Self-care practices in decision-making: How nutrition and habits may affect decision in business

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INTRODUCTION

Business operations, efficiency, and performance depend directly on management style in terms of decision making and adopted policies [1-3]. Decision making, the core of management across all sectors of an economy, is not always rational. "Utility theory makes logical economic logic hypotheses that do not reflect people’s real choices and ignore cognitive prejudices" [4]. The classical economic theory and decision making has been questioned due to two generic inadequacies: First, the brain is constructed to support ‘automatic’ processes, and second humans' behavior is determined by unrecognized influence of finely tuned affective (emotion) systems located in specific brain regions. These two systems are very important and vital for human beings’ daily functioning. When affective systems are perturbed or damaged, by brain damage, alcohol, imbalances in neurotransmitters, stress, or the ‘heat of the moment,’ the deliberative system is generally unable to do the job itself [5].

The healthy lifestyle keeps our body and its endocrinology system in good condition and subsequently the hormones—that influence humans’ emotions—controllable. Indeed, “among the most important behavioral factors affecting health is smoking, food and stress” [6], also consumption of fast food can lead to obesity that may cause many important health and mental issues [7, 8], while regular exercise can help manage stress (physical and mental), increase norepinephrine concentrations, a chemical that mediates the brain’s response to stress [9, 10].

In addition, the exercise supports the release of endorphins, which create feelings of euphoria and happiness [11]. Studies have also shown that exercise can even improve symptoms among the clinically depressed [12]. For this reason, exercise is recommended as a treatment for people suffering from depression or anxiety, while in some cases, exercise may be just as effective as antidepressants in treating depression [13].

The decision-making is a complex process that applies to everyone and everywhere. Businesses, as a place, where the decisions have a dominant role, intend to follow the steps of the process that consists in seven steps (identification of the problem/issue, situation analysis, possible course of actions, decision criteria, course of actions selection, implementation, check and evaluation of actions) [14, 15].

The decision-making process (DMP) is a brain process that can be influenced by someone’s choices in the context of self-care, such as a careful diet, the adoption of exercise or habits related to hobbies they love to do (e.g., reading, theater, etc.). Hormones levels may be affected by nutrition and habits that someone chooses, and in turn, to influence the brain functioning [16].
HOW HORMONES INFLUENCE HUMANS’ EMOTIONS VIA NUTRITION AND HABITS

Having established that emotions might be influenced by our brain functionality, next is discussed the relationship between levels of hormones and the humans’ emotions [18, 19] and whether humans’ dietary and lifestyle could be held responsible for this relationship. Hormones can be classified into three categories based on their chemical structure:

1. lipid-derived,
2. amino acid-derived, and
3. peptide hormones.

Among basic hormones, cortisol, oxytocin, testosterone, vasopressin (antidiuretic hormone [ADH]), progesterone and insulin can affect human emotional status [16].

Cortisol, a steroid hormone, one of the glucocorticoids, produced in the adrenal cortex and then released into the bloodstream, which carries it throughout the body, has been found to influences humans’ mood and behavior [20]. The high concentration of cortisol may lead to high blood pressure, osteoporosis, depression, mood fluctuation, anxiety, weight gain, muscle weakness, and increase thirst as well as urination frequency [21-24]. On the other hand, the decreased levels of cortisol in blood can cause symptoms such as fatigue, weight loss, muscle weakness, dizziness, mood swings and the darkening of regions of the skin. Foods with high concentration of carbohydrates and fat trigger the secretion of cortisol [25-28]. It becomes obvious that the balance of cortisol plays a very important role in emotional status regulation (Figure 1).

Oxytocin is quoted the “hormone of love”, because it is responsible for the lactation promotion by moving the milk into the woman breast. Studies have found that it is an important chemical messenger that controls some human behaviors and social interaction. It is oxytocin that may also play a role in recognition, sexual arousal, trust, and anxiety. Some research shows that the hormone may affect addiction and stress as well. The secretion of this hormone increases when hug someone, dance, laugh, read your favorite book and listen to the music you like [29, 30].

