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The Importance of Nutrition in Structuring the Locus of Control

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Abstract: *Professional literature shows that certain modifiable behaviors in lifestyle, such as diet, physical activity, leisure time, and rest, are risk factors for decreased quality of life. In other words, neglecting these vital aspects of life leads, in chain, to the impairment of physical and mental health. Self-care behaviors, management of physical and mental resources are affected by personal psychological characteristics, with locus of control playing a central role. Research has been marked by the idea that dietary behavior (nutrition), alongside its specific existential roles (roles of growth and development, maturation, and survival), is significantly linked to other important dimensions of physical and mental life (locus of control, self-attitude, professional activity, physical and emotional regulation activities - such as engaging in physical activities and rest). To collect data in support of the formulated hypothesis, we administered two questionnaires (lifestyle questionnaire and locus of control questionnaire) to a sample of 219 teachers from pre-university education.*

Keywords: *nutrition, movement, rest, work, self-attitude, locus of control.*

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Introduction

Quality of life, as a multidimensional concept, includes a series of domains such as living conditions, health, housing, employment, family life, balance between private and professional life, and subjective well-being. Also, nutrition has an important role in maintaining an individual's well-being. Nutritional status is a measure of a person's health as affected primarily by food intake and nutrient utilization. According to the World Health Organization (WHO), health is not merely the absence of disease, but a state of complete mental and physical well-being in relation to an individual's productivity and performance (https://www.fao.org/3/y5343e/y5343e04.htm).

The perception of control over one's own life has proven to be a significant concept in studies conducted in the field of psychology over the last five decades. Many studies in the field of behavioral psychology reveal that an individual's perception of locus of control significantly impacts the performance achieved in various domains of personal, social, and professional life (Lefcourt, 1991). There are six central theories that attempt to capture the causal relationship between personal, social-professional performances, and one's perspective on their own life. These include Bandura's self-efficacy theory (1977), Weiner's theory of causal attributions (1974, cited in Peterson & Strunkard, 1992), Seligman's learned helplessness theory (1975), Langer's theory of perception of control (1983), De Charms' personal causality theory (1968, cited in Peterson & Strunkard, 1992), and the reference theory for the current research - Rotter's theory of internal or external locus of control (1966). From Rotter's perspective, locus of control is interpreted as an important personality variable, characterized by stability and general influence over specific activities.

According to Rotter (1966), locus of control results from the interaction between central personality variables, mediated and shaped by the social environment. Thus, life's needs and goals are socially learned and result in specific behaviors. Changes in the environment, as well as changes made at the cognitive level, can lead to significant changes in life plans. From the locus of control theory, it follows that individuals can change their daily performances, daily occupations through perceptual-cognitive changes, and consequently, changing their perception of the social environment. The locus of control theory is also used in the perspective of behavioral predictions. From this perspective, it is accepted that human behavior changes over time due to new experiences that lead to new expectations or modifications of values that individuals perceive as valuable. The locus of

control theory has generated a multitude of research aimed at inventorying the relationships between internal consistency of locus of control and various aspects of life.

Some studies have attempted to capture the relationship between locus of control and perceived satisfaction at the professional (work) level. According to Locke (1976), job satisfaction is conceptualized as an employee's affective response to different facets of work performed within an organization. As a result, employees experience job satisfaction if they perceive that their skills, competencies, and personal values are positively rewarded and appreciated by the employer. Correlated with the locus of control theory, internals are more inclined than externals to perceive a higher level of satisfaction in their work. Spector (1982) suggests that internals are more likely to leave an unsatisfactory job compared to externals.

There is ample empirical evidence highlighting the importance of locus of control in perceiving personal well-being satisfaction. For example, Coleman & DeLeire (2003), and Flouri (2006) show that individuals with an internal orientation are much more likely to graduate from high school, to manage their financial resources more effectively, and to pay attention to daily diet and body weight. Additionally, individuals with an internal locus of control are much more likely to eat healthier, engage in more physical activity, smoke less, achieve better results in medical health evaluations, have a high and stable self-perception, take financial risks, and exert more effort in job searching (Cobb-Clark et al., 2014; Kesavayuth et al., 2018).

