	6,50	7,00	7,25
29	7,88	2,38	4,00	3,75	4,63
Min	5,13	2,00	3,63	3,63	1,50
Max	8,75	8,88	9,38	8,13	7,88
>= 7	22	3	9	3	3
Average	7,50	5,11	6,40	5,69	5,35
SD	0,862	1,559	1,266	1,191	1,388

Table 3 Sensitivity Analysis (N = 29)

The **findings from the sensitivity analysis** can be summarized as follows: In the student group, 71% of participants report a score of at least seven on intellectual. The mean is the highest, and the standard deviation is the lowest for this construct. The scores range from 5.13 to 8.75, and the standard deviation is highest for the construct imaginative. Nine of the participants have a score greater than seven on the construct emotional. And three each report a score greater than seven on sensory, imaginary, and psychomotor sensitivity. For

three subjects, all values are less than 7. For one subject, all constructs are reported with a mean value greater than seven. Whether these subjects tend to answer in one direction can only be assumed. For three subjects each, four constructs (except sensory) and three, respectively, have a mean greater than 7. Thus, it can be assumed that combinations of types are possible but that intellectual sensitivity is most frequently developed in the student group.

The **operationalization of the BIG5 personality test** used the short version of Rammstedt and John (2005). The results from the survey are shown in **Table 4** below.

	Extroversion	Agree- ableness	Conscien- tiousness	Neuroticism	Openness
1	3,5	6,0	9,0	6,0	7,8
2	8,0	3,0	6,8	5,5	7,8
3	7,3	4,8	7,3	7,8	9,3
4	4,3	6,0	5,5	3,8	4,5
5	6,8	1,8	7,5	3,3	9,0
6	7,3	3,5	7,8	2,0	6,5
7	5,5	2,8	7,0	7,8	7,5
8	8,0	6,8	7,8	3,8	7,0
9	7,0	4,0	8,3	5,5	6,8
10	6,8	5,0	8,8	2,8	7,0
11	7,3	4,5	8,0	5,3	8,0
12	3,8	7,0	5,3	5,0	5,0
13	6,0	5,8	9,0	3,3	7,5
14	6,3	6,8	6,3	4,3	4,8
15	5,8	5,8	8,0	4,5	8,8
16	7,3	6,3	7,8	4,0	7,5
17	5,3	3,8	6,8	7,3	7,0
18	5,8	7,5	4,3	4,3	6,3
19	5,5	4,8	7,0	3,8	5,3
20	4,3	5,0	4,0	9,8	7,3
21	8,0	9,3	5,3	2,3	8,3
22	5,8	5,3	7,0	6,3	8,3
23	7,0	6,5	6,8	5,8	7,8
24	4,3	6,3	5,3	4,3	6,3
25	6,0	7,0	8,3	8,0	7,0
26	7,0	5,0	7,0	5,8	7,0
Min	3,5	1,8	4,0	2,0	4,5
Max	8,0	9,3	9,0	9,8	9,3
>=7	3	3	8	4	10
Average	6,1	5,4	7,0	5,1	7,1
SD	1,3	1,7	1,4	1,9	1,2

The BIG5 analysis data shows that most students score high on openness and conscientiousness, making the mean highest there and the variance somewhat lower. The standard deviation is highest for agreeableness and neuroticism, and the mean is lowest for both constructs. However, since the composition is precise, each personality profile must be considered and evaluated individually.

Russell's (1980) model, shown in Figure 2, is used to operationalize the affect query.

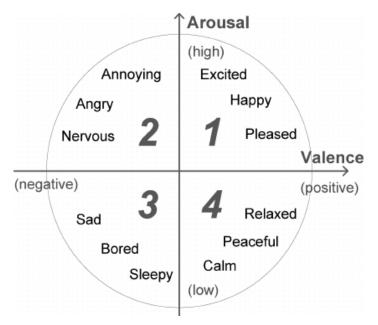


Figure 2: Russel's Valence and Arousal Model (1980), Source: Yang & Chen, 2012

The author uses a Likert scale to inquire about positive and negative affect. The cause of the emotions is also explored by allowing students to articulate why they feel the way they do. **Table 5** summarizes the survey overview.

Question	Answer	Scale
	1: Happy (positive)	1: not at all to 10: extremely
	3: Sad (negative)	1: not at all to 10: extremely
	4: Satisfied (positive)	1: not at all to 10: extremely
How do you fool?	2: Angry (negative)	1: not at all to 10: extremely
How do you feel?	1: Excited (positive)	1: not at all to 10: extremely
	3: Bored (negative)	1: not at all to 10: extremely
	4: Relaxed (positive)	1: not at all to 10: extremely
	2: Frustrated (negative)	1: not at all to 10: extremely
Does your state of mind result	Open Text	
from the assignment, from your		
interaction with your fellow		
students, and/or from your		
interaction with the professor?		
Briefly describe your perception.		