Testosterone pays an important role to both males and females. Issues associated with testosterone levels in men include low sperm counts, shrinking of the testicles and impotence, heart muscle damage and increased risk of heart attack, prostate enlargement with difficulty urinating. In addition, might cause liver disease, acne, fluid retention with swelling of the legs and feet, weight gain (partially related to increased appetite), high blood pressure and cholesterol, insomnia, headaches, increased muscle mass, increased risk of blood clots, stunted growth in adolescents, uncharacteristically aggressive behavior (although not well studied or clearly proven). Also, changes in testosterone levels can cause mood swings, euphoria, irritability, impaired judgment, delusions, reduced body and facial hair, increased breast size, hot flashes, irritability, poor concentration and depression, brittle bones and an increased risk of fracture [31-35].

Vasopressin (ADH): This hormone “regulates the normative social behavior in mammals” [56]. It is one of the main determinants of body’s osmotic balance, blood pressure regulation, sodium homeostasis, and kidney functioning. Low levels of vasopressin in human blood may be caused by compulsive water drinking or low blood serum osmolality. The associated symptoms are “excessive urination, which is called polyuria, followed by extreme thirst, which is called polydipsia”. On the other hand, the high levels of ADH caused by very serious diseases and illnesses (leukemia, cancer in pancreas, multiple sclerosis, epilepsy, cystic fibrosis, emphysema etc.) [57]. The structure of oxytocin is very similar to that of vasopressin. This similarity can cause some cross-reactions: Oxytocin has a slight antidiuretic function, and high levels of AVP can cause uterine contractions [38, 39]. ADH is the hormone, which regulates the levels of the water in the body. Caffeine, alcohol, and salty foods tend to decrease the secretion of this hormone [40-43].

Progesterone exists in humans and has a dominant role in women because is essential for the reproduction and pregnancy maintenance [44]. High progesterone symptoms are also accompanied by slight dizziness, water retention, drowsiness, a feeling of spinning sensation, and tenderness in the breasts (for women). It also regulates mood and weight. On the other hand, low levels of progesterone cause symptoms such as anxiety, mood changes, depression, sleep disturbances, headaches, low blood sugar [45, 46]. Zinc, vitamin C, B6, E as well as fibers, L-arginine, magnesium are basic resources that boost the progesterone [47-49].

Insulin is an anabolic hormone—produced by pancreatic islets— that regulates the metabolism of the carbohydrates, proteins as well as fats by promoting the absorption of glucose from the blood into liver, fat and skeletal muscle cells [50, 51].

Figure 1. Example of cortisol secretion [17]
If a situation causes more insulin levels than required (e.g., more energy consumed or less food consuming), cells take too much glucose from the blood, which drives to the low blood glucose levels (hypoglycemia). In that condition, liver releases the stored glucose to balance the relevant levels in the blood. The low glucose levels make a person feel ill. The human body experiences sweating, hunger, anxiety, tremor, palpitations, and pale complexion, symptoms of individuals with low blood glucose level. If the levels are too low for some time and no prompt action is taken, then will impact the brain too, causing confusion, dizziness, fits, or coma. Indicative symptoms of hypoglycemia during sleep may be nightmares, or crying out, feeling tired, irritable, or confused after waking up [52]. On the other hand, the high levels of glucose in blood can be caused due to some diseases (e.g., diabetes). Consumption of high sugar products can cause high glucose levels in the blood causing tension, angering, sadness, faintness, thirstiness, tiredness, nervousness, lethargic, blurredness vision, headaches [53].