Findings by Blinder (1973) and Oaxaca (1973) (cited in Awaworyi-Churchill et al., 2020) suggest that gender differences in locus of control contribute to explaining the gender gap in mental health. Women are more vulnerable in this regard (they are more likely to be externals, which makes them vulnerable in maintaining a healthy lifestyle, being attentive to diet, exercise, and stress management - the main cause of mental health deterioration). Therefore, the development of education programs for internalism, starting from the early years of schooling, should be designed differentially, depending on gender, with the idea of structuring and developing internal locus of control in girls from the early stages of development. The finding that having an internal locus of control is associated with higher levels of lifestyle well-being has also been suggested by other studies. For example, individuals with an internal locus of control are better equipped with psychological resources against life's negative events (Buddelmeyer & Powdthavee, 2016) and have a lower risk of experiencing psychological distress and depression (Arraras et al., 2002).

The relationship between locus of control variables (internal versus external) and lifestyle quality and well-being can be explained through various mechanisms. One crucial aspect is the variable of life choices. There is a consistent body of literature showing that locus of control plays an important role in both physical and mental health. For instance, compared to those with an external locus of control, individuals with an internal locus of control tend to be much more physically active. At the same time, physical activity is an essential factor contributing to a person's perceived well-being. Scientific evidence suggests that physical activity and exercise have various anti-anxiety and antidepressant effects that can improve self-perceived well-being. Consequently, physical activity and time spent in outdoor activities are important indicators in analyzing lifestyle choices, correlated with the locus of control dimension (Rasciute et al., 2010; Kesavayuth et al., 2020).

Our research precisely addresses this aspect, namely, providing a perspective on nutrition, movement, and attitude toward work in correlation with the locus of control variable.

There are studies that have examined lifestyle related to nutrition, physical activity, risk factors, and locus of control. It has been found that female subjects have deficiencies in physical activity compared to male subjects. Additionally, there is evidence of a tendency for girls to engage in compulsive eating following negative psychological experiences, compared to boys who tend to increase the time allocated to physical exercise under similar circumstances (Abolfotouh et al., 2007). Other studies have shown a strong association between family history of smoking, sedentary lifestyle, and overweight/obesity (Johnson et al., 2002; Bakr et al., 2003).

Materials and methods of research

This research has been marked by the idea that dietary behavior (nutrition), alongside its specific existential roles (roles of growth and development, maturation, and survival), is significantly intertwined with other important dimensions of physical and mental life (locus of control, self-attitude, professional activity, physical and emotional regulation activities - such as engaging in physical activities and rest).

To test this hypothesis, we applied two working tools, namely:

a) *Lifestyle Evaluation Questionnaire*. This questionnaire comprises a total of 20 items, grouped into five factors: Factor A - nutritional dietary behavior (items 1-5); Factor S - sports (items 6-8); Factor O - rest (items 9-10); Factor M - work (items 11-14); Factor SA - self-attitude (items 15-20). The inclusion of these factors in the lifestyle

evaluation questionnaire was based on the following premises. Dietary behavior is fundamental for each of us. The existence of a balanced dietary behavior, correlated with the organism's biological needs, depends on a combination of organic and psychological factors. Human dietary behavior can only be fully understood within a social context, identifying both significant experiences from personal history and cultural-historical factors (Eertmans et al., 2001). Furthermore, dietary behavior is significantly related to physical activity and the maintenance and preservation of physical and mental health. Sport not only improves physical health but also plays a significant role in improving mental health, as there are many psychological benefits of sports. Studies show that individuals who actively engage in sports have a positive attitude towards life and pay increased attention to nutrition compared to those who do not engage in regular sports activities (Taliaferro et al., 2011). As for rest, it is significantly related to diet and physical activity. Sufficient sleep is associated with maintaining a healthy body weight, positive physical and mental tone, hence better quality of life. Regarding the relationship between diet quality and perceived satisfaction in work performance, several studies demonstrate the existence of significant relationships between healthy behaviors (related to diet, physical activity, relaxation) and perceptions of stress and job satisfaction ($p < 0.05$). Also, the results suggest that practicing positive behaviors related to physical and mental health has a positive influence on workplace performance, as well as high and positive self-attitude (Factor SA from the applied questionnaire) (Dengler et al., 1994; Weaver et al., 1993). Responses were collected using a five-point Likert scale (from strongly disagree to strongly agree). Internal consistency calculated by Cronbach's Alpha index = 0.76.