The emotions were queried in the lecture hall after each completed task along the innovation process and are summarized in **Table 6**. Since the emotions were queried per week, the number of participants changes. Due to lack of time, there was no emotion survey as part of the Sustainable Business Model Canvas exercise.

Emotions / Tasks	Market	Empathy	Startup	En-	<b>Ideation 1</b>	Ideation 2
(Average)	Report	Мар	Scouting	visioning		
	Reading					
Ν	11	14	10	15	13	14
1: Happy (positive)	0	1 (8)	0	1 (7)	1 (7)	3 (6)
3: Sad (negative)	1 (4)	2 (7)	1 (4)	0	2 (9)	1 (6)
4: Satisfied (positive)	8 (5,9)	11 (6,2)	9 (6,4)	12 (6,8)	3 (7,7)	9 (6,7)
2: Angry (negative)	1 (6)	0	0	0	0	0
1: Excited (positive)	1 (6)	2 (5,5)	1 (5)	2 (6)	2 (6,5)	4 (5,5)
3: Bored (negative)	1 (7)	1 (8)	2 (6)	0	0	0
4: Relaxed (positive)	8 (5,4)	8 (6,1)	7 (7,1)	14 (6,7)	4 (7,3)	7 (6,6)
2: Frustrated (negative)	3 (5,7)	1 (8)	1 (7)	0	7 (7,3)	2 (8)

Table 6 Emotion Analysis per Task (N = 20)

The findings from the emotion survey can be summarized per task as follows:

- Students are primarily satisfied except for the idea generation (ideation 1).
- Happy students appear in all tasks except researching startups and reading market reports.
- Excited students appear in all tasks.
- Excitement was mostly mentioned in combination with satisfaction.
- Satisfaction together with relaxation was the most common combination of emotions.
- Frustration arose in ideation 1 due to time pressure and openness of the task.
- Boredom appeared due to disinterest in the task, and anger resulted from technical problems.

Since the subjects were asked to describe their experienced emotions, it became transparent what they were happy about during the exercises:

- While reading the market research report, a participant interacts with his fellow students and is happy about it. Excitement is reported back based on the content of the report.
- In the Empathy Map exercise context, a participant is excited about the quality of the interaction with fellow students and about the task itself.
- In the context of envisioning and ideation, participants were pleased with the task, the constructive, if bumpy, interaction with fellow students, and the outcome.
- During the idea generation exercises, the participants were particularly pleased with the elaboration of a concept and its presentation in groups, with an excellent exchange of content and constructively critical questioning by the peers and the professor.
- Only the vision-building and ideation exercises each lead to a very high level of excitement among different people.

To get a better understanding of the **emotional root causes**, **Table 7** now compares the reasons mentioned by study participants when feeling satisfied, happy, or excited.

Task	<b>Stated Emotion</b>	Root-Causes		
Market Report	Satisfaction	Interaction with peers		
Reading		Task		
		Report content		
Empathy Map	Excitement	Happy with the task		
	Happiness	Valuable reflection with peers		
		Quality of results		
	Satisfaction	Group interaction		
Startup Scouting	Excitement	Insights through reflections		
	Satisfaction	Task or Topic		
Envisioning	Happiness	Task and interaction		
	Satisfaction	Group Interaction		
		Happiness due to painting		
		Task		
Ideation 1	Excitement	Good group		
	Happiness	No reason		
	Satisfaction	Great task and helpful interaction		
Ideation 2	Excitement	Interactions and helpful criticism		
	Happiness	Very good reflection, critical thinking, discussion		
	Satisfaction	Interesting reflection, new concept creation		

Table 7 Root Causes for Excitement, Happiness, and Satisfaction (N = 20)

Comparing the reasons for the student's assessment of what leads to joy, happiness, or excitement shows how unclear the distinction between the terms is. Not only the higher education literature seems to disagree, but also the participating subjects in this study. Some state "I am happy with..." when explaining the root-cause for their satisfaction or excitement. Some participants emphasize the quality of the exchange, contradicting perspectives, and the quality of results when explaining their happiness. Still, Elwick and Cannizzano's (2017) finding that happiness is experienced through friction and satisfaction with less challenge cannot fully be confirmed in the dataset. For example, solving the challenge of an outdated concept to a new idea was rated with satisfaction.

