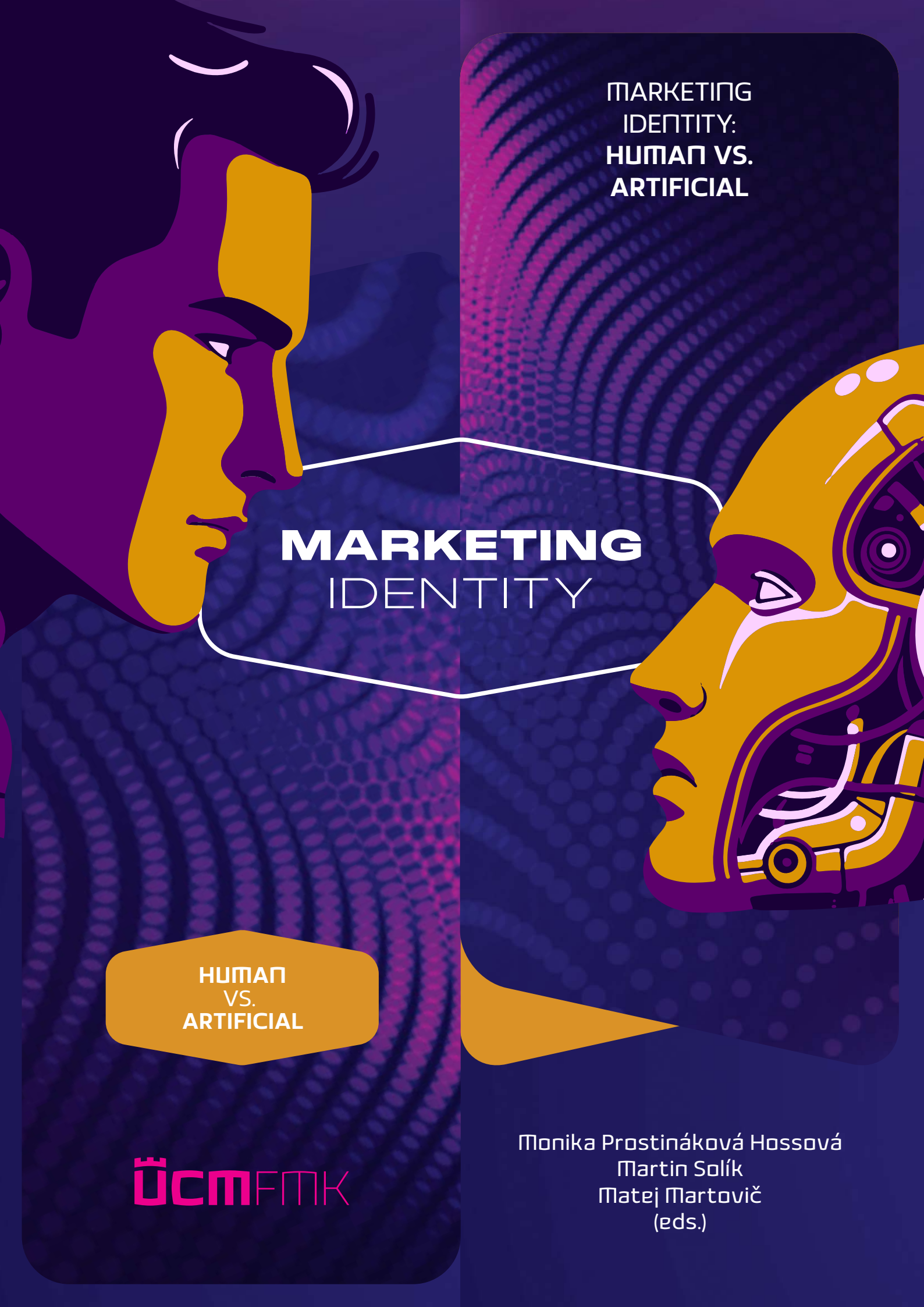




MARKETING
IDENTITY:
HUMAN VS.
ARTIFICIAL

MARKETING IDENTITY

HUMAN
VS.
ARTIFICIAL

ÚCM FMK

Monika Prostináková Hossová
Martin Solík
Matej Martovič
(eds.)