b) *Locus of Control Questionnaire.* Locus of control, a characteristic of an individual's cognitive style that can be *distributed* along a continuum between internalism and externalism, was measured using the *Internal-External Control Scale for Children and Youth/IE-CT*, adapted in Romania by Chelcea (1994), based on the *Nowicki-Strickland Locus of Control Scale/N-SLCS* (Nowicki & Strickland, 1973[1]). People make anticipations about the factors capable of

[1] The scale proposed by Nowicki and Strickland (1973) can be found under the acronym N-SLCS in K. Corcoran, & F. Fischer (Eds.) (1987). *Measures for Clinical Practice. A Sourcebook*. New York: The Free Press (pp. 402-404) and in R. Aero, & E. Weiner. (Eds.) (1981). *The Mind Test.* New York: William Morrow and Company, Inc., pp. 20-21. Furthermore, the

determining what will happen to them or to others. Rotter (1966) systematized a binary classification of these anticipations. Thus, some individuals place factors that could influence the course of events they experience or the situations they face at the level of their own person. Others, on the contrary, place these causal factors in the situation, chance, or power of others - especially in situations where someone may have difficulty exerting effective control over difficult situations. Rotter named the first type of attributions *beliefs in internal control*, and the second type of attributions *beliefs in external control*. For example, the belief that it is enough to work hard for things to go well is an internal belief. On the other hand, the belief that you cannot succeed unless luck helps you is an external belief. People's beliefs about the factors that can influence the control of a problematic situation or the manifestation of a certain behavior are nothing more than *attributions*.

As for the respondent sample, it consisted of 219 individuals, teachers (primary school female teachers) from pre-university education in Bacău, Focşani and Moineşti town. The questionnaires were administered and collected between November and December 2023. The collected data were statistically processed using the SPSS 20 software, conducting simple frequency analyses, means, standard deviations, as well as correlations and cross-analyses. The research received approval from the University Ethics Committee of "Vasile Alecsandri" University of Bacău, Romania.

Results and discussions

Quantitative Data Analysis. A first aspect concerns presenting some significant data related to the respondents in the current research. The intention was to identify to what extent primary school teachers exhibit a healthy lifestyle, knowing clearly that they have a significant impact on shaping a healthy personality from early childhood ages. From the perspective of the variable *type of studies*, most respondents are graduates of bachelor's degree programs (63%), followed by those with master's degree studies (31%).

translated and adapted version for the Romanian language of the scale, along with the correction grid, can be found in S. Chelcea (2004). *Metodologia cercetării sociologice. Metode cantitative şi calitative*. Bucharest: Ed. Economică, pp. 368-370.

Table 1. Distribution of respondents by type of studies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Pre-university education – high school	13	5.9	5.9	5.9
	Bachelor's degree	138	63.0	63.0	68.9
	Master's degree	68	31.1	31.1	100.0
	Total	219	100.0	100.0	

Correlating with the variable of *age*, most respondents fall within the age range of 41-50 years (47.5%), followed by the age range of 51-60 years (22.4%).

Table 2. Distribution of the respondents by age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-25	18	8.2	8.2	8.2
	26-30	12	5.5	5.5	13.7
	31-40	28	12.8	12.8	26.5
	41-50	104	47.5	47.5	74.0
	51-60	49	22.4	22.4	96.3
	61+	8	3.7	3.7	100.0
	Total	219	100.0	100.0	

Regarding the variable of *work experience*, a significant percentage of 63% have more than 20 years of experience in the field of work.