To now examine correlations between sensitivity type, personality, and emotions reported back, 20 complete data sets are considered (58% of the 34 subjects). Since the sample size is too small to show significant correlations, a brief descriptive discussion of isolated anomalies in the data now takes place:

- No connection was found between imaginative sensitivity type and a reported enjoyment or satisfaction in particularly creative tasks (e.g., ideation).
- No connection was found between extraversion and positive affect.
- There seems to be a relationship between above-average expression of intellectual sensitivity and IQ.
- There appears to be a relationship between emotional sensitivity and neuroticism.
- Students who expressed high satisfaction in reading the market report were more conscientious and intellectual than average (N = 3).
- Students who indicated high dejection within the Empathy Map task were above-average experiential personalities (N = 2).



- Pleased and satisfied on the Empathy Map task were above average agreeable personalities.
- Pleased in the vision-building exercise was a remarkably emotionally stable person with an above-average intellectual and high IQ.
- Pleased in the challenging idea generation exercise was a person who was above average in agreeableness and below average in conscientiousness.
- Two students who are above average intellectual and average conscientious were pleased with the ideation exercise 2.
- The creative potential was rated above average in one individual using Urban and Jellen's (1995) TSD-Z test. This individual showed average imaginative sensitivity. However, the person had an above-average IQ and an above-average intellectual sensitivity.
- Only five out of 34 participants were interested in their creative potential. Two people were satisfied with the result, which was above average. The discussion of the evaluation criteria helped sharpen the understanding of creativity and how it can be made tangible. The evaluation and its reflection will be intensified in the future.
- The three students who scored above average on the written examination of the strategic innovation management course had very high intellectual sensitivity. The personality profiles do not reveal any commonalities or extreme differences.
- Only the vision-building and the ideation exercises lead to remarkably high excitement levels in different individuals. The personalities and sensitivity types show no similarities.

# **CONCLUDING DISCUSSION**

In the data analysis, happiness was operationalized regarding positive affect and root-causes of positive as well as negative emotions were reflected.

- In all exercises (except the Startup Scouting and Market Report Reading), isolated students were happy. However, most students reported satisfaction and relaxation in combination. The extent to which their performance differs from that of the happy students will be surveyed and explored in greater depth in future surveys. No statement can be made about this at present.
- Constructively critical or solution-oriented interaction with fellow students and professors, the quality of the exchange and of the result affect the students' happiness. The joint elaboration of novel results and their presentation or discussion led to joyful experiences.
- Time pressure and open as well as complex tasks triggered frustration in eight students. They felt stressed. This aspect is to be deepened in future experiments.
- The five-minute online questionnaire on sensitivity type and personality can provide initial impressions of a person's cognitive performance and emotional stability. Sporadically, students who experienced pleasure or excitement during exercises along the innovation process showed a standard score on one or both profiles. More data sets are needed to stabilize these initial impressions.
- Since the development of innovations along a process is based on the creativity of people, special attention was paid to this element. A distinction must be made between the creativity of an individual, the creativity of a group, and the group climate.



- The TSD-Z test was used for testing by completing a picture and evaluating the result based on predefined criteria. The measurement of creative potential at the individual level met with only moderate approval. Five out of 34 people agreed to participate (15%). One person showed above-average creative potential, and one person showed average creative potential.
- The measurement of creative potential and creative performance has been unsatisfactory so far. Reflections with the students revealed that there is no common understanding of creativity and that the evaluation with the help of the TTCT-criteria and TSD-Z scoring is helpful (i.e., Torrance, 1966; Urban & Jellen, 1995). In subsequent surveys, all produced results along the innovation process will be uploaded to a digital learning platform and will be evaluated directly by the students and professors based on predefined criteria.
- The imaginary sensitivity of a person did not indicate whether he/she felt particularly pleased or satisfied with ideation exercises.
- The study confirmed that the results of a group and thus also the perceived happiness in it depend on the content quality of the dialogue or the constructiveness and solution orientation of the group. Conscientious and agreeable people were more likely to experience positive emotions in group work. Highly gifted und fewer compatible people enjoy complex and open tasks as well as time pressure. This context will be further explored in future surveys.
- Limitations: Documentation was only possible to a limited extent, as no standardized learning platform was available for documentation, and the Wi-Fi in the learning room only sometimes worked. Thus, the evaluation of the results was carried out on the tablet with predefined criteria. The group size meant that facilitation by a single person was too tight. To perform the experiments cleanly, it is recommended to have at least two or three people on the exercises.