Faculty of Mass Media Communication
University of Ss. Cyril and Methodius in Trnava

MARKETING IDENTITY HUMAN VS. ARTIFICIAL

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Conference Proceedings
from the International Scientific Conference
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HUMAN CREATIVITY, PERCEPTUAL RIGIDITY, THE MEDIA AND CONSPIRACY THEORIES IN THE AGE OF AI

Katarína Fichnová – Veronika Peráčková

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Abstract:

The aim of this paper is to investigate the nature of the association between being subject to conspiracy theories and the identified degree of perceptual rigidity based on the Gestalt theory of “*pregnanz*”. Rigidity is a psychological construct that is considered to be the opposite of human creativity. It encompasses the tendency to create and persistently use mental and behavioral files, and has been confirmed to be positively related to authoritarianism. In contrast, human creativity is associated with cognitive flexibility and critical thinking. In the era of exponential rise of technology and AI, the issue of resistance to deep fakes and conspiracy theories is of utmost importance. The research problems and hypotheses will be tested using statistical procedures, with data and variable identification administered using standardized psychodiagnostic methods (TSD-Z, BRT, CS) on a research cohort of undergraduate students. The results showed insignificant correlations of the observed variables and the links between human creativity and rigidity show a negative relationship. In the case of an insignificant linear relationship between creativity and susceptibility to conspiracy theories, including those generated by AI, the convex shape of the curve indicates another type of relationship. This is a pre-research study to a more broadly conceived project. The results were discussed, and measures were proposed.

Key words:

AI. AI and Generation. Conspiracy Stories. Conspiracy Theories. Human Creativity. Media. Media Communication. Perceptual Rigidity.

1 Theoretical Basis of the Study

The aim of this paper is to investigate the nature of the association between being subject to conspiracy theories and the identified degree of creativity (vs. perceptual rigidity). This study is a pilot project within a broader project focused on conspiracy theories and hoaxes. In the introduction, we broadly define the terms related to the goals of our study (conspiracy theories, creativity and rigidity) based on current mediaiological and socio-psychological paradigms, while looking at the topic from proximal and distal perspectives.

The need to develop research efforts dedicated to understanding the reasons for the spread and embracing of conspiracy theories can be clearly seen in the media practice (not only but mainly) in Slovakia. However, this also includes the exponential rise of technologies, especially AI-based, which are (and will be) used and abused to create disinformation, conspiracy theories and deep fakes¹. In July 2023, the MedianSK agency conducted a survey on a representative sample aimed at the spread of and belief in conspiracy theories among the inhabitants of Slovakia (Lisá, 2023). According to the data, it shows that e.g. up to 19 percent of Slovaks believe that “there is no Russian war in Ukraine, and it is a lie fabricated by the USA” (Lisá, 2023, para. 3)².

¹ Authors’ note: According to B. Cruz (2024), “deep fake” means images, videos and audiovisual or sound recordings that have been manipulated with the help of artificial intelligence (AI). They include changing the sound, content of speech, facial expressions, or speech synthesis (artificial generation).

² Authors’ note: The text of the quotation in the original language: “vojna Ruska na Ukrajine nie je a ide o klamstvo, ktoré vymyslelo USA” (Lisá, 2023, para. 3).

In international comparisons, Slovakia is rarely included in the selection of the countries, but when it is, the statistics are alarming. The data from 2022 (Globsec Trends, 2022) indicate that Slovakia and Bulgaria rank among the most conspiratorial countries: up to 54% of respondents believe in conspiracy theories and manipulative narratives (see, Figure 1). Not only the older respondents (Szyszka & Wojciechowski, 2018) but, as some research suggests, even the younger generations are affected and at risk (see, e.g., Walotek-Ściańska et al., 2014; Reľovská & Štrbová, 2021; Spálová & Mikuláš, 2023).

