

The Relationship between Cognitive Profile, Locus of Control, Uncertainty Intolerance and “Fake News” in a Group of Students

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How to cite this paper: Prisăcaru, A. (2025). The Relationship between Cognitive Profile, Locus of Control, Uncertainty Intolerance and “Fake News” in a Group of Students. *Open Journal of Social Sciences*, 13, 538-564.

<https://doi.org/10.4236/jss.2025.134032>

Received: March 4, 2025

Accepted: April 27, 2025

Published: April 30, 2025

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Abstract

The present study highlights and provides conclusive evidence on the role of cognitive profile, locus of control and intolerance to uncertainty on the emotional states induced by media information, especially the negative emotional states induced by “fake news”. It has been shown that each psychological characteristic studied has a particular role in the reception, processing, interpretation and elaboration of the response to informational stimuli, but the cognitive profile is the central one. As an example, the onset of negative, dysfunctional emotional states induced by “fake news”, with reference to the dependent variable fear/anxiety, can be explained in 80.7% of variance by the irrational cognitive profile, externalism and intolerance to uncertainty, discussed in the literature as psychological vulnerabilities. The study also highlights some differences in the dysfunctional negative emotional states induced by the “fake news” variable according to the age of the individuals, with higher values in the over 35 age group compared to the under 35 age group. For example, the biggest difference is for the anxiety/anxiety variable, where the difference between means is -30.717 , followed by the anger variable, where the difference between means is -28.586 . The scores reported describe older people as showing some resistance to new situations, to change, remaining with old habits of media consumption oriented towards TV shows and less towards online platforms and perhaps a poorer adaptation to the presence of manipulative fake news.

Keywords

“Fake News”, Dysfunctional Negative Emotions, Cognitive Profile, Locus of Control, Intolerance of Uncertainty, Cognitive Bias, Manipulation

1. General Theoretical Framework

The concept of “fake news”, according to wikipedia, originates from the English concept of “fake news” and is a type of yellow journalism or propaganda, which is the spreading of false information disseminated through traditional media or traditional social media such as TV or newspapers (Himma-Kadakas, 2017).

The same source assesses that fake news is written and published with the intention to mislead, in order to damage the reputation of an agency, entity or person, as well as for financial or political gain, often using sensational, dishonest or simply fabricated headlines to increase readership, for online dissemination and to gain revenue by distribution on various platforms. Fake news intentionally misinforms and differs from satire or parody, which is intended to entertain rather than mislead.

There are also authors who argue that the notions of “fake news” and “fake news” are often used synonymously in everyday language, but the essential difference lies in the intention behind them, namely: fake news narratives are circulated by a state or organization with the aim of creating confusion and generating social tensions, while fake news does not originate from a state ideology or strategy and in some cases has no intention of manipulation (Tuşa, 2022).

In terms of the concept of psychological manipulation, it refers to a type of social influence that aims to change the perception or behavior of others using hidden, deceptive or even abusive tactics. Because the manipulator pursues only his or her own interests, often to the detriment of others, these methods can be considered exploitative, immoral and deceptive (Braiker, 2004). The author mentions that manipulators exploit some of the psychological vulnerabilities (weaknesses) that victims may have, such as, the desire to please people; the addiction to gaining the approval and acceptance of others; emotophobia (fear of negative emotions); lack of decisiveness and the ability to say “no”; blurred sense of identity (fuzzy personal boundaries); low self-sufficiency; rigid cognitions, external locus of control, etc.

On the other hand, Simon (1996) assesses that the success of psychological manipulation is based on the following components: the manipulator hides his aggressive intentions and behaviors; the manipulator knows the victim’s psychological vulnerabilities and determines what kind of tactics he can use; the manipulator is cruel enough not to back down from harming the victim if necessary. Consequently, manipulation tends to be camouflaged (relationally aggressive or passively aggressive).

In 2017, Claire Wardle co-founder, co-director of the Information Futures Lab and professor of practice at the Brown School of Public Health in Rhode Island, northeastern United States, considered a leader in the field of misinformation, verification and user-generated content, identified seven types of fake news with the following characteristics (Wardle, 2017; Wardle & Derakhshan, 2017):

- satire or parody that says it has no intention to cause harm but has the potential to mislead;

- false links that are used when the headlines, visual effects or myths about some pictures or graphics do not support the content;
- misleading content understood as a form of deceptive use of information to harm one or more persons;
- false context understood as a form of authentic content combined with false contextual information;
- impostor' content considering that authentic sources are replaced by false sources;
- manipulative content consisting of authentic information or images that are manipulated to mislead, to falsify;
- fabricated content referring to new content that is 100% false, designed to deceive and harm.

Therefore, we can opt for the approach that most definitions and descriptions of the two concepts, “fake news” and “fake news” are used as having similar meanings, and from one author to another some nuances appear that revolve around the idea of spreading false information, especially online, with the intention to mislead, with diversified object, subject, targets and themes.

The relevance and extent of fake news is also thought to have increased in the post-truth political system. For the media, the ability to attract readers to their websites is necessary to generate online advertising revenue. If the publication of false content attracts users, this benefits the advertisers or editorial offices of the publications concerned.

Political actors have also been involved in generating and disseminating fake news, especially during elections to attract as many people and voters as possible. For example, an analysis by media company BuzzFeed found that the top 20 “fake news” stories about the 2016 US presidential election received more attention on Facebook than the top 20 election stories circulated in traditional media channels. At the same time, anonymous websites hosting “fake news” written under anonymity have been criticized because they make it difficult to track down the authors of slanderous fake news (Chang et al., 2016).

Another perspective on fake news is provided by D. Agrigoroaiei (Agrigoroaiei, 2018), who believes that fake news is the spread of news online that is either invented or distorts reality, and often does not represent any kind of news but is presented as if it were newsworthy.

The concept of “fake news”, the author points out, has gained more and more followers in recent years, evolving from its satirical origin in literature to a broad phenomenon of criticism. Even if they go by several names: rumor, disinformation or simple lies, these fake news/claims are usually published on websites or social media for profit or social influence. The cornerstone of a “fake news” publication is falsehood, and the main claims being communicated in “fake news” articles are fabricated and untrue, in other words, “fake news” publications are intentionally or knowingly false.

Most “fake news” articles are written in reference to some public person or dif-

ferent current events, and by distributing them on social media they fulfill the purpose of going viral, attracting attention, being accessed by as many people as possible and influencing them. By linking social media posts to various websites, which contain posters with different ads or advertising content, they can generate large amounts of money as a result of web traffic. In fact, a successful fake news post can be distributed millions of times and generate tens of thousands of dollars in advertising revenue.

The author also notes that it is also important to take into account the fact that there are politicians and public figures who attribute the term “fake news” to articles that have referred to them as “fake news”, which they have found defamatory or because they did not like the content, tokens to be used later to claim that they are a departure from the traditional way of publishing or to shift interest in another direction. However, traditional news publications do not fall into this category of “fake news” because they are by their nature not intentionally or knowingly false.