The discussed extensive literature review enabled us to group the foods and habits that may encourage the secretion of the discussed hormones, which in turn expected to humans’ emotional status. Recent research in neuroscience has shown that the genetic control of intelligence is correlated with the structure of brain regions [54]. This may explain why humans’ behaviors differentiate from person to person. People were born under different conditions (environmental and prenatal conditions), which possibly have affected the brain structure and the relevant functionality [55]. In that respect, the behavior outcome seems to be shaped based on the genetic frame and factors that could be influenced by life experiences and personal aspects of individuals as spirituality and political ideology [56]. Human behavior differences could be explained taking into consideration, firstly, the fact that general neurobiological systems have a different sensitivity to the classes of stimulus for each individual and, secondly, these differences are obvious as feature variation both in subjective emotional experience and in apparent patterns of emotional expression [57].

Brain functionality depends on a variety of chemical substances. The different levels of hormones affect the brain and its reaction to external triggers, and hence the human’s behavior [58]. From the above, nutrition and the choices that someone has in his/ her daily life may impact these biochemical substances and influence brain functionality. Lifestyle includes diet (the type and quality of daily diet), exercise as well as habits in relation to the daily routine that one follows [59]. Lifestyle seems to have an important role in management decisions because hormones have an impact on humans’ emotions. A healthy (or not) lifestyle may affect humans’ emotions, and hence, it affects employees and managers and consequently the management decision.

DECISION-MAKING

Decisions are part of humans’ daily life. Choices made by people are influenced by a group of factors: Past experiences, a variety of cognitive biases, individual differences, and personal beliefs [60]. DMP is a complex procedure that consists of different steps [14, 61]. This process is connected to brain functionality [62]. Researchers attempt to eludicate decision-making networks in the primate brain [63]. Hence, decision-making is a process that is executed by the brain and is affected by different factors (i.e., hormones, which are basic role in the brain’s functions). These factors influence the biochemical substances of the human brain, which are responsible for people’s decisions because the emotions— that are affected by hormonal secretions—and their process may modulate the impact of the influence on DMP [64].

DMP is not something new. This process applies to everyone and everywhere. Companies and organizations follow the steps that DMP encompasses to find alternatives or and solutions. This process includes seven steps:

1. identification of the problem/issue,
2. situation analysis,
3. Possible course of actions,
4. Decision criteria,
5. Course of actions selection,
6. implementation, and
7. check and evaluation of actions [14, 15].

Research findings shows that there is a hormonal influence in DMP [65]. Hormones may affect the human behavior as well as the choices they make [66]. The emotional status that someone experiences could affect the final decisions of someone [67, 68]. Recent neurophysiological studies state that DMP follows a specific neurobiological mechanism. This mechanism includes "a multicomponent valuation stage, implemented in ventromedial prefrontal cortex and associated parts of striatum, and a choice stage, implemented in lateral prefrontal and parietal areas" [67, 69]. Based on that, the concentration and synthesis of the biochemical substances of the brain at the moment someone takes a decision seems to play a decisive role. Any decision taken is influenced by some factors. Some of them are due to exogenous environment and some others due to endogenous personal status. Motivating and influencing parameters can be external or/and internal [70, 71]. Environmental factors (exogenous) such sounds, colors etc. are able to influence the decision process [72, 73]. In addition, the personal traits of the decision maker (endogenous) can affect the final decision. The speed of thinking and data processing is another factor that can influence the process [74]. The over-analyzing or the fast taken procedures might cause issues during DMP [75]. Another dimension is the capability of adapt [76]. It depends on the decision maker’s personality and how he/she manages the dynamic environment and the relevant changes [77]. In addition, the biases and preferences of the person who receives the decisions are crucial for the process. Any opinion based on non-objective evidence can affect DMP. In cases, where a business is to take a sophisticated decision, the experts (e.g., consultants, scientists) are influencing final decisions [78, 79].

From the above, DMP seems not to be a simple procedure. This process consists in many parts and encompasses different

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1 Behavioral activation or facilitation system and behavioral inhibition system.
and intercorrelated components [66, 80]. The decisions can be influenced by both exogenous and endogenous factors. The decision maker’s emotional status is one of the crucial components that affects the process [68, 81]. The influence of the brain may be caused by hormone levels, which in turn, are affected by nutrition and lifestyle, and hence, there is an impact on the emotional balance status.