# **Future Research**

The following aspects are to be further explored in a natural laboratory in the future in the form of experiments:

- Person: Emotionally stable versus unstable personalities and their behavior in complex problem-solving exercises with and without time pressure (aspect stress).
- Person: Intellectually above or below average individuals and their performance in open and complex problem-solving exercises (aspect cognitive load)
- Person: online assessment of creative performance (aspect virtual learning environment)
- Environment: group composition and its effect on creative performance, creatively and cognitively strong versus less strong individuals
- Environment: group dynamics and their impact on creative performance, constructive versus destructive
- Product: web-based 360-degree creativity evaluation of the produced results in the context of problem-solving

The data collection will be continued in subsequent semesters and extended to other universities. Interested parties are welcome to contact the author, who will provide descriptions and instructions. The data will be made available across universities.



- The analysis of creativity has yet to be ideal. In the future, a combination of creativity tests in advance and the evaluation of creativity of results in the innovation process will be pursued. Group exercises will be documented on a virtual flipchart.
- It would be exciting to find out whether the tendency of the sensitivity test is also confirmed in a larger sample. The finding that students are intellectually sensitive but less imaginative and emotional could have an impact on future educational endeavors.
- The assessment of the relationship between happiness and innovation is highly interesting from a higher education and business perspective and should be further continued.
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# Impact of the COVID-19 pandemic on the amount and structure of indirect costs of diseases and health problems in Poland

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#### ABSTRACT

The economic slowdown resulting from the COVID-19 pandemic has affected the labor market and health care system, reduced the income of employees and enterprises, and deteriorated the condition of public finances. In the area of public health, the situation makes it possible to analyze the cost categories of diseases and health problems. This applies not only to the costs related to COVID-19, but also to other disease entities whose prevalence was directly or indirectly affected by the epidemiological situation.

In economic terms, the value of all burdens resulting from the course of diseases and resulting health problems can be divided into direct, indirect and immeasurable. The aim of the study was a comparative analysis of the cost structure of lost productivity (short-term and long-term absenteeism) in the pandemic situation (2020-2021) and previous years (2012-2019) in Poland.

The article includes literature studies of legal acts and financial data published by public institutions responsible for financing benefits related to incapacity for work.

The conclusions show the change in the costs and productivity of society in selected periods, showing a measurable burden for the economy and society. The results were subjected to a comparative analysis using descriptive and statistical methods for quantitative research.

Keywords: COVID-19, Public Health, Public Management, Health Care, Indirect Disease Costs



# Integrating Objective Measurement in Measuring the Malaysian Family Well-Being

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#### ABSTRACT

Initiative to measure the well-being of family using a subjective measurement had been introduced by the National Population and Family Development Board (NPFDB) with the implementation of the Malaysian Family Well-Being Index (MFWBI) 2011. The MFWBI 2011 had measured the level of family well-being through a household's assessment by the father or mother regarding the well-being of their families. The well-being was assessed through seven domains identified, namely, Family Relationship Domain, Family Economy Domain, Family Health Domain, Family and Community Engagement Domain, Role of Religion and Spiritual Practices Domain, and Housing and Environment Domain. The recorded index in 2011 was 7.55 with a maximum score of 10.00. In 2016, measurement of the family well-being index was repeated using an improvised instrument which had added a new domain, named Family and Communication Technology Domain. The index recorded in 2016 was 7.33 out of a maximum score of 10.00. The recent MFWBI 2019 had maintain all the eight domains and the index recorded was 7.72. The objective of this study is to integrate the use of objective measurement in measuring well-being of the families. The data used in this study includes the MFWBI 2019 data and the state-level administrative data from the Department of Statistics, Malaysia. Among the administrative data that have been used were median household income, crude death rate, internet access and garbage collection. Composite scoring of subjective and objective data found a decline in the family well-being as compared to those reported in the MFWBI 2019 which used the subjective data alone. However, this study suggests the use of this new composite scoring technique in order to get an acceptance from the state-level administrations.