2. Justifying the Choice of Topic

Nowadays the options related to the presence in the virtual environment have become habitual, including in situations aimed at carrying out professional or academic activities, but they can generate stressful situations that require the psychic apparatus to restore balance, homeostasis and adaptation. As emphasized by [Alemany-Arrebola et al. \(2020\)](#), referring to the changes imposed in the COVID-19 pandemic, namely the carrying out of activities in the online version: *“in the COVID-19 era, for several months families were confined to their homes, with the reason for this being the limitation of the pandemic, and thus a change in the physical and psychological dynamics of society as a whole was produced”*.

But [Pereira Edgar & Rosa Cecilia \(2024\)](#) also assess that the COVID-19 pandemic has been a phenomenon with enormous impacts in all countries, which has changed routines and way of life in most activities, some escaping to the online environment, such as, education, work, psychology, health, etc.

The increasing presence of each of us in the virtual environment may be a positive thing, but how do we know how to select the information we need, which is authentic and useful for our endeavors, how to protect ourselves from manipulative or false information and, above all, what are our behavioral patterns, whether we are talking about academic, social, family or professional environments?

The answer could take into account the existence and functioning of sanogenesis mechanisms, i.e. psychological defense or coping and positive coping mechanisms, as evidenced by the results of empirical research conducted [Wang, Liu, Wu & Li \(2024\)](#).

But [Jiang \(2024\)](#) also opines that a solution could be mental health education, which refers to the process of helping pupils/students to recognize themselves, enhance their self-confidence, and cultivate a positive mindset and emotional regulation skills.

In the same vein, Verma (2024) opines that Positive Psychology promotes encouraging interventions to support the mental, emotional, behavioral and social well-being of pupils and students, advocating the approach of positive psychology elements in schools through the lens of the triangular functional curriculum model “Positive Psychology - Life Skills” (PPL model).

Also to be considered are the assessments that emotional intelligence, defined as the ability to identify, understand, regulate and utilize one’s own emotions as well as those of others, is proposed for use in educational settings, considered essential for teachers to effectively manage classroom dynamics and student/student engagement (Liu, Omar, & Puad, 2024).

At the same time, it is worth mentioning that, based on a number of studies showing that the relationship between parental attitude and the formation in children/adolescents/young people of critical thinking, optimal behavior, adapted, prudence in the interpretation of all information (Gherghinescu & Glăveanu, 2015; Glăveanu, 2012) and psychological resilience (Glăveanu, 2012), it can be said that the attitude towards media information, especially fake news, has roots in the way people have been taught by their parents to relate to reality and to the information received from the social environment.

In the same orientation, Glăveanu (2012) brings to attention the existence of an increased number of mental health problems among adolescents/teenagers, with reference to anxiety, depression, eating disorders, in the context given by the abundance of information in the media, interpreted as a source of distress, promoting the development of resilience, the analysis of factors that determined the behavior and the approach of methods to increase the resilience of adolescents/teenagers.

In this approach we also take into account the fact that various researchers are interested in answering the question: Why does our brain accept “fake news” without challenging it?

The starting point for a partial answer to the question can be derived by analyzing some experiments and the interpretation given by their authors (Brotherton, 2017), such as:

- a study conducted by Stephan Lewandowski, professor of psychology at the University of Bristol, UK, was based on the situation in which pregnant women were told that the claim that listening to Mozart’s music would increase the IQ of their unborn child was false; the effect was that most of the women did not accept this idea, moreover, the so-called “rebound effect” was created, in the sense that stating a fact that contradicts personal beliefs reinforces those beliefs;
- another experiment started from a false myth that the flu vaccine caused influenza; one group of people was given leaflets with appropriate content from an official center for the prevention of contagious diseases, and another group was given information about the risks of not getting vaccinated; the effect was that, unlike the first group, none of the second group changed their opinion;

- another study involved a group of people given a set of information about a fictitious fire; at first they were told that a cupboard inside a building that had caught fire had a cupboard containing paint buckets and cylinders, which were emitting thick black smoke; towards the end, new information said that according to the fire brigade the cupboard was empty; however, the group's opinion was that 90% of them were convinced that the paint buckets and cylinders were the cause of the fire.

3. The Practical Importance of the Topic Under Investigation

Some authors, among them Norbert Schwarz Professor of Social Psychology at the University of Basel - Switzerland, consider that the intention to mislead is as old as mankind and say that we are entering a contemporary climate in which facts and false information are mixed, even intentionally mixed, so that the management of fake news becomes important in many areas of everyday life, from politics to health information and scientific studies (Greifeneder, Jaffe, Newman, & Schwarz, 2022).

However, it is appreciated by them (Greifeneder et al., 2022) that the issues addressed need to be understood in the context created by online social networks, which have fundamentally changed the way information is produced, consumed and transmitted. For example, it is shown that even a minor exposure to a related but inconclusive photograph can lead people to believe that an associated claim is true, despite the fact that the photograph does not provide significant evidence as to the veracity of the claim, and this effect lasts for several days and influences several types of reasoning, including judgments about general knowledge, predictions about future events, and judgments about one's own episodic memories.

Given that the "fake news" phenomenon is becoming increasingly widespread, also favored by the evolution of technology or the diversification of communication channels, we can easily observe that the interest in the topic proposed for study is growing.

As more concrete examples, inspired by real life, we would like to highlight some data highlighting the impact of fake news on individuals or institutions:

- *an exciting title "The annulment of the elections in Romania, a case study in the West on the impact of manipulation on social networks", brings to our attention the fact that the presidential elections in Romania, held in November 2024, are the first major democratic elections in Europe whose results were annulled due to suspicions of foreign interference and marks an unprecedented event, as well as a landmark in raising awareness of the impact of information manipulation on social networks. The data referred to in the article aims to analyze the modus operandi observed on the TikTok platform, aimed at artificially promoting certain content about certain candidates by influencers, and at the same time assesses the risk of these methods being transposed to other countries. This manipulation highlights, on the one hand, the ease with which users can nowadays be forced to be visible on a social network such*

as TikTok without the platform moderating the content presented or considering it false, and on the other hand, the role and vulnerability of influencers, who are exposed to an increasing risk of manipulation by hostile actors. The problem is that, although we look a lot at Facebook, in fact much of this behavior happens on TikTok, where there is a lot of video content that is difficult to control, because it is also a less controlled platform (Calestru, 2025);

- also in Romania, a few years ago, a bank's image was damaged after rumors appeared on the market that the bank had no cash on hand, with people storming ATMs and counters to withdraw money from their current or deposit accounts;
- in a similar case in the US, a simple campaign to misinform the public with fake news about a particular brand's products led to a fall in the company's shares and a press scandal as the company was preparing for a merger (Xiaomeng & Leping, 2020).