Table 3. The frequency distribution for work experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< 1 y.	4	1.8	1.8	1.8
	1-5 y.	13	5.9	5.9	7.8
	6-10 y.	21	9.6	9.6	17.4
	11-20 y.	44	20.1	20.1	37.4
	21-30 y.	137	62.6	62.6	100.0
	Total	219	100.0	100.0	

From the perspective of the variable *residence*, over 80% live in urban areas, while the rest live in rural areas. And from the perspective of the variable *gender*, out of the total of 219 respondents, only 3 were men (1.4%).

Din From the perspective of the *locus of control* variable (internalists-externalists), after calculating the raw scores, it emerged that 95% of

respondents fell into the internalist profile, compared to only 5% for the externalist profile. This aspect can be analyzed especially in relation to three variables, namely: gender, age, and work experience. All these related to the professional role of a teacher. In the general profile of the teacher, we can identify traits such as: empathy, mental flexibility, vivid intelligence, emotional stability, abstraction ability, self-control, sociability, seriousness, sensitivity, lucidity, and rich personal resources. Additionally, self-determination and self-discipline are two important variables that can explain the high score obtained in the locus of control variable. However, not every time does internalism significantly correlate with all fulfilled social roles. From the perspective of the professional role played and correlated with the factor of work experience, the manifested internalism is evident. On the other hand, the small percentage regarding externalism cannot lead to the idea that those teachers do not possess all the qualities listed above. It is about how they relate to themselves in situations of success, control, and failure, the perceived lack of control.

Table 4. Internalists

N	Valid	208
	Missing	0
Mean		10,65
Median		10,00
Std. Deviation		3,475
Minimum		1
Maximum		19

Table 4. Externalists

N	Valid	11
	Missing	0
Mean		21,27
Median		20,00
Std. Deviation		1,794
Minimum		20
Maximum		25

a) *The correlation between the internalist score and the lifestyle score*: A primary aspect investigated was to determine if there are statistically significant differences between the two groups (internalists/externalists) regarding the scores obtained on the *Lifestyle* questionnaire. In this regard, an independent samples t-test was conducted, with the variances of the two groups being equal, according to the Levene's test ($F = 0.399$, $p>0.05$). Although the

result of the t-test does not indicate statistically significant differences between the two groups: t_{217}=1.471, p=0.143 (p>0.05 it cannot be considered relevant due to the discrepancy in the sizes of the two groups.

b) *The correlation between the externalist score and the lifestyle score*: The aim was to determine if there is a correlation between the scores obtained on the *Lifestyle* questionnaire and those obtained on the IE questionnaire. Applying Pearson's bivariate correlation test, the results indicate an inverse correlation between the two scores (F = -0.230, p<0.05).

Although we observe a weak correlation (the F score is <0.3), we can still affirm that *an increase in the degree of internalism (decrease in the IE score) occurs simultaneously with an increase in the "lifestyle" score.* Additionally, applying Pearson's bivariate correlation test, an inverse correlation is observed between the IE score and Factor A (F = -0.190, p<0.05), Factor S (F = -0.207, p<0.05), and Factor O (F=-0.172, p<0.05); no statistically significant correlation is observed with *Factor M* (F = 0.002, p>0.05) and *Factor AT* (F=-0.078, p>0.05).

The qualitative analysis of the data supports the significant positive relationship between how individuals perceive their own dietary, exercise, and rest behavior correlated with the dimension of internalism. For each of the three factors (Factor A, Factor S, and Factor O) that significantly correlate positively with the dimension of internalism, the qualitative analysis of the data allows us to make the following statements. We will present specific data obtained from the sample with internal determination, due to the high percentage of over 95%. Those with external determination are in a significantly small number, and as a result, the correlations are not specific.