Keywords: family, well-being, religion, community



# **REFLECTIONS AND NEW DIRECTIONS: Advocating an Ethical Framework** in Decision Making to Promote Mental Wellbeing

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# ABSTRACT:

Appreciating that governments, public health authorities and policy makers have to make difficult decisions during unprecedented times like the COVID-19 pandemic, a number of countries devised summary statements based on Thompson, Faith, Gibson and Upshur's (2006) ethical framework. These ethical values inform how and what decisions are made. This includes: Inclusivity; Openness and Transparency; Reasonableness; Responsiveness and Accountability. This presentation will include findings from recent research studies including psychosocial consequences of mandatory quarantine, psychosocial consequences of COVID19 for expatriates, and the mental wellbeing of teachers during the school closures. In all three studies, the findings suggest that adopting the values outlined in the ethical framework could assist in, not only mitigating the negative psychosocial consequences of the pandemic and other VUCA (volatile, uncertain, complex and ambiguous) times, but actually promote wellbeing and happiness. Moreover in our VUCA world, adopting a value-driven framework would assist in covering social aspects of diversity, equity and inclusion, while ensuring accountability of leadership so that there is clarity around the code of conduct and idea

Keywords: mental health, wellbeing ethical values, COVID-19, public health



# Relationship between Changes in Exercise Behavior and Pain as well as Neuropsychological Function in Community-dwelling elderly

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#### ABSTRACT

This study longitudinally investigated the stages of change in exercise behavior in community-dwelling elderly, and examined the relationship between change in exercise behavior and pain as well as neuropsychological function. The participants were 110 women aged 65 years or older, mean age  $74.4 \pm 5.2$  years, who participated consecutively in health surveys conducted in 2018 and 2019. The measurement items were stage of change in exercise behavior, pain, and neuropsychological function. Neuropsychological function was assessed using the short version of the Geriatric Depression Scale (GDS-5), subjective sense of health, and subjective sense of satisfaction with life. From the results of the stages of change in exercise behavior in the first and subsequent years, there were 72 participants in the group that continued in the action/maintenance stage, and 12 that deteriorated from the action/maintenance stage to the preparation/contemplation/precontemplation stage; 14 that improved from the preparation/contemplation/precontemplation stage to the action/maintenance stage; and 12 that continued in the preparation/contemplation/precontemplation stage. Two-way analysis of variance showed no interactions, but a significant main effect was found for the stage factor in exercise behavioral change, in GDS-5. The simple main effect test showed that the group that continued in the preparation/contemplation/precontemplation stage had significantly higher values, compared to the group that improved from the preparation/contemplation/precontemplation stage to the action/maintenance stage, and the group that continued in the action/maintenance stage. The present study suggests that neuropsychological function is involved in the stages of exercise behavioral change.

KEYWORDS: Change in exercise behavior, Neuropsychological function, communitydwelling elderly

#### **INTRODUCTION**

As Japan enters a super-aging society, there is a great deal of interest in the health of the elderly<sup>1</sup>). Regular exercise is one way to maintain good mental health<sup>2</sup>). Exercise habits have also been shown to be effective in preventing depression<sup>3,4</sup>). However, it is difficult to continue exercising and to make it a habit.

There are approaches to encouraging the habit of exercise based on behavioral science theories and models. Recently, the transtheoretical model (TTM) has been attracting attention. The TTM divides the stages of behavioral changes into five stages, namely, precontemplation, contemplation, preparation, action, and maintenance, and states that an approach corresponding to each stage will lead to behavioral change<sup>5</sup>). However, to date, no study has examined the behavioral changes in TTM longitudinally to clarify the relationship between the change in the stages and depression in community-dwelling elderly persons.

Therefore, this study longitudinally investigated the stages of change in exercise behavior in community-dwelling elderly, and examined the relationship between change in exercise behavior and pain as well as neuropsychological function.

#### **METHODS**

The participants were 110 women aged 65 years or older, mean age  $74.4 \pm 5.2$  years, who participated consecutively in health surveys conducted in 2018 and 2019. The study was conducted according to the principles of the Declaration of Helsinki and was approved by the ethics committee for Human Research of Kyoto Tachibana University (18-26). All guardians of the participants provided written informed consent, and the participants were free to withdraw from the study at any time.

The measurement items were stage of change in exercise behavior, pain, and neuropsychological function. The scale created by Oka et al<sup>6)</sup>. was used to assess the stage of change in exercise behavior. This scale consists of items that measure the actual state of exercise behavior in the present and the past, and the state of readiness of the motivation for such exercise behavior. Exercise for health is defined as, "exercise for about 30 minutes at a time, at least twice a week." The participants were asked at which of the following five stages they were: "not presently exercising, or not planning to start exercising" (precontemplation stage); "not presently exercising, but intend to start within 6 months" (contemplation stage); "planning to start within one month", or ''is



exercising but not regularly" (preparation stage); "exercising regularly but it is now within 6 months since the start" (action stage); and "exercising regularly and continuing for at least 6 months" (maintenance stage).