It goes without saying that the aforementioned phenomena are of concern to many specialists from various fields such as psychology, neurosciences, sociology, communication, etc., who will bring to our attention both the conclusions of the studies undertaken, but especially the strategies/techniques of defeat and control for individual protection, and if we will not be able to control "fake news", we will be able to minimize their effect.

4. Theoretical Framework Underpinning the Research

In order to explain the functional versus dysfunctional way of reporting functional versus dysfunctional reporting to situations of "fake news" confrontation we will guide the development of the study using the Stress-Vulnerability Model as theoretical foundation.

In agreement with David (2012: pp. 125-130), the stress-vulnerability model takes into account that certain life events and situations, such as in our case the "fake news" information, when interacting with some of the person's psychological vulnerabilities, such as rigid, irrational cognitions, can generate dysfunctional emotions or even maladaptive behavioral manifestations.

The more psychological vulnerabilities, of varying intensities, the more the person exhibits repeated impact with stressors, the more it is expected that maladaptive and dysfunctional behavioral manifestations are inevitable.

Adapting the theoretical model to the situation of the present study, in which the stressors are represented by "fake news" type information, and the vulnerabilities of the person are of cognitive nature, such as negative and catastrophic automatic thoughts, we summarize the functioning in **Figure 1**.

From the previous figure, we can understand that stressors can be of the following categories: fake news information from online or physical environment, information from the work environment, etc., and psychological vulnerabilities are highlighted by externalizing locus of control, dysfunctional cognitive schemas, irrational cognitive style, intolerance to uncertainty, low self-esteem, poorly de-

veloped coping mechanisms. Consequences can be felt: 1) at the cognitive level, through automatic negative thoughts, difficulty concentrating, etc.; 2) at the emotional level, through anger; guilt, anxiety, etc.; 3) at the action level, through withdrawal, substance use etc.

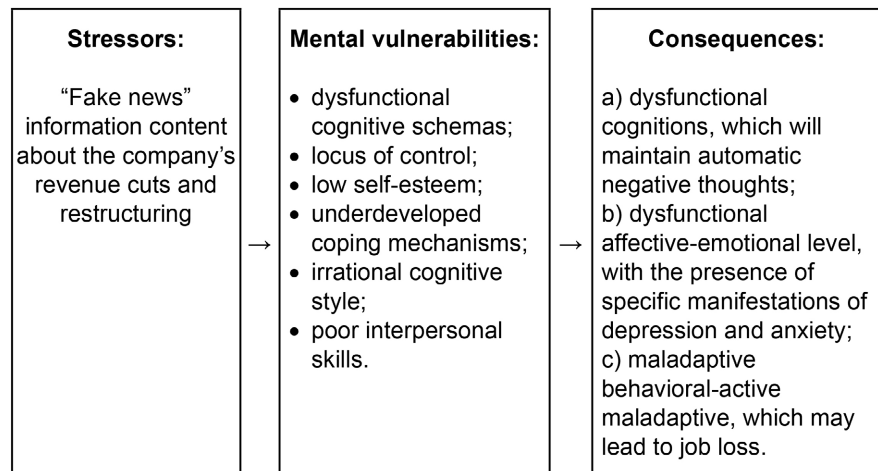


Figure 1. Example for stress-vulnerability model relief.

5. Methodological Framework

5.1. Objectives

The general objective of the paper aims to study and highlight the relationship between the characteristics of the cognitive profile, locus of control, tolerance to uncertainty and emotions induced by "fake news" type news with manipulative purpose, taking into consideration three specific objectives, as follows:

- **the first specific objective** aims to analyze the existence and intensity of emotional states induced by social-media news, especially those induced by "fake news" with manipulative purpose;
- **the second specific objective** aims at analyzing the intercorrelation between cognitive profile characteristics, locus of control, tolerance of uncertainty and emotions induced by manipulative fake news, as well as the differences between people of different ages in the presence of emotions induced by "fake news";
- **the third specific objective** aims to study and highlight the role of cognitive profile, locus of control and intolerance to uncertainty in predicting the onset of dysfunctional emotional states generated by "fake news" type information with manipulative purpose.

5.2. Research Hypotheses

In order to fulfill the research objectives we proposed the following hypotheses:

- **Hypothesis no. 1** - We assume that between cognitive profile characteristics and emotional states induced by "fake news" information there are some in-

terdependent relationships.

- **Hypothesis no. 2** - *We assume that between social-media information and the emotional states induced by it there are some interrelation relationships.*
- **Hypothesis no. 3** - *We assume that there are some interdependent relationships between locus of control, intolerance of uncertainty and emotional states induced by fake news.*
- **Hypothesis no. 4** - *We assume that there are some differences in the level of emotional states induced by fake news depending on the age of individuals.*
- **Hypothesis no. 5** - *We hypothesize that cognitive profile, locus of control and intolerance of uncertainty play a significant role in predicting the onset of dysfunctional emotional states in the presence of fake news.*

5.3. Structure and Description of the Research Sample

The convenience sampling technique was used to constitute the research sample, a non-probabilistic technique, which does not take into account the requirements of indicating the probability of case selection, as a result, there is no guarantee that the sample is composed of cases that faithfully describe the reference population described above (Popa, 2016).

At the same time, the technique involves the inclusion of accessible and available cases, based on volunteering, being the least rigorous but also the most frequently encountered in research practice.

Thus, the research sample consisted of 231 persons, from among students working in parallel in various professional activities, with the following characteristics:

- gender balanced, i.e. 118 women and 113 men;
- heterogeneous in terms of age, with ages ranging from 20 to 55 years and an average age of 33;
- homogeneous in that they are all developing different forms of interpersonal relationships in an institutional context, i.e. they are students and also professionally committed;
- heterogeneous in terms of educational background, i.e. 66 with secondary education, 66 with bachelor studies, 93 with master studies and 6 with doctoral studies; it is worth mentioning that a significant number of people are older than 35 years of age, as they have already graduated from higher education in different professional fields and are in their second university/specialization for various reasons, such as the need for professional development, attraction to another field, lack of vocational orientation at the right age, unemployment etc.;
- heterogeneous in terms of the professional field in which they work, as follows: 34 in finance, 25 in human resources, 3 in industry, 16 in commerce, 6 in advertising, 19 in education, 9 in law, 11 in healthcare, 19 in psychological care, 10 in management, 14 in technical, 15 in arts, 21 in defense and public order, 17 in public services, 4 in public administration and 8 in unspecified fields.

5.4. Instruments Used to Assess the Variables

Data were collected by applying standardized psychological assessment instruments, both electronic and pencil-and-paper versions, between December 2022 and January 2023.

5.4.1. Scale of “Fake News” and True News (S.S.F.S.A.)

The scale was developed specifically for this scientific endeavor, with the objective of assessing and highlighting how people process and react when they are in the situation of receiving some stimuli, through the written information, namely “fake news” or “true” news, with the requirement to assess how plausible the news is/was for them at the time of its appearance, considering the following response options: 1 (probably false); 2 (definitely false); 3 (probably true); 4 (definitely true).