At the level of *Factor A* (dietary behavior-nutrition), the greatest attention is given to the need for three main meals, correlated with paying attention to having a caloric intake adapted to the daily effort. An important aspect is subjects express satisfaction with their physical appearance related to body weight. However, this aspect is problematic when we correlate this result with the results obtained for *Factor AT* (attitude towards oneself). We will provide further clarification on this correlation when analyzing the mentioned factor. The least valued aspect within Factor A is related to the attention paid to purchased food products. This aspect can be explained from several perspectives: the perspective of consumer psychology in which there is a great attractiveness to buy products promoted through advertising campaigns, through the offers available on the shelf, through the tendency to "get used" to not reading the labels of purchased food products; the economic perspective in which there is a tendency to buy more food products with less money. Considering this last aspect, correlated with the

profession of the respondents (teachers), we consider that the existence of specialized nutritional education for them can positively impact the dietary behavior of young school-age children. It is known that, especially during the Covid-19 pandemic and after this period, significant mutations occurred in the dietary behavior of families, where the presence of semi-prepared products, fast-food products has become a permanent reality with a negative impact on the physical body of both adults and children. And this physical bodily aspect (which can correlate with overweight and obesity) affects the cognitive-emotional and social behaviors of everyone.

Regarding *Factor S* (sports factor), the results suggest that across the entire sample of subjects, there is a positive inclination to spend at least 30 minutes a day walking outdoors, to engage in a sport at least once a week, such as running or going to the gym. However, we consider that the lower score obtained for the item "physical activities relax me" communicates the lack of time that the subjects in the research sample have available, considering the multitude of activities correlated with the teaching profession. Plus, everyone, in their daily life, fulfills a myriad of other social roles.

At the level of *Factor O* (rest factor), we obtained significantly positive scores, both in terms of self-perceived sleep quality and in terms of having a healthy bedtime routine. We did not consider investigating the aspect related to the existence of natural sleep or the use of certain medications to induce sleep. When we designed the lifestyle investigation questionnaire, we toyed with the idea that at this factor level, we would obtain the lowest scores because fatigue, emotional overload of teachers, and other specific personal factors (related to age, roles fulfilled) usually correlate significantly with sleep disturbances.

The next two factors in the lifestyle assessment questionnaire (Factor M - work and Factor AT - self-attitude) stood out due to the absence of a positive correlation between specific scores and the presence of the dimension of internalism. At the level of Factor M, the lowest scores were obtained for the items "when I make an action plan, I am sure I will carry it out" and "when I decide to do something, I get to work immediately." Even though internalism exists in the reference sample and initially attracts involvement in proposed tasks, postponement or abandonment of previously established tasks can be explained by appealing to other specifically human psychological resources. Role overload, behavioral formalism, erosion of mental energy, and the sense of futility of proposed activities (especially in reference to the teaching profession) can account for these results. Additionally, in Factor AT - self-attitude, the obtained results can be justified by the fact that the questions in the locus of control questionnaire primarily address the manifest, visible,

and controllable behavioral aspect. However, self-attitude, in its depth, is related to certain self-conception schemes structured since childhood. It is enough for a quantified behavior to appear as unsatisfactory for negative thoughts about oneself to insert into consciousness, correlating with the experience of feelings of worthlessness and lack of personal value. Therefore, besides the professional development and training of teachers, it is necessary to systematically work on self-clarification so that the intrinsic value of each individual takes control in everyday life.