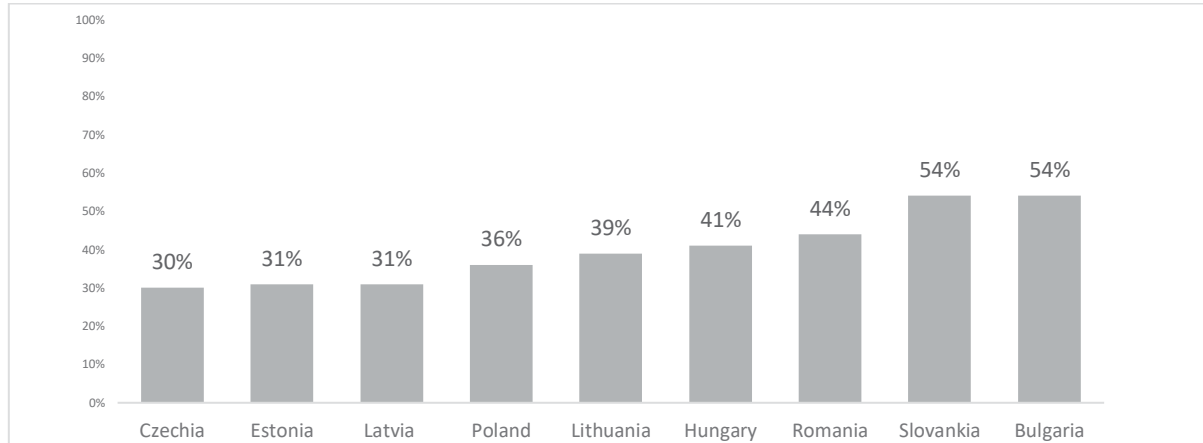


Figure 1: Average belief in three conspiracy theories and manipulative narratives in selected nine countries of the post-Soviet bloc

Source: Globsec Trends (2022, p. 83)

According to the research report published by V. Kalmárová et al. (2017) from a study conducted on 3,625 high school students, up to 59% of the respondents fully or partially agree with the conspiracy theory that the world is controlled by behind-the-scenes interest groups. In the same research study, up to one fifth of the respondents partly or completely identify with the statement that prefers dictatorship over democracy as a way to govern the state.

These results point to the pressing need to identify the reasons and motives behind this situation and the ways to remedy it.

1.1 Brief Definition of the Term “Conspiracy Theories” and the Current Possibilities of Combating Them

“‘Conspiracy theories’ are attempts to explain the ultimate causes of significant social and political events and circumstances with claims of secret plots by two or more powerful actors” (Douglas et al., 2019, p. 4). A more precise definition of conspiracy theories is presented by J. W. van Prooijen and M. van Vugt (2018), who claim that conspiracy theories contain at least five components. That is, a hypothesized a) *pattern* (the assumption that people, objects or events are connected), b) implication of an *agency* (i.e. the plans of the alleged conspirators are deliberate)³. Conspiracy theories always involve c) a *coalition* (a group involved in the action), and also d) an *element of threat* (e.g. that the alleged goals of the conspirators are malicious or deceptive), and finally, an element of e) *secrecy*. In our opinion, the listed

³ Authors’ note: J. W. van Prooijen and M. van Vugt (2018) also add in this context that the detection of agencies allowed our ancestors to understand the motives (both benevolent and malevolent) of the actions of people around them. It also aided the development of empathy for the mutual needs and wishes of the tribe or group members, and developed mainly for the purpose of regulating people’s social life. The authors also point out that people sometimes detect the *agency* even when none exists: for example, they attribute human motives to pets, plants or electronic devices (and, we should add, to AI). We believe that this phenomenon is connected with one of the characteristics of the human psyche, which is described under “anthropomorphization” in the ontogenesis of the human psyche (see, e.g., Šramová, 2007). In some cases, it remains active even after early childhood.

“ingredients” have practical implications in addition to the professional theoretical definition – they can also offer ordinary citizens the criteria, the fulfilling of which should make us approach the assessed claim, story or narrative more critically.