RESEARCH METHODOLOGY

This article is dealing with the findings of a primary research carried out through questionnaire.

Further to the literature review and based on the scope of this article, the quantitative data analysis has been selected. Thus, data has been collected from a suitable sample of managers (principals, supervisors) and employees, through questionnaire developed in order to investigate the main hypothesis. In addition, the quantitative approach allows the study of the correlations between several variables, such as the degree of correlation between the responses of managers and employees, their lifestyle, and decision-making.

Formulation of Main Hypothesis

DMP is a complicated procedure that encompasses a variety of factors. Unconscious [79] and the total balance of humans’ hormones can affect the decisions received [13]. The lifestyle and the daily habits are enough to influence the emotional human’s status [6, 8, 12]. On the other hand, the rational theory of decision-making is obsolete [4, 5, 82]. Studies have shown that the people are influenced by their emotional status [83, 84], and hence, their brain chemical consistency changes, which influences their decisions accordingly. In that context, the main hypothesis of this study, which has been formulated is to investigate whether the managers/employees’ decisions are influenced by their nutrition and habits.

In that frame, the research is dealing with the Greek businesses. Greek managers and employees have answered to the questionnaire developed for the scope of this research.

Questionnaire Design

For the main research question of the paper to be empirically examined, a suitable questionnaire was developed and distributed to managers and employees from the Greek business market.

The questionnaire consists of five parts and includes 69 statements and questions. In the first part (A–10 statements), the respondent is called to fill out some demographics information like gender, age, marital status, etc. The second part (B–19 statements) is related to the business/workplace’s frame, the third part (C–Five statements) is for the colleagues/teams’ habits, the fourth part (D–10 statements) includes statements about nutrition and habits, and the fifth part (E–25 statements) is related to the internal impact. Especially for part D, each statement describes a habit (dietary or exercise). A more detailed analysis for each statement follows in the next paragraphs.

The answers for part D and part E are indicated on a five-Likert scale. Grade 1 indicates “never” and grade 5 indicates “very frequently”. The questions 2, 3, 4, 5, 6, and 9 have inverse formulation (hence, inverted score calculation).

Part A asks for demographics information such the gender, age, educational background, marital status, net monthly family income, children, weight, and height. This information can assist with the calculation of body mass index (BMI) that provides the status of obesity. The calculation formula is BMI=Weight (kg)/height (m)^2 (BMI categories: underweight= <18.5, normal weight=18.5-24.9, overweight=25.0-29.9, obesity= BMI of 30.0 or greater). This part is able to describe the general profile of the respondents. Part B includes questions/statements related to the business that the respondent is working for: Type and sector of employment, years of experience, positions they have (managers or employees), and statements for benefits provided regarding the business trips, the time of commuting [85, 86], and the possible special management of people who needs special care (e.g., pregnant, diabetics, disabled personnel) [87, 88]. Part C is related to the respondent’s workplace environment and his/her colleagues. They are asked if the environment has influenced him/her regarding the nutrition and dietary habits [89]. Part D provides a score for the lifestyle (nutrition and habits) of the respondent in terms of the emotional status/ balance. Includes statements for the nutrition as the consumption of homemade food, sugar products, caffeine, and refreshments, processed tomatoes products, non-whole grain foods and fried cooked meals, trans-fat (fast-food), tuna, yolks, seafood, and red meat. As far as the habits, the statements are for the time spent for arts (theatre, music, writing/ reading), and the time they give for contact with the people they love. Regarding the lifestyle, questions for nicotine and work out are included. At this point, it would be very useful to be mentioned that depending on the overall score that a respondent achieves, he/she belongs to one of the categories of emotional balance status (low, mid, and high). Part E focused on the lifestyle changes that someone has absorbed, and which degree has affected the decisions in terms of data analysis, speed, and risk. The decisions are categorized into three different types: Personal life decisions related to work, and assets management. The questionnaire closes with statements regarding the emotion’s regulation.