Din From the perspective of *internalism*, the obtained statistical data (according to Table 4) allow us to make several comments. Firstly, there is a discussion about the *need for self-connection* versus the *need for social validation*. Among internalists, the need for self-connection supersedes the latter variable. Today, more than ever, there is an obsession with validation, with being seen, appreciated, and admired. From a mental health perspective, this positioning is dangerous. Seeking, as an end, to be at the center of others means losing the ability to be responsible and aware of one's own thoughts, emotions, and feelings. Schimel et al. (2001) analyzed three studies that focused on the relationship between social validation and certain important variables of the self. Thus, the need for social validation from those around us significantly affects the level of self-esteem. But if social recognition correlates with personal achievements (professional, community-social), then there is also a high level of self-esteem. Secondly, internalists are aware that *they cannot control how others think, feel, and behave*. Gabor Maté (2021) argues that one of the three significant causes of psychosomatic or mental health conditions correlates with the need to control others. And yet we cannot control anything outside ourselves. The only controllable reality (with conscious and responsible involvement) is the self. However, most of the time, we reject the idea of connecting with ourselves because facing oneself is one of the toughest experiences possible.

Conclusions

The way we address fundamental needs related to nutrition, physical activity, and rest significantly influences both the quality of social and professional roles fulfilled, as well as the quality of self-conception and self-perception. The existence of healthy eating behaviors correlates with the presence of physical and mental energy required in daily activities. Often, what is fundamental and essential is neglected, not out of ignorance or ill will, but simply because we believe that these can be postponed or arbitrarily satisfied. Considering the group of subjects on which we conducted this research (primary school teachers), we believe there are positive premises for

developing practical skills and habits in young children to provide them with the necessary resources to develop a healthy personality both physically and mentally. Surely, if we had extended the research to a larger group of pre-university teachers, at the secondary education level, we would have obtained more consistent results.

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At the end, we mention that all authors had an equal contribution to the research.

References

Abolfotouh, M. A., Bassiouni, F. A., Mounir, G. M., & Fayyad, R.Ch. (2007). Health-related lifestyles and risk behaviors among students living in Alexandria University hostels. *Eastern Mediterranean Health Journal, 13*(2), 376-391

Aero, R., Weiner, E. (Eds.) (1981). *The mind test*. William Morrow and Company, Inc.

Arraras, J. I., Wright, S. J., Jusue, G., Tejedor, M., & Calvo, J. I. (2002). Coping style, locus of control, psychological distress and pain-related behaviours in cancer and other diseases. *Psychology, Health & Medicine*, *7*(2), 181–187. https://doi.org/10.1080/13548500120116139

Awaworyi-Churchill, S., Munyanyi, M. E., Prakash, K, Smyth, R. (2020). Locus of control and the gender gap in mental health. *Journal of Economic Behavior & Organization*, *178*, 740-758, https://doi.org/10.1016/j.jebo.2020.08.013

Bakr, E. M., Ismail, N. A., & Mahaba, H. M. (2002). Impact of life style on the nutritional status of medical students at Ain Shams University. *The Journal of the Egyptian Public Health Association*, *77*(1-2), 29–49.

Bandura, A. (1977). *Self-efficacy: the exercise of control*. New York: Freeman

Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *Journal of Human Resources. 8* (4), 436–455. https://doi.org/10.2307/144855

Buddelmeyer, H., & Powdthavee, N. (2016). Can having internal locus of control insure against negative shocks? Psychological evidence from panel data. *Journal of economic behavior & organization*, *122*, 88–109. https://doi.org/10.1016/j.jebo.2015.11.014

Chelcea, S. (2004). *Metodologia cercetării sociologice. Metode cantitative şi calitative*. Editura Economică

Cobb-Clark, D. A., Kassenboehmer, S. C., Schurer, S. (2014). Healthy habits: The connection between diet, exercise, and locus of control. *Journal of Economic Behavior & Organization. 98*, 1–28. https://doi.org/10.1016/j.jebo.2013.10.011

Coleman, M., DeLeire, T., (2003). An economic model of locus of control and the human capital investment decision. *Journal of Human Resources*,*38*(3),701–21

Corcoran, K., Fischer, F. (Eds.) (1987). *Measures for clinical practice. A sourcebook*. The Free Press

De Charms, R. (1968). *Personal Causation*. New York: Academic Press

Dengler, R., Rushton, L., Roberts, H. R., Magowan, R. (1994). Results from a lifestyle survey: Trent health. *Health Education Research*, *9* (3), 285–296.