Some people claim that the name for this phenomenon should not include the term “theories” since, *sensu stricto*, theories can in principle be tested and verified. Therefore, it should rather be referred to as “stories” and the claims as “assumptions” (Nocun & Lamberty, 2021). We agree with this objection and will use the term “conspiracy stories” or “assumptions” in the text below.

The identification of the signs of conspiracy stories is only one of the ways to prophylactically treat the possible targeting of potentially new addresses (see, e.g., Zubiaga & Jiang, 2020). Many people cannot identify these signs, which becomes a significant problem in the era of AI because manipulated messages (visual, auditory or audiovisual) may look very realistic thanks to AI (Cruz, 2024). Moreover, the tools for their creation have become more ubiquitous (e.g. DeepFaceLab and FAkeApp as early as in 2019 (Cruz, 2024)).⁴

Some researchers also examine the linguistic aspects of disinformation (Krajčovič et al., 2024). These aspects relate to the conspiracy stories themselves. Another possibility is to focus on the recipient, and specifically on the timely and effective increase of media literacy (Astuti, 2021; Ogonowska, 2022; Saraswati et al., 2022). Research was also focused on identifying those personality traits that correlate with a higher tendency to succumb to conspiracy stories. Some of them will be outlined in the next section.

1.2 Correlates of Trust/Belief in Conspiracy Stories

K. M. Douglas et al. (2017) conducted a meta-analysis of research studies aimed at identifying the psychological factors behind the popularity of conspiracy theories and identified the underlying *reasons/motives* that attract people to conspiracy stories. These were divided into three areas: a) *existential* (e.g. the desire for control and security), b) *social* (the desire to maintain a positive image of oneself and the social group)⁵, and c) *epistemic* (e.g. the desire to be understood, accurate and subjectively secure). The authors derived the taxonomy from the Theory of System Justification by J. T. Jost et al. (2008), and add that people may not even be aware of these motives.

L. Stasielowicz (2022) focused on identifying those *personality dimensions* that are associated with susceptibility to conspiracy stories. To this end, he conducted a complex three-level Bayesian meta-analysis (686 correlations, 127 independent samples) and found that people who believe in conspiracy theories on average suffer from paranoia or schizotypy, are narcissistic or religious/spiritual, and have relatively low *cognitive abilities* (more details below), and according to M. Abalakina-Paap et al. (1999), they are hostile and distrustful. The risk traits also include anxiety (Grzesiak-Feldman, 2013). Research shows that, in addition to personality dimensions and characteristics, *situational variables* also play an important role: anxiety and feelings of uncertainty and powerlessness (Abalakina-Paap et al., 1999; Van Prooijen & Jostmann, 2013).

Furthermore, proclivity toward conspiracy stories can also be attributed to the field of *cognition and cognitive abilities*. Some research has linked the belief in conspiracy stories to lower levels of education (Douglas et al., 2016) and lower levels of analytical thinking (Swami et al., 2014). People who fall for conspiracy stories have an external locus of control

⁴ Authors’ note: B. Crutz (2024) reports that searches for “free voice cloning software” increased by 120% between July 2023 and 2024. It only takes three seconds of sound to create an 85% match between the cloned voice and the original.

⁵ Authors’ note: Here, conspiracy theories make use of the “self” and the group by allowing the blame for negative outcomes to fall on others. Thus, they help us maintain the image of the “self” and the group as competent, moral and valuable, but sabotaged by the powerful and unscrupulous.

(Abalakina-Paap et al., 1999), and the proclivity to conspiracy stories is stronger among those who typically search for meaning and patterns in the environment (Bruder et al., 2013) and believe in magical and paranormal phenomena (Dieguez et al., 2015; Van der Wal et al., 2018; Enders & Smallpage, 2019).

Whether positive or negative, the mutual correlations should also be viewed in terms of one of the most complex ways of thinking – human creative thinking.