The task was to analyze and classify each item into one of the two categories, “fake news” or “true news”, according to their own way of relating to information content in social media.

At the same time, for each “fake news” or “true” news item elaborated as a scale item, people were asked to self-assess their emotional states induced/caused by the content of the information, by reporting on a continuum from -10 to +10, taking into account each of the following three bipolar dimensions: anxiety (fear) - relaxation; depression (sadness) - ecstasy; anger - calm.

The scale was designed by the author of the study in consultation with three psychological experts and comprises a total of 22 items (presented in the appendix).

It should be noted that this scale was developed only for this study and will not be used on any other occasion, thus it was not designed and did not follow all the steps for the development of a standardized psychological assessment instrument.

In support of the previous statement it should be taken into account that the items of the scale contain “fake news” and “true” news that were strictly topical during the data collection phase of this study and that its application in another context has no impact on the population under investigation.

Initially, the scale comprised 28 items, operationalized/conceptualized by using 14 “fake news” and 14 “true news” specific contents, but following the pilot study with a number of 30 people, respectively their responses and suggestions, it was judged that 6 items were not suitable and were eliminated.

The development of the final form of the scale, using also the results obtained from the pilot study, followed preliminary data analysis procedures consisting of: checking the correctness of data recording, analyzing the normality of the distribution, analyzing marginal or extreme values, identifying missing data/values and analyzing linearity.

5.4.2. Scale of Locus of Control (S.L.C.R.-A.)

The scale was developed by Julian B. Rotter in 1966, based on the concept of “locus of control” in the description of personality, highlighting the psychological characteristics that imprint a certain direction on the person’s behavior,

aiming to attribute the causes of behavior to factors that are in the subjective sphere, internal to the individual or outside him, in the objective world. The instrument has been translated, adapted and used by a group of specialists (Cracsner, Prisăcaru, Cană & Negură, 2007, p. 245-248), comprising 29 items with two response options each.

5.4.3. Uncertainty Intolerance Scale (UIS)

The scale was taken from (Iliescu et al., 2015), contains 27 items with answers on a 5-step Likert-type scale and allows the assessment of individual preferences and personal style of relating to some complex life situations, characterized by either minimal uncertainty (control) or high uncertainty (exploration). Uncertainty tolerance, from the point of view of this assessment tool, is defined as an individual predisposition, assessed in the context of interpersonal interaction in different social and professional environments.

5.4.4. Scale of Rational and Irrational Beliefs (S.C.R.I.)

The scale was taken from the website (Iliescu et al., 2015), contains 25 items with answers on a 5-step Likert-type scale and measures rational versus irrational evaluative cognitions of a general nature, distributed on 7 dimensions, as follows: rationality, global evaluation of one's own value, need for achievement, need for approval, need for comfort, absolutistic demands for justice and global evaluation of others.

5.4.5. Scaling Factual Data

The scale was designed to collect information on age, gender, level of education, professional status and professional field of work.

5.5. Research Results

To prove hypothesis no. 1, with the following content: *Assuming that between cognitive profile characteristics and emotional states induced by "fake news" information there are some interdependent relationships*, the statistical technique called Pearson correlations was used. The results are presented in **Table 1**.

For data interpretation, in agreement with Colton (1974: p. 167), the values of the correlation coefficients have the following meanings: a correlation coefficient of -0.25 to 0.25 means weak or no correlation; a correlation coefficient of 0.25 to 0.50 (or -0.25 to -0.50) means an acceptable degree of association; a correlation coefficient of 0.50 to 0.75 (or -0.50 to -0.75) means moderate to good correlation; a correlation coefficient greater than 0.75 (or less than -0.75) means very good association or correlation.

The data in **Table 1** shows:

- between the variables emotional states induced by the "fake news" and some variables of the cognitive profile are present relations of intense association, supported by different values and meanings ("+" or "-") of the correlation coefficient, which explicitly signifies that the role of cognitions within the psy-

chic apparatus is significant in the processing of stimuli and the elaboration of responses;

- the finding of positive conditioning relationships, supported by significant values of the correlation coefficient, between the need for comfort, the absolutistic demand for justice, the global evaluation of others, irrationality and negative emotional states, as well as non-negative conditioning relationships between the cognitive profile characteristics mentioned and negative emotional states, which indicates that negative, dysfunctional emotional states are maintained by the irrational component of the cognitive profile, and conversely, positive, functional emotional states are maintained by the rational component of the cognitive profile;
- highlighting very good values between the need for fulfillment and the emotional states induced by “fake news”, in a negative (“-”) sense, with dysfunctional negative emotional states (e.g. for fear $r = -0.654^{**}$; for anger $r = -0.652^{**}$; for sadness $r = -0.447^{**}$) and in a positive sense (“+”) with positive emotional states (e.g.: for relaxation $r = -0.528^{**}$; for calm $r = -0.551^{**}$), which means that it is in an inverse interconditionation relationship, the more the need for fulfillment increases, the more negative emotions will decrease;
- Also, with respect to the need for approval, we capture the same direct interconditionation relation with the emotional states induced by “fake news”, in a negative (“-”) direction with dysfunctional negative emotional states (e.g.: for anxiety $r = -0.647^{**}$; for anger $r = -0.631^{**}$) and positively (“+”) with positive emotional states (e.g.: for relaxation $r = 0.484^{**}$; for calm $r = 0.450^{**}$), showing that a higher level of rationality of cognitions will lead to a lower level of dysfunctional negative emotional states, but also to a higher level of positive emotions.

Table 1. Descriptive statistics and values of correlation coefficients between rational versus irrational evaluative cognitions profile variables and emotions induced by the “fake news” variable (N = 231).

Cognitive profile variables	M	S.D.	Emotional states induced by the “fake news” variable					
			Fear	Sadness	Fury	Relax	Extaz	Calm
Rationality	16.21	3.036	0.062	-0.066	0.045	0.043	0.034	0.048
Global self-assessment	7.35	1.819	-0.030	0.071	-0.012	-0.061	-0.140*	-0.087
Need for fulfillment	11.34	3.923	-0.654**	-0.447**	-0.652**	0.528**	0.115	0.551**
Need for approval	9.42	3.252	-0.647**	-0.367**	-0.631**	0.484**	0.040	0.450**
Need for comfort	10.00	3.807	0.529**	0.438**	0.524**	-0.392**	-0.077	-0.338**
The absolutist demand for justice	11.06	4.604	0.640**	0.445**	0.636**	-0.526**	-0.156*	-0.446**
Overall assessment of others	8.84	3.310	0.664**	0.453**	0.648**	-0.543**	-0.181**	-0.508**
Total irrationality	58.13	8.338	0.307**	0.304**	0.309**	-0.283**	-0.162*	-0.208**

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

Partial conclusion: from the data presented in **Table 1**, as well as from the interpretation presented, we can state that hypothesis no. 1 is statistically supported and that the variables of the cognitive profile, through the two large components, namely through rationality, entail positive functional emotional states, and through irrationality, entail negative dysfunctional emotional states, proving that irrationality becomes a form of psychological vulnerability.