As stated above, the emotions—and behavior—are influenced by the hormones and the relevant chemical synthesis of the decision-maker brain. The basic concept of the questionnaire is to investigate the relationship between nutrition, habits and lifestyle with the decisions taken by the managers and/or employees. The instrument was reviewed by 10 people with different educational and experience backgrounds. The final version of the instrument was released for pilot testing. On the 20th of May 2021, the questionnaire officially distributed to the Greek businesses.

The instrument’s reliability has been checked through Cronbach’s alpha. The coefficient alpha is the most common for assessing the reliability of questionnaires. In this context, Cronbach’s alpha is selected to assess the validity of the questionnaire. Acceptable reliability limit for coefficient alpha is >0.8 [90]. However, values between 0.6-0.7 are considered acceptable and values over 0.9 provides an excellent reliability [91, 92].
Table 1. Sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>42.56</td>
</tr>
<tr>
<td>Female</td>
<td>57.44</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>1.65</td>
</tr>
<tr>
<td>26-54</td>
<td>17.36</td>
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<tr>
<td>35-44</td>
<td>45.80</td>
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<tr>
<td>45-54</td>
<td>27.69</td>
</tr>
<tr>
<td>55-64</td>
<td>8.26</td>
</tr>
<tr>
<td>65+</td>
<td>1.24</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>0.41</td>
</tr>
<tr>
<td>High school</td>
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</tr>
<tr>
<td>IEK</td>
<td>3.51</td>
</tr>
<tr>
<td>TEI</td>
<td>10.74</td>
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<tr>
<td>AEI</td>
<td>29.75</td>
</tr>
<tr>
<td>MSc/MD</td>
<td>45.39</td>
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<tr>
<td>PhD</td>
<td>5.37</td>
</tr>
<tr>
<td>Other</td>
<td>0.41</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
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<tr>
<td>Married</td>
<td>60.33</td>
</tr>
<tr>
<td>Single</td>
<td>21.49</td>
</tr>
<tr>
<td>Cohabit</td>
<td>9.09</td>
</tr>
<tr>
<td>Divorced</td>
<td>8.26</td>
</tr>
<tr>
<td>Widower/widow</td>
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</tr>
<tr>
<td>Number of children</td>
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<td>0</td>
<td>36.78</td>
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<tr>
<td>1</td>
<td>23.14</td>
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<tr>
<td>2</td>
<td>34.30</td>
</tr>
<tr>
<td>3</td>
<td>5.57</td>
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<tr>
<td>4+</td>
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<tr>
<td>Family monthly net income (EUR)</td>
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<tr>
<td>&lt;1,000</td>
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</tr>
<tr>
<td>1,001-2,000</td>
<td>40.08</td>
</tr>
<tr>
<td>2,001-3,000</td>
<td>19.01</td>
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<td>&gt;3,000</td>
<td>26.86</td>
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<tr>
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<tr>
<td>Employee</td>
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</tr>
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<td>Freelancer</td>
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<tr>
<td>Employment sector</td>
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<td>Private</td>
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</tr>
<tr>
<td>Public</td>
<td>20.25</td>
</tr>
<tr>
<td>Private &amp; public</td>
<td>4.96</td>
</tr>
<tr>
<td>Position</td>
<td></td>
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<tr>
<td>Principal (manager)</td>
<td>50.58</td>
</tr>
<tr>
<td>Supervisor (manager)</td>
<td>22.51</td>
</tr>
<tr>
<td>Employee</td>
<td>47.11</td>
</tr>
<tr>
<td>Management experience (years)</td>
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<tr>
<td>0</td>
<td>31.40</td>
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<tr>
<td>&lt;3 years</td>
<td>12.81</td>
</tr>
<tr>
<td>3-6 years</td>
<td>12.40</td>
</tr>
<tr>
<td>6-9 years</td>
<td>5.57</td>
</tr>
<tr>
<td>9-12 years</td>
<td>8.26</td>
</tr>
<tr>
<td>12-15 years</td>
<td>9.09</td>
</tr>
<tr>
<td>15-18 years</td>
<td>4.96</td>
</tr>
<tr>
<td>18-21 years</td>
<td>5.79</td>
</tr>
<tr>
<td>21-24 years</td>
<td>2.07</td>
</tr>
<tr>
<td>24-27 years</td>
<td>3.72</td>
</tr>
<tr>
<td>&gt;27 years</td>
<td>3.72</td>
</tr>
</tbody>
</table>