Eertmans, A., Baeyens, F., Van den Bergh, O. (2001). Food likes and their relative importance in human eating behavior: review and preliminary suggestions for health promotion. *Health Education Research, 16* (4), 443–456, https://doi.org/10.1093/her/16.4.443

Flouri, E. (2006). Parental interest in children's education, children's self-esteem and locus of control, and later educational attainment: Twenty-six year follow-up of the 1970 British Birth Cohort. *British Journal of Educational Psychology. 76*(1): 41–55

Johnson, C. C., Li, D., Perry, C. L., Elder, J. P., Feldman, H. A., Kelder, S. H., & Stone, E. J. (2002). Fifth through eighth grade longitudinal predictors of tobacco use among a racially diverse cohort: CATCH. *The Journal of school health*, *72*(2), 58–64. https://doi.org/10.1111/j.1746-1561.2002.tb06515.x

Kesavayuth, D., Ko, K. M, Zikos ,V. (2018). Locus of control and financial risk attitudes. *Economic Modelling, 72,* 122-131. https://doi.org/10.1016/j.econmod.2018.01.010

Kesavayuth, D., Poyago-Theotoky, J., Tran, D. B., Zikos, V. (2020). Locus of control, health and healthcare utilization. *Economic Modelling*, 86(C), 227-238.

Langer, E. J. (1983). *The psychology of control*. Sage Publications

Lefcourt, H. M. (1991). Locus of control. In Robinson, P. Shaver & L. Wrightman (Eds), *Measures of Personality and social Psychological Attitudes*, Vol 1. San Diego: Academic Press

Locke, E. A. (1976). The Nature and Causes of Job Satisfaction. In M. D., Dunnette (ed.) *Handbook of Industrial and Organizational Psychology*, (Vol. 1, 1297-1343)

Maté, G. (2021). *Când corpul spune nu. Costul ascuns al stresului*. Editura Curtea Veche

Nowicki, S., Strickland, B. R. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology. 40*, 148-154

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International Economic Review. 14*(3): 693–709. https://doi.org/10.2307/2525981

Peterson, C., & Stunkard, A. J. (1992). Cognates of personal control: Locus of control, self-efficacy, and explanatory style. *Applied & Preventive Psychology, 1*(2), 111–117. https://doi.org/10.1016/S0962-1849(05)80151-9

Rasciute, S., Downward, P. (2010). Health or Happiness? What Is the Impact of Physical Activity on the Individual? *Kyklos*; *63*(2), 256–70. https://doi.org/10.1111/j.1467-6435.2010.00472.x

Rotter, J. B. (1966). Generalized Expectancies for Internal versus External control of locus of reinforcement. *Psychology Monographs*, *80* , 1-28. https://www.neshaminy.org/site/handlers/filedownload.ashx?moduleinstanceid=34376&dataid=51132&FileName=Article%207-Are%20You%20the%20Master%20of%20Your%20Fate.pdf

Schimel, J., Arndt, J., Pyszczynski, T., & Greenberg, J. (2001). Being accepted for who we are: Evidence that social validation of the intrinsic self reduces general defensiveness. *Journal of Personality and Social Psychology*, *80*(1), 35–52. https://doi.org/10.1037/0022-3514.80.1.35

Seligman, M. E. P. (1975). *Helplessness: On development, depression and death*. Freeman, San Francisco, CA

Spector, P.E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*. *91*(3), 482-497

Taliaferro, L. A., Eisenberg, M. E., Johnson, K. E., Nelson, T. F., & Neumark-Sztainer, D. (2011). Sport participation during adolescence and suicide ideation and attempts. *International journal of adolescent medicine and health*, *23*(1), 3–10. https://doi.org/10.1515/ijamh.2011.002

Weaver, C. M., Woteki, M. K., Bootlace, W. R. (1993). Research Needs in Diet, Nutrition, and Health, *Food Technology*, *47*(3), 14–25

Weiner, B. (1974). *Achievement motivation and attribution theory*. General Learning Press