Pain was assessed by asking participants about the site, duration, and degree of pain. For the number of pain sites, subjects were asked "where in your body are you experiencing pain?". Multiple responses were allowed for this question: head, neck, shoulder, back, hip, knee, and ankle. The duration of the pain was scored by answering the question, "How long have you had the pain?", and the response was selected from the following options: 1 week (1 point), 2 weeks (2 points), 1 month (3 points), 1-3 months (4 points), 3-6 months (5 points), or 6 months or longer (6 points). The degree of pain was investigated using a visual analog scale (VAS). The subject checked his/her own condition on a scale, which ranged from "no pain at all (0 points)" to "unbearably painful (10 points)".

Neuropsychological function was assessed using the short version of the Geriatric Depression Scale (GDS-5), subjective sense of health, and subjective sense of satisfaction with life. The GDS-5 is a self-administered five-item questionnaire for assessing depression in the elderly<sup>7)</sup>. The subjective sense of health was obtained by having the study participant respond to the question "About your health status" using a VAS, with 0 representing "poorest condition" and 10 representing "healthiest condition". For satisfaction with daily life, the respondents were asked to respond to the question "about the level of satisfaction with your daily life" using a VAS, with a score of 0 representing "very dissatisfied" and 10 being "very satisfied". All assessments were performed through a face-to-face interview using questionnaires.

From the results of the stages of change in exercise behavior in the first and subsequent years, there were 72 participants in the group that continued in the action/maintenance stage, and 12 that deteriorated from the action/maintenance stage to the preparation/contemplation/precontemplation stage; 14 that improved from the preparation/contemplation/precontemplation stage to the action/maintenance stage; and 12 that continued in the preparation/contemplation/precontemplation stage to the action/maintenance stage; and 12 that continued in the preparation/contemplation/precontemplation/precontemplation stage.

stage factor of behavioral change, was performed.

#### RESULTS

Two-way analysis of variance showed no interactions, but a significant main effect was found for the stage factor in exercise behavioral change, in GDS-5 (F (1,109) =3.6, p<0.05. The simple main effect test showed that the group that continued in the preparation/contemplation/precontemplation stage had significantly higher values, compared to the group that improved from the preparation/contemplation/precontemplation stage to the action/maintenance stage, and

the group that continued in the action/maintenance stage (Table 1) .

## DISCUSSION

In this study, GDS-5 scores were significantly higher after one year in the group that remained in the preparation/contemplation/precontemplation stage of exercise behavior, compared to the group that had improved from the

preparation/contemplation/precontemplation stage to the action/maintenance stage, and the group that continued in the action/maintenance stage. In the TTM, self-efficacy is one of the factors involved in behavioral change. Prior research has shown that selfefficacy tends to increase as the stage of transformation increases<sup>6</sup>. In other words, people in the preparation/contemplation/precontemplation stage are likely to have low self-efficacy. Misawa et al<sup>8</sup>. also reported a negative correlation between depression and self-efficacy, with perceived self-efficacy low in those with depressive tendencies. The finding in the present study of higher GDS-5 scores in those who did not progress from the early stages of exercise behavior change suggests that it not only strengthens self-efficacy but also prevents depression, which is important in influencing the behavioral change of exercise in the elderly.

## CONCLUSION

The present study suggests that neuropsychological function is involved in the stages o



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# **CONFLICT OF INTEREST**

Authors declare no conflict on interest



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Table1 Relationships between exercise behavior change, pain and neuropsychological function

	Action/maintenance stage→ Action/maintenance stage(72 subjects)		Action/maintenance stage→ Preparation/contemplatio n/precontemplation stage(12 subjects)		Preparation/contemplatio n/precontemplation stage $\rightarrow$ Action/maintenance stage group(14subjects)		Preparation/contemplatio n/precontemplation stage → Preparation/contemplatio n/precontemplation stage (12 subjects)		Main effect (F value)		Interaction (F value)	Simple main effects test
	2018	2019	2018	2019	2018	2019	2018	2019	Age factor	Stage factor	Age factor X Stage factor	
GDS-5	0.4±0.7	0.4±0.8	0.7±0.7	0.4±0.9	0.5±0.9	0.3±0.5	0.9±1.1	0.8±1.0	0.96	3.6*	1.58	Preparation/contemplat- ion/precontemplation stage → Preparation/contemplat-
Sense of health Sense of life satisfaction	6.7±1.9	7.0±1.7	5.7±.0	6.5±1.9	6.0±1.7	6.5±1.7	6.5±2.1	5.5±1.3	0.29	2.25	1.62	ion/precontemplation stag Preparation/contemplat- ion/precontemplation stag → Action/maintenance sta
Pain level	7.6±2.1 2.3±2.9	7.8±2.0 2.2±2.8	7.8±2.2 2.3±2.2	8.2±1.7 2.6±2.9	6.8±1.8 2.9±2.6	7.0±1.9 2.2±2.7	6.8±2.2 2.0±2.3	7.3±1.7 2.5±2.6	0.82 0.02	1.59 0.56	0.08 0.56	group and Preparation/contemplat- ion/precontemplation stag
Duration of pain Number of sites of pain	1.6±2.4 0.8±1.1	2.3±2.7 0.9±1.2	2.3±2.4 0.9±1.0	2.7±2.9 0.8±1.1	2.4±2.7 0.8±0.8	1.9±2.7 0.9±1.3	2.2±2.9 1.3±1.6	2.6±3.0 0.9±1.2	0.45 0.11	0.32 0.15	0.62 0.78	→ Preparation/contempla ion/precontemplation stage Action/maintenance stage Action/maintenance stage