Figure 2. BMI of sample (Source: Author’s own elaboration, using data from field study conducted in 2021)

STATISTICAL ANALYSIS & FINDINGS

Sample Description

The collected information was coded and statistically analyzed.

The questionnaires distributed to the Greek companies from the 20th of May 2021 until the 2nd of July 2021. The number of responses collected was 242: 128 are managers (principals/supervisors) and 114 employees.

The majority of the respondents (74.79%) work in the private sector and have a manager position (52.89%). In addition, 68.60% of the participants have experience in a management position and 43.39% of the sample have completed a post-graduate program. The 60.53% are marriage and the 65.22% are parents (>1 child). Table 1 presents a description of the sample.

The research uses sample from Greek companies/organizations of various sectors and sizes (Table 1). Particularly, it was asked by participants to fill out a questionnaire with sincerity and spontaneity.

Survey Findings

The respondents have been asked to input their weight and height in order for BMI to be calculated. Based on the responses, the half sample indicates a normal BMI (Figure 2). 47.52% indicates a BMI bigger than 25, which means overweight/obesity.

Based on part D of the questionnaire, the scores have been classified indicating the degree of the emotional status balance that the respondents might achieve. In that respect, four classes generated: High emotional status balance: Respondents who consume food and have habits/lifestyle that keep the body in balance; mid high emotional status balance: Respondents who consume some food and have habits/lifestyle that boost the secretion of some hormones with impact on the emotions; mid low emotional status: Respondents who consume some food and have habits/lifestyle that cannot help to keep a normal hormones balance in their body; low emotional status: Respondents who
consume food and have habits/lifestyle that cannot help to keep a normal hormones balance in their body.

Figure 3 presents the distribution of the sample to these categories. According to Figure 3, most of the sample (60.74%) indicates a mid-high emotional balance.

The sample outcome on the question whether the lifestyle change affects the respondents’ decisions regarding the way they process the data prior to taking a decision is quoted in Table 2.

Most of the sample participants agree that the changes of their lifestyle have influenced the way of how they process the data and information they receive before they have a final decision. In more detail, 42.56% agree that their decisions related to the work are influenced by changes in lifestyle, 46.70% agree the same when they must take decision for their personal life, and 38.84% agree that their decisions—regarding the asset management—are affected by any change related to their lifestyle.

Next the participants’ view, Table 3, the speed of DMP and whether it is affected by the lifestyle changes or not is presented. According to Table 3, 47.52% agrees that the speed of DMP—in work—is influenced; 42.97% agrees that these changes can affect the speed of their DMP when they decide for personal issues, while 36.78% agrees the same for the decisions related to the asset management.

The risk of the decisions seems to be affected by the changes in lifestyle. According to Table 4, 42.54% of the respondents agree that the risk-taking of DMP is influenced when they are going to take decisions related to their work; 38.02% agree the same for their personal life decisions; when they must decide for their assets, 36.57% agree that the lifestyle changes can affect the degree of the risk-taking.

Main Hypothesis Testing

The main hypothesis of this research was to find out if nutrition, habits (NHL), and BMI are factors that can influence DMP. In this regard, we proceeded to statistically analyze our data to check the correlation between DMP, NHL, and BMI. This relationship was verified through two-way ANOVA (Table 3). The results statistically confirm the a-priori hypothesis of a correlation between DMP with BMI and NHL’s interaction with BMI (F=2.35, p=0.05<0.05).