To prove hypothesis no. 2, with the following content: *We assume that between social-media information and the emotional states induced by them there are intercorrelations*, the statistical technique called Pearson correlations was used. The results are presented in **Table 2** and **Table 3**.

Table 2. Descriptive statistics on the variable “fake news”, the variable “true news”, the “fake news”-“true news” variable (items not correctly indexed) and the emotional states induced by them (N = 231).

	<i>Variable</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>For variable “fake news”</i>	<i>Fake news</i>	2	18	11.20	3.395
	<i>Fear</i>	0	75	29.22	20.811
	<i>Sadness</i>	0	30	11.71	7.954
	<i>Fury</i>	0	70	29.03	19.744
	<i>Relax</i>	0	80	29.52	16.843
	<i>Extaz</i>	0	35	8.53	6.324
	<i>Calm</i>	0	90	31.67	18.455
<i>For the variable “true news”</i>	<i>True news</i>	3	13	9.73	2.185
	<i>Fear</i>	0	50	24.76	10.957
	<i>Sadness</i>	0	30	13.03	6.283
	<i>Fury</i>	0	50	26.28	10.994
	<i>Relax</i>	20	100	55.02	20.003
	<i>Extaz</i>	5	45	20.28	10.417
	<i>Calm</i>	20	120	58.31	19.013
<i>For the variable “fake news”-“news true”</i>	<i>Fake news-news true</i>	0	65	13.55	11.497
	<i>Fear</i>	0	120	36.49	23.360
	<i>Sadness</i>	0	45	16.58	12.131
	<i>Fury</i>	0	120	36.28	23.256
	<i>Relax</i>	0	65	9.68	7.460
	<i>Extaz</i>	0	40	7.27	5.646
	<i>Calm</i>	0	60	10.35	8.268

Table 3. Values of correlation coefficients between the variable “fake news”, the variable “true news”, the variable “fake news”-“true news” (items not correctly indexed) and the emotional distress induced by them (N = 231).

<i>Social media information variables</i>	<i>Emotional variable</i>					
	<i>Fear</i>	<i>Sadness</i>	<i>Fury</i>	<i>Relax</i>	<i>Extaz</i>	<i>Calm</i>
<i>Fake news</i>	0.468**	0.931**	0.666**	-0.936**	-0.637**	-0.651**
<i>Fake news-news true</i>	0.515**	0.300**	0.555**	-0.793**	-0.385**	-0.789**
<i>News true</i>	-0.322**	-0.217**	-0.339**	0.312**	0.304**	0.381**

**Correlation is significant at the 0.01 level (2-tailed).

The data presented in **Table 3** highlight very relevant information, namely the fact that there are different degrees of association between the variables represented by the content of the news and the variables represented by the emotional states induced by their content, expressed by multiple values of the correlation coefficients, from acceptable values of the specific association to good or even very good values, which allows us to appreciate that the way of receiving, processing and interpreting the stimuli has an echo in the affective level, namely in emotions of all types.

We can also observe that the data on the variable “fake news”, obtained through the responses to the items identified and correctly framed, highlight:

- positive (“+”) intercorrelations with dysfunctional negative emotions, such as for example $r = 0.931^{**}$ for sadness, $r = 0.666^{**}$ for anger and $r = 0.468^{**}$ for fear;
- negative (“-”) intercorrelations with positive emotions, such as $r = -0.936^{**}$ for relaxation, $r = -0.637^{**}$ for ecstasy and $r = -0.651^{**}$ for calm.

We can also observe that the data on the variable “fake news”-“true news”, obtained by the answers to the items that were not correctly categorized, both among those with “fake news” content and among those with “true news” content, highlight:

- positive (“+”) intercorrelations with dysfunctional negative emotions, such as for example $r = 0.515^{**}$ for sadness, $r = 0.300^{**}$ for anger and $r = 0.555^{**}$ for fear;
- negative (“-”) intercorrelations with positive emotions, such as $r = -0.793^{**}$ for relaxation, $r = -0.385^{**}$ for ecstasy and $r = -0.789^{**}$ for calm.

This allows us to assess that both items with “fake news” content and items with content that cannot be correctly judged and categorized, whether “fake news” or “true news”, will have relatively similar influence on the person’s response, most likely because of the lack of certainty that maladaptive action behavior develops.

At the same time, we can observe less significant intercorrelation relationships, such as the values of the correlation coefficients, with positive direction (“+”), between the variables “true news” and positive emotion variables, and those with negative direction (“-”) between the variables “true news” and negative emotion

variables, which may mean that some people are not negatively influenced by information content or that they can optimally manage their emotional states in the case of external stimuli with correct, true and easily identifiable content from the media.

Partial conclusion: from the data presented in **Table 3**, as well as from the interpretation presented, we can state that hypothesis no. 2 is statistically supported.

To prove hypothesis no. 3 with the following content: *We assume that between locus of control, intolerance of uncertainty and emotional states induced by fake news information there are some interdependent relationships*, the statistical technique called Pearson correlations was used. The results are presented in **Table 4**.

Table 4. Descriptive statistics and values of correlation coefficients between the variables locus of control, intolerance to uncertainty and emotions induced by the variable “fake news” (N = 231).

Variables	M.	S.D.	Emotional states induced by the “fake news” variable					
			Fear	Sadness	Fury	Relax	Extaz	Calm
<i>Intolerance of uncertainty</i>	64.81	29.944	0.714**	0.370**	0.704**	-0.566**	-0.236**	-0.531**
<i>Place of external control</i>	13.71	3.850	0.050	0.071	0.057	-0.185**	-0.027	-0.189**
<i>Place of internal control</i>	9.31	3.853	-0.046	-0.063	-0.052	0.182**	0.024	0.186**

**Correlation is significant at the 0.01 level (2-tailed); *Correlation is significant at the 0.05 level (2-tailed).

The data presented in **Table 4** shows:

- as in the case of hypothesis number 1, between the variables emotional states induced by “fake news”, the variables locus of control and intolerance to uncertainty, intense association relationships are present, supported by different values and meanings (“+”) or (“-”) of the correlation coefficient, which emphasizes the role of the latter in the psychic apparatus as significant, namely in the processing of the received stimuli and in the elaboration of responses;
- between the variable intolerance to uncertainty and the variables of emotional states induced by “fake news” there are significant relationships of association or intercondition, being supported by the high values of the correlation coefficients in the case of negative emotional states (e.g.: for fear $r = 0.714^{**}$; for anger $r = 0.704^{**}$), signaling that an increase in the degree of intolerance in situations of uncertainty also leads to an increase in the intensity of negative emotions;
- in the case of positive emotional states, reported on the same variable, the values of the correlation coefficients are high, but with a negative sign (“-”), which means that when intolerance to uncertainty increases the values of positive emotions decrease (e.g.: for relaxation $r = -0.566^{**}$; for calm $r = -0.531^{**}$), and negative emotions take the place of positive ones;
- as regards the relationship between the variable locus of control in relation to the variables emotional states induced by “fake news”, we find that the external

locus of control is in a conditioning relationship with negative emotions, but with a negative sign (“-”), although the values of the correlation coefficients are not sufficiently high (e.g. for relaxation $r = 0.182^{**}$; for calm $r = -0.189^{**}$), their negative sign (“-”) indicates that the high externalist orientation is inversely related to positive emotions, and vice versa, and that externalist people mainly attribute the causality of mental and physical phenomena to chance, fate, supernatural forces, without comfort, acceptance and adaptation;

- if the level of internalizing internality is higher, negative emotions may decrease and positive emotions may be more sustained, although the values of the correlation coefficients are not high enough (e.g. for relaxation $r = -0.185^{**}$; for calm $r = -0.186^{**}$);

Partial conclusion: from the data presented in **Table 4**, as well as from the interpretation presented, we can state that hypothesis no. 3 is statistically supported and that externality, a component of locus of control, as well as intolerance to uncertainty, can lead to dysfunctional negative emotional states, proving that they can be understood as psychological vulnerabilities.

To prove hypothesis no. 4, with the following content: *Assuming that there are some differences in the level of emotional states induced by “fake news” information, depending on the age of the individuals, the statistical technique called differences in statistical means, i.e. Independent-Samples Test, was used. The results are presented in Table 5 and Table 6. With regard to the age of the individuals in the study group, they were distributed into two groups, i.e. 118 individuals aged up to 35 years in the first group and 113 individuals aged over 35 years in the second group.*

Table 5. Descriptive statistics on differences in statistical means between the two age groups on emotions induced by “fake news” variables (N = 231).

<i>Emotions variables</i>	<i>Age group</i>	<i>N</i>	<i>M</i>	<i>S.D.</i>	<i>Std.Error Men</i>
<i>Fear</i>	1	118	14.19	8.818	0.812
	2	113	44.91	17.941	1.688
<i>Sadness</i>	1	118	8.52	6.803	0.626
	2	113	15.04	7.720	0.726
<i>Fury</i>	1	118	15.04	8.951	0.824
	2	113	43.63	17.194	1.618
<i>Relax</i>	1	118	39.24	14.700	1.353
	2	113	19.38	12.395	1.166
<i>Extaz</i>	1	118	9.41	7.343	0.676
	2	113	7.61	4.914	0.462
<i>Calm</i>	1	118	41.23	16.933	1.559
	2	113	21.68	14.246	1.340

Table 6. Values of statistical mean differences (Independent Samples Test) on emotions induced by the “fake news” variable for the two age groups (for N = 231).

Emotions variables	<i>t-test for Equality of Means</i>						
	<i>T</i>	<i>df</i>	<i>Sig. (2-tailed)</i>	<i>Mean Difference</i>	<i>Std. Error Difference</i>	<i>95% Confidence Interval of the Difference</i>	
						<i>Lower</i>	<i>Upper</i>
<i>Fear</i>	-16.621	229	0.000	-30.717	1.848	-34.358	-27.075
<i>Sadness</i>	-6.825	229	0.000	-6.527	0.956	-8.412	-4.643
<i>Fury</i>	-15.945	229	0.000	-28.586	1.793	-32.118	-25.053
<i>Relax</i>	11.076	229	0.000	19.857	1.793	16.324	23.389
<i>Extaz</i>	2.175	229	0.031	1.796	0.826	0.169	3.423
<i>Calm</i>	9.474	229	0.000	19.547	2.063	15.482	23.613

From the analysis of the data presented in **Table 5** and **Table 6**, the following can be deduced:

- significant differences between the two age groups in terms of the level of emotional states induced by the content of “fake news” news are highlighted;
- dysfunctional negative emotional states induced by the “fake news” variable have higher values in the over 35 age group than in the under 35 age group, which indicates that older people are more sensitive, show some resistance to change and are less able to adapt to new situations; the explanations could be put down to some of the answers of the investigated persons, from which we note that they have remained faithful to older habits, those of receiving information mainly from TV programs and accessing online platforms less frequently, as well as to the statements that they do not have the necessary skills to understand how to work with different electronic devices, and when they are constrained by different situations they turn to family members;
- for example, the largest difference is for the fear variable, the difference between means is -30.717, corresponding to a $t_{\text{calculated}} = -16.621$ and a significance threshold $\text{Sig. (2-tailed)} = 0.000$, followed by the anger variable, where the difference between means is -28.586, corresponding to a $t_{\text{calculated}} = -6.825$ and a significance threshold $\text{Sig. (2-tailed)} = 0.000$;
- in contrast, the positive emotional states induced by the “fake news” variable have higher values for the under 35 age group compared to the over 35 age group, which indicates that younger people show an optimal level of adaptation to new situations and are more flexible in accepting change;
- for example, the largest difference is for the relaxation variable, the difference between means is 19.857, corresponding to a $t_{\text{calculated}} = 11.076$ and a significance threshold $\text{Sig. (2-tailed)} = 0.000$, followed by the calm variable, where the difference between means is 19.547, corresponding to a $t_{\text{calculated}} = 9.474$ and a threshold of significance $\text{Sig. (2-tailed)} = 0.000$;

- stimulus processing mechanisms operate differently, we could say that they are in favor of the under 35 age group, perhaps supported by the vision of life with fewer events and worries, the prospect of professional experiences to come, open-mindedness and the possibility of personal development.

Partial conclusion: the data mentioned in **Table 5** and **Table 6**, as well as the interpretation presented above, allow us to state that hypothesis no. 4 is statistically supported, showing that younger people, under 35 years of age, better manage the way of receiving, processing and interpreting information, so that the share of positive emotions is in favor of negative ones.

To prove hypothesis no. 5, with the following content: *We hypothesize that cognitive profile, locus of control and intolerance to uncertainty play a significant role in predicting the onset of dysfunctional emotional states in the context of the presence of fake news information*, the statistical technique called simple linear regression was used. The results are presented in **Table 7** and **Table 8**.

Table 7. Values of regression coefficients on the relationship between cognitive profile variables, locus of control, intolerance to uncertainty and “fake news” induced negative emotion variables.