\*p≺0.05

# The role of the dietitian profession in creating a healthy lifestyle in Poland

Prof. Joanna Woźniak-Holecka Medical University of Silesia in Katowice, Poland

## ABSTRACT

Dietetics is an interdisciplinary profession, using knowledge of basic medical sciences, human nutrition, gastronomic technology, and other related fields. The range of professional tasks of a dietitian is very wide and includes, among others: working on menus, planning individual and group nutrition and the use of clinical nutrition. In addition, the dietitian's tasks include supervision over the quality of food products and their storage conditions, as well as the assessment of the nutritional status and nutrient needs of individual patients. The scope of duties also includes basic diagnostics, preventive measures and active participation in the treatment of obesity or malnutrition, as well as providing nutritional advice.

Nutritionists, whose profession belongs to the group of medical professions, enable patients to take care of their health and prevent diseases associated with improper nutrition, and also help in the treatment of many diseases and disorders. The catalog of diseases that should be treated in cooperation with a dietitian includes, among others: arterial hypertension, overweight and obesity, lipid disorders, gastrointestinal diseases, cancer or carbohydrate metabolism disorders.

Shaping everyday habits is more effective if it is carried out with the use of the knowledge of professionals. Many disease entities require temporary changes in the menu or become a daily diet not only to maintain health, but also for the quality and comfort of life. It should be noted that in the face of the global epidemic of overweight and obesity, their role will increase, and the need to develop evidence-based dietetics will become more important than ever.

The methodology includes the analysis of secondary data (desk research) and the analysis of statistical data. The literature review include Polish and English - language scientific articles, monographs, reports and expert analyses.

The conclusions show that a properly selected diet is an effective method of taking care of health and improving its quality.

Keywords: dietitian profession, nutrition, healthy lifestyle, healthy life.



# What Makes YOU Unhappy?

Venerable Tenzin Dorjee International Buddhist Studies College, Thailand

# Abstract

Ancient Nalanda University Master Shanti Deva said in his book "The Way of the Bodhisattva" chapter number 5<sup>th</sup>. The sources of unhappiness are: For all anxiety and fear. And suffering in boundless quantity, Their source and wellspring are the mind itself.

The way to subdue those fear, and anxiety and means to be free from suffering is: By simple binding of this mind alone, All these things are likewise bound. By simple taming of this mind alone, All these things are likewise tamed.

Even, the concept of happiness is a complex and multifaceted one, and identifying the specific sources of unhappiness and happiness can be challenging. But in the above two stanzas, it mentioned sources of unhappiness and the way to bring happiness in one's life. Therefore, this paper will examine various factors that have impacted personal happiness, such as social isolation, financial stress, health problems, relationship issues, negative self-talk, and unrealistic expectations.

Additionally, the paper will explore how individual differences in personality, values, and life experiences can affect one's state of happiness.

Also, it's crucial to identify and address the specific factors that may be impacting one's happiness and seek support from friends, family, and mental health professionals.

Keywords: Happiness, unhappy, mind, tame

# Work, Relax and Play (WRAP) an extra-curricular wellbeing program for healthcare students.

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#### Abstract

Commenced in January 2021, Staffordshire University's Work, Relax and Play (WRAP) initiative is a social, interprofessional approach to supporting student wellbeing and promoting good mental health. WRAP is an optional, session-based program which aims to create healthier universities and equip the future National Health Service (NHS) workforce with the vital strengths and traits which will support them throughout their health career. Due to its significant contribution to student experience, WRAP has now engaged departments from all over the university and is now developing into a university-wide wellbeing program.