In addition, the results of ANOVA test show a correlation between the decision-making and BMI, which is statistically significant (F=2.83, p=0.04<0.05). This was expected because BMI is a general picture of someone’s lifestyle following.

DISCUSSION & CONCLUSIONS

A healthy lifestyle that includes healthy eating habits and physical exercise are a field of intensive research these days. The functioning of the human body depends significantly on the quality of the food we consume. Therefore, it is necessary to intervene by agencies to educate citizens on how to choose the food they will consume [93]. Adopting a healthy lifestyle in terms of nutrition, exercise and more general habits in a person’s daily life can help the proper functioning of the brain and therefore a better emotional balance since this can improve DMP. The self-care practices seem to improve not only the human lives within workplace [94] but also the decision they made.

The set hypothesis of the present paper was examined using fieldwork information of our developed questionnaire. The statistical analysis of the coded information shows that statistically significant correlation between DMP and nutrition, habits in interaction with BMI exists, confirmed our hypothesis. In addition, the statistical analysis showed the sttical significance between DMP and BMI. Further statistical analysis of the survey findings shows that most respondents agree that changes in nutrition, habits and lifestyle affect DMP. Of course, there is a percentage of 29.00% to 35.00% who...
Table 5. Two-way ANOVA for DMP, NHL, & BMI

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected model</td>
<td>1,511.241*</td>
<td>13</td>
<td>116.249</td>
<td>1.747</td>
<td>0.050</td>
</tr>
<tr>
<td>Intercept</td>
<td>22,465.766</td>
<td>1</td>
<td>22,465.766</td>
<td>357.7</td>
<td>0.000</td>
</tr>
<tr>
<td>NHL 4Categories</td>
<td>461.285</td>
<td>3</td>
<td>153.762</td>
<td>2.311</td>
<td>0.080</td>
</tr>
<tr>
<td>BMI  Categories</td>
<td>564.996</td>
<td>3</td>
<td>188.332</td>
<td>2.831</td>
<td>0.040</td>
</tr>
<tr>
<td>NHL 4 Categories*BMI  Categories</td>
<td>1,094.252</td>
<td>7</td>
<td>156.322</td>
<td>2.550</td>
<td>0.030</td>
</tr>
<tr>
<td>Error</td>
<td>15,169.259</td>
<td>228</td>
<td>66.532</td>
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<tr>
<td>Total</td>
<td>215,761.000</td>
<td>242</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Corrected total</td>
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<td>241</td>
<td></td>
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</tbody>
</table>

Note. *R-squared=0.91 (adjusted R-squared=.59); DMP=f (NHL, BMI); & Dependent variable: DM_Totals

believe that lifestyle changes do not positively or negatively affect the way they make decisions.

It is important to note that less than half of the sample has a normal BMI. In addition, the vast majority of the sample have adopted a lifestyle as well as nutrition and habits that can maintain their emotional balance at an average level. Only 12.81% are those who have adopted habits that allow them to maintain a high mental balance.

The results highlight how important is self-care both in terms of nutrition and exercise, as well as in the general habits one adopts in one’s daily life. The findings show that implementing healthy self-care practices can not only benefit health per se but also influence DMP.

Based on these data, lifestyle changes can affect DMP either it concerns employment or asset management issues or even issues related to personal life and relationships with others. Summarizing, the healthy lifestyle might affect the emotional status of managers and employees. DMP has statistically significant correlation with nutrition, habits, and BMI. The three DMP dimensions (data processing, speed, and risk-taking) are influenced by lifestyle changes.

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Data sharing statement: Data supporting the findings and conclusions are available upon request from the author.

REFERENCES


30. Anninou V. How to activate the 4 main neurotransmitters of your brain, which affect your happiness? Eductor.gr; 2021.


60. Dietrich C. Decision making: Factors that influence decision making, heuristics used, and decision outcomes. Inq J. 2010;2(2).