	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
<i>Fear*</i>					
<i>(Constant)</i>	-283.514	119.690		-2.369	0.019
<i>Cognitive profile - rationality</i>	-0.454	0.322	-0.066	-1.413	0.159
<i>Cognitive profile - irrationality</i>	0.319	0.121	0.128	2.643	0.009
<i>Place of internal control</i>	-11.226	5.142	2.077	2.183	0.030
<i>Place of external control</i>	11.025	5.141	2.041	2.145	0.033
<i>Intolerance of uncertainty</i>	0.468	0.033	0.673	14.092	0.000
<i>Sadness*</i>					
<i>(Constant)</i>	-165.204	59.409		-2.781	0.006
<i>Cognitive profile - rationality</i>	-0.114	0.160	-0.044	-0.715	0.475
<i>Cognitive profile - irrationality</i>	0.217	0.060	0.227	3.614	0.000
<i>Place of internal control</i>	-7.071	2.552	-3.423	-2.770	0.006
<i>Place of external control</i>	6.882	2.552	3.334	2.697	0.008
<i>Intolerance of uncertainty</i>	0.080	0.016	0.301	4.853	0.000
<i>Fury*</i>					
<i>(Constant)</i>	-277.511	115.034		-2.412	0.017
<i>Cognitive profile - rationality</i>	-0.316	0.309	-0.049	-1.022	0.308
<i>Cognitive profile - irrationality</i>	0.310	0.116	0.131	2.677	0.008
<i>Place of internal control</i>	-11.179	4.942	-2.180	-2.262	0.025
<i>Place of external control</i>	10.936	4.941	2.134	2.213	0.028
<i>Intolerance of uncertainty</i>	0.437	0.032	0.663	13.702	0.000

*Dependent variable: Fear; Sadness; Fury.

Table 8. Values of regression coefficients on the relationship between cognitive profile variables, locus of control, intolerance to uncertainty and “fake news” induced positive emotion variables.

	B	Std. Error	Beta	t	Sig.
<i>Relax*</i>					
<i>(Constant)</i>	167.007	112.039		1.491	0.137
<i>Cognitive profile - rationality</i>	0.376	0.301	0.068	1.247	0.214
<i>Cognitive profile - irrationality</i>	-0.283	0.113	-0.140	-2.501	0.013
<i>Place of internal control</i>	-5.048	4.813	-1.154	-1.049	0.295
<i>Place of external control</i>	-4.178	4.812	-0.956	-0.868	0.386
<i>Intolerance of uncertainty</i>	-0.294	0.031	-0.523	-9.465	0.000
<i>Extaz*</i>					
<i>(Constant)</i>	57.234	51.418		1.113	0.267
<i>Cognitive profile - rationality</i>	0.055	0.138	0.026	0.399	0.690
<i>Cognitive profile - irrationality</i>	-0.080	0.052	-0.105	-1.538	0.126
<i>Place of internal control</i>	-1.856	2.209	-1.130	-0.840	0.402
<i>Place of external control</i>	-1.797	2.209	-1.095	-0.814	0.417
<i>Intolerance of uncertainty</i>	-0.043	0.014	-0.204	-3.026	0.003
<i>Calm*</i>					
<i>(Constant)</i>	173.176	127.483		1.358	0.176
<i>Cognitive profile - rationality</i>	0.495	0.343	0.081	1.445	0.150
<i>Cognitive profile - irrationality</i>	-0.149	0.129	-0.067	-1.162	0.247
<i>Place of internal control</i>	-5.623	5.477	-1.173	-1.027	0.306
<i>Place of external control</i>	-4.666	5.476	-0.974	-0.852	0.395
<i>Intolerance of uncertainty</i>	-0.314	0.035	-0.509	-8.876	0.000

*Dependent variable: Relax; Extaz; Calm.

Taking into account the formula of the regression equation (constant + predictor value) and the values of the regression coefficients mentioned in **Table 7**, column “B”, we can conclude that each psychological characteristic that obtained positive values, with reference to the variables irrational cognitive profile, externality and intolerance to uncertainty, as predictors, explains and predicts in different proportions the onset of dysfunctional negative emotional states, as dependent variables, in the context of the presence of “fake news” type information, such as for example:

- regarding the dependent variable fear/anxiety, the predictor variable irrational cognitive profile can explain the variance in proportion of 31.9%, the predictor variable externality can explain the variance in proportion of 2%, the predictor variable intolerance to uncertainty can explain the variance in proportion of

46.8%, and by adding them together we can say that the predictor variables mentioned total and can explain the variance of the dependent variable fear/anxiety in proportion of 80.7%;

- regarding the dependent variable sadness/depression, the predictor variable irrational cognitive profile can explain the variance in proportion of 21.7%, the predictor variable externality can explain the variance in proportion of 8.82%, the predictor variable intolerance to uncertainty can explain the variance in proportion of 8%, and by adding them together we can say that the predictor variables mentioned total and can explain the variance of the dependent variable fear/anxiety in proportion of 38.52%;
- regarding the dependent variable anger, the predictor variable irrational cognitive profile can explain the variance in proportion of 31%, the predictor variable externality can explain the variance in proportion of 9.3%, the predictor variable intolerance to uncertainty can explain the variance in proportion of 43.7%, and by adding them together we can say that the predictor variables mentioned total and can explain the variance of the dependent variable fear/anxiety in proportion of 84%;
- we can also observe that the predictor variables rational cognitive profile and internality contribute to explaining the onset of negative emotional states, as dependent variables, but we observe that they have negative values, which means the reverse contribution, i.e. a rise in their level contributes to the onset of the mentioned emotions.

Also, the data presented in **Table 8**, which refer to positive emotions as dependent variables, contribute to confirm the previous conclusions, are complementary to them, explaining the role and the proportion of the variance of the onset of positive emotional states in the opposite way to the onset of negative emotional states (the negative sign accompanying the percentage value of variance), through the prism of rational cognitive profile, internality and a low level of intolerance to uncertainty.

In other words, when we have the characteristics of the rational cognitive profile, internality as a locus of control characteristic, as well as low intolerance to uncertainty, it is expected that “fake news” information is optimally managed so that it does not lead to the onset of dysfunctional negative emotional states and, implicitly, to some maladaptive action behaviors, such as those specific to manipulative situations.

Partial conclusion: the data mentioned in **Table 7**, **Table 8** and the interpretation presented above allow us to deduce that the level of dysfunctional negative emotions, as dependent variables, experienced by students in the situation of their presence in an environment with “fake news” information, can be managed through the prism of psychological characteristics, such as those related to rational cognitive profile, internality and a low level of intolerance to uncertainty. Based on the above data, we can state that hypothesis no. 5 is statistically supported.

6. Conclusion

The results obtained and presented showed that the research hypotheses are statistically supported, but the most important aspect highlighted is that the cognitive profile, locus of control and intolerance to uncertainty are in an interrelation with the emotional states induced by media information. Thus, we can appreciate that the onset of dysfunctional negative emotions can also be influenced by the psychological characteristics mentioned above, when we refer in particular to “fake news” type information, which is often used for manipulative purposes.

The analysis and interpretation of the results obtained in the study led to some conclusions similar to those of the authors who have studied the “fake news” phenomenon, as well as the role of certain psychological characteristics on the impact that “fake news” can have on the behavior of people in different situations and contexts.