# Introduction

With the aim to enhance the student experience, the inspirational WRAP development team were motivated by the need to respond actively to the Office of National Statistics (ONS) (2021) findings that almost two-thirds (63%) of students reported worsening of their wellbeing and mental health. Over half of students' mental health is now worse than before the pandemic, with only 13% of students seeing their friends more than once a week. 57% of students are interacting less with other students at their institution 94% of higher education institutions report an increase in demand for their counselling services. The team implemented WRAP noting that Nursing students are more prone to stress when compared to other disciplines, offering the initiative in support of the overall student experience and wellbeing in Staffordshire University's School of Health, Science and Wellbeing.

#### Discussion

In recognition of the significant life changes that healthcare students attending higher education institutes can often encounter and the implications of these upon mental health, WRAP has been developed with the aim to improve the wellbeing of healthcare students, with evidence-based research underpinning the included activities. In the design and implementation of WRAP, the team noted and responded to multiple complex factors affecting wellbeing for university students, including lack of exercise, altered nutrition, and changing levels of social interaction. Mikkelsen et al (2017) suggests that exercise can improve anxiety, depression, and stress. Caso et al (2020) indicate that as well as a poor diet influencing academic stress and anxiety, this academic stress can then encourage a poor diet, causing a vicious circle effect. The team recognised additional considerations faced in the Context of Covid 19, as National Union of Students (NUS) (2020) identify that over half of students' mental health is now worse than before the pandemic, with only 13% of students seeing their friends more than once a week and 57 % of students interacting less with other students at their institution. This highlighted the significant lack of social interaction, which in turn can reduce the opportunity for a healthy state of wellbeing. In response to this, the WRAP interprofessional wellbeing programme aimed to enhance the student experience by creating a social interprofessional environment, encouraging exercise and relaxation methods, giving knowledge around healthy eating and equipping students with the tools required to manage workload stress.

Since its implementation in January 2021, the WRAP programme has expanded significantly and is now available to all health and social care students, law students and English students with the aim to develop into a university wide program. WRAP stands for Work, Relax and Play which forms the structure of the sessions, with a work session one week, a relax the following week and then a play session the week after. This timetable continues throughout the academic year with one session every Wednesday afternoon as this is the most likely self-directed study day in a students' timetable. Work sessions include experienced healthcare professionals sharing their experiences and identifying the importance of reflection for personal well-being. These work sessions respond to student need, discuss key topics and encourage students to recognise that reflection and sharing experiences can promote healthy wellbeing. Other work sessions include expert sessions, debriefing tools, awareness sessions, nutritional advice, workload stress management, compassion fatigue and financial support. The main aim of the work sessions is to develop vital strengths and traits for healthcare students, such as emotional intelligence and resilience, with other work sessions discussing wellbeing techniques and providing toolkits for students. Relax sessions include a series of yoga, tai chi and allotment gardening sessions for learners to relax as interprofessional groups and form friendships. Play sessions range between guizzes and fun exercise, each session will be a different fun sport for students to be a part of. These sports are social and inclusive of all abilities.



Since its implementation, student engagement with WRAP has risen and access has widened across the faculty and university, and feedback from students has been positive throughout. The WRAP lead is currently undertaking qualitative research into WRAP and although not complete, initial themes that have emerged from focus groups of healthcare students who have taken part in WRAP identify increased socialisation, improvement of mental health and wellbeing and the want for this to be a compulsory and embedded within the curriculum program. There are many ways that students are involved in this initiative - currently there are 14 student WRAP representatives across disciplines, these reps encourage student engagement and help the WRAP lead to organise the timetable, facilitate the "play" sessions and get involved in presenting WRAP at conferences and events. This is crucial as students leading student wellbeing is essential for a successful wellbeing program. As the programme widens, student experience is further enhanced by interprofessional experiences, across all branches of nursing, allied health professions and those in different schools across the University. WRAP encourages students from multiple healthcare courses to work together in groups that they wouldn't normally collaborate with, building social networks and developing vital skills such as communication, knowledge sharing, reflection and motivation of others.

# Conclusion

WRAP contributes to the Universities UK (2020) strategy and supports the objective to create overall mentally healthier universities. It aims to promote healthier lifestyles by developing collaborative, safe and supportive physical and digital student environments that have a positive impact on mental health. The WRAP wellbeing program already has a demonstrable history of positively impacting student experience at university (evidence). The WRAP programme combines individualised professional education, strategies for good mental health and inclusive social exercise and sport; enhancing the overall student experience by positively addressing the key factors affecting student wellbeing.

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## **Conflict of interest**

"Authors declare no conflict of interest."

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