Although each psychological characteristic studied has a role and a particular contribution in the reception, processing, interpretation and elaboration of the response to informational stimuli from the media, organizational or social environment, the central place is represented by the cognitive profile of each of us, taking into account that the cognitive level is the first to enter in relation to the stimuli.

In this sense, starting from the reasoning that cognitive schemas process all information, including erroneous or “fake news” information, the cognitions driven by the cognitive schemas formed over time often process information that overlaps with our beliefs. This process generates, on the one hand, a kind of reward for the psychic apparatus through the appearance of dopamine, and on the other hand, it trains the psychic process known in the literature as “cognitive bias”, supported by the characteristics of the irrational cognitive profile, as has been proven by the data presented.

The important role of the locus of control was also highlighted, proving that people who are characterized by an internalist orientation, who attribute the causality of events to subjective, internal determinations, which are part of the individual, ignoring the role of life situations, the conjunction of factors, chance, will have an adequate self-image and better adaptation to stimuli, in this case with information of the “fake news” type.

Let’s not forget the role of intolerance to uncertainty, a psychological characteristic seen as a vulnerability that, depending on the developmental level, favors the onset of dysfunctional negative emotions and, implicitly, supports maladaptive behaviors.

At the same time, the study also brings to attention some differences regarding the dysfunctional negative emotional states induced by the “fake news” variable according to the age of the persons, showing higher values in the over 35 age group compared to the group under 35 age, which means that older people are more sensitive and show a certain resistance to new situations, to change, perhaps also poor adaptation. For example, the biggest difference is related to the anxiety/ans-

ity variable, the difference between means is -30.717 , corresponding to a $t_{\text{calculated}} = -16.621$ and a threshold of significance $\text{Sig. (2-tailed)} = 0.000$.

In conclusion, the study has revealed strong evidence that the three psychological characteristics considered as psychological vulnerabilities, namely irrational cognitive profile, externalizing locus of control and intolerance of uncertainty explain in different proportions the variance of the negative, dysfunctional emotional states induced by fake news. For example, if we refer to fear/anxiety induced by fake news, 80.7% of the variance can be explained by the irrational cognitive profile, externalism and intolerance of uncertainty.

7. Future Research

The study was initiated and carried out solely through the personal contribution of the author and the limited funds allocated allowed the study sample to consist of only 231 individuals/students.

Although the study has some limitations, related to data collection, we can appreciate that its results may be provocative for other authors, and for the continuation and deepening of the theme through a larger study to be conducted in the future we will collect samples of students from different universities located in different localities by attracting interested researchers.

As the topic is of great interest, in future studies we will deepen the impact and implications of “fake news” on the behavioral actions from the perspective of their manipulative role, as well as identify measures or recommendations for the support of the population in such situations. To this end, a program for developing psychological resilience and a pilot study is in the design phase and will be carried out with students in laboratory classes as well as in the form of home prescriptions to practice and practice techniques in various life situations, and the results will be presented in a new article upon completion. The program is inspired by the [American Psychological Association guidelines \(2024\)](#) and advocates increasing resilience based on ten strategies, targeting:

- maintaining good and close relationships with family members, friends and members of their groups;
- avoiding exposure to stressful events that lead to dysfunctional reactions and manifestations;
- accepting situations that cannot be intervened on and cannot be changed;
- developing and guiding lifestyle towards realistic goals;
- thorough preparation of decisions in critical situations;
- self-awareness of one’s own psychological characteristics, functional coping mechanisms and their use as opportunities for overcoming situations with significant distress;
- developing self-confidence in one’s own strengths and resources;
- developing the way of dealing with life situations by changing the overall perspective and integrating them into a broader life context;
- maintaining an optimistic outlook and positive expectations, and visualizing a

more friendly future;

- engaging in self-treatment or engaging in mental, physical, emotional and spiritual self-care practices.

Also, in future studies, it is of interest to further analyze the differences between certain age groups of the sampled individuals with regard to a number of factors such as digital literacy, healthy media consumption habits, easy access to the internet, familiarity with different electronic media and online news platforms, which might influence the way of reporting fake news.

At the same time, for future studies, we will analyze the possibility of taking into account elements related to the reciprocal influence and/or interaction between the variables of cognitive profile, locus of control and intolerance to uncertainty on emotional responses, especially those considered as psychological vulnerabilities.

Acknowledgements

We would like to thank the students who took the time to participate in the realization of this project, as well as the colleagues/teachers who gave me some suggestions regarding the choice of the topic of study and for the elaboration of the Scale of fake news and real news (S.S.F.S.A.).

Funding

This study was not supported by funds from any institutions or organizations, but only from the author's own resources.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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The “Fake News” or “True News” Scale (Excerpt)

The scale is designed to assess how people think and react when they have to discern whether a news item is “fake news” or “true news” and comprises a total of 22 news items (items), randomly distributed across the scale.

To do so, please rate how plausible the news items below are/were (at the time they appeared) on a scale from 1 (definitely fake) to 4 (definitely true), then mark “X” in the table for each news item.

Also, for each news item, please self-assess your emotional states provoked by its content, by marking with an “X” the responses expressed on a continuum from -10 to +10, taking into account the following three bipolar dimensions: anxiety (fear) - relaxation; depression (sadness) - ecstasy; anger - calm.

1) Kiev (city in Ukraine) doesn’t want peace, because it “lives from this military conflict” and wants to make as much profit as possible now. A certain journalist points out that the Ukrainian side, under these conditions, is receiving unlimited weapons and money, concluding that “Politicians do not care that Ukrainians are cold and hungry”.

Item 1	<i>Response options for news content:</i>				
	1	2	3	4	
	<i>Self-assess emotional states:</i>				
	-10	-5	0	+5	+10
<i>Anxiety/Fear</i>					<i>Relaxation</i>
<i>Depression/Sadness</i>					<i>Ecstasy</i>
<i>Anger</i>					<i>Calm</i>

2) One country, Austria, is blocking at the last minute the decisions of 26 countries on Romania’s entry into Schengen, using the authoritarian method of consensus.

Item 2	<i>Response options for news content:</i>				
	1	2	3	4	
	<i>Self-assess emotional states:</i>				
	-10	-5	0	+5	+10
<i>Anxiety/Fear</i>					<i>Relaxation</i>
<i>Depression/Sadness</i>					<i>Ecstasy</i>
<i>Anger</i>					<i>Calm</i>

3) Romanians have saved less this year due to inflation and inflation. Around 7 out of 10 Romanian employees put money aside from their paychecks to ensure a safety net, but only half of them save consistently, a BestJobs survey shows.

Item 3	<i>Response options for news content:</i>				
	1	2	3	4	
	<i>Self-assess emotional states:</i>				
	-10	-5	0	+5	+10
<i>Anxiety/Fear</i>					<i>Relaxation</i>
<i>Depression/Sadness</i>					<i>Ecstasy</i>
<i>Anger</i>					<i>Calm</i>