1.3 Human Creativity, Creative People vs. Perceptual Rigidity

E. P. Torrance's (1998, 1990; Torrance & Ball, 1984) theory asserts that creative people are able to keep their minds open long enough to make mental leaps, maintain an open mind and refrain from jumping to early and premature conclusions (Torrance, 1971). The less creative individuals tend to jump to early conclusions. This ability is identified in creativity tests as "resistance to premature closure" (Torrance, 1971, p. 94). It is also linked with *flexibility* (flexibility of thought, ability to find different possible views or approaches to a solution and present diverse ideas) (Guilford, 1950, 1982). Creativity is also associated with the *tolerance for ambiguity* (Guilford, 1982; Dacey & Lennon, 2000; Van Hiel et al., 2016; and others) who discuss the ability to maintain an unprejudiced attitude towards an ambiguous situation, manage the tension stemming from an ambiguous and open-ended solution, and not to succumb to patterns and stereotypes (Dacey & Lennon, 2000; Sternberg, 2001).

On the other hand, people who believe in conspiracy stories need clear and relatively quick solutions or explanations that reduce the experienced feelings of uncertainty and anxiety (Abalakina-Paap et al., 1999; Grzesiak-Feldman, 2013; Van Prooijen & Jostmann, 2013). According to P. Dubóczy (2024, "Na začiatku je podozrenie" section, para. 2): "when evaluating the situation [in conspiracy stories] the causes are almost always simplified and the specifics or factors that influenced them are forgotten"⁶. And, as stated above, people jump to early conclusions. In contrast to flexible solutions to problems, a certain type of cognitive, but also perceptual *rigidity* can be observed, which we characterize as the tendency to create and persistently use mental and behavioral patterns. Both concepts (flexibility and rigidity) deal with the ability to adapt to changes and new information. Rigidity can lower or inhibit the ability to think about new or diverse solutions to problems (which is also positively correlated with authoritarianism) (Costello et al., 2022; Stoycheva et al., 2020; Contu et al., 2024). The concept of perceptual rigidity is plausibly anchored mainly in the Gestalt theory of the "pregnanz" (the good shape), and is considered to be one of the most sophisticated tests of this type (Vollhardt, 1990). J. Koenderink et al. (2018) view *pregnanz* as the presence of a certain tension in the perceptual field. It is a multifaceted Gestalt-based psychological concept, which indicated the "goodness" of the experienced perceptual organization (Van Geert & Wagemans, 2024). The elimination of unnecessary details and an emphasis on the characteristic features of the overall organization in comparison with the reference organization can contribute to a "better" Gestalt (without tensions).

In the present study, we attempt to examine the possible links between conspiracy stories as a solution to reduce the tensions stemming from situational uncertainty, complexity and ambiguity, and thus from the possible lower cognitive flexibility (rigidity).

⁶ Authors' note: The text of the quotation in the original language: "pri hodnotení situácie sa [v konšpiračných príbehoch] skoro vždy zjednodušujú príčiny a zabúda sa na špecifiká či faktory, ktoré ju ovplyvnili" (Dubóczy, 2024, para 2).

2 Methodology

2.1 Research Objectives and Research Problems

The goal of the pilot study is to identify the possible links between exposure to conspiracy stories and the identified degree of creativity and perceptual rigidity (stiffness, inflexibility) in university students.

In accordance with this goal, we defined the following three basic research problems:

- RQ1:** Is there a significant negative relationship between creativity and the belief in conspiracy stories?
- RQ2:** Is there a significant negative relationship between creativity and rigidity?
- RQ3:** Is there a significant positive relationship between the belief in conspiracy stories and rigidity?

These questions will be analyzed in detail in subsequent research and the results of this pilot study will be taken into account.

2.2 Methods

Based on the research problems articulated above, we decided to use standardized and semi-standardized methods.

- a) We measured *creativity* by means of a psychodiagnostic test, which was standardized in Slovakia by a team led by T. Kováč (Urban et al., 2002) and bears the name of its first author – Urban’s Figural Test of Creative Thinking (Urban & Jellen, 1995) (TSD-Z). The test not only identifies divergent productions, but also the so-called “creative personality tuning”, and is applicable to different age groups. The test isn’t time-consuming (it only takes 15 minutes to administer).
- a) We measured *cognitive rigidity* with the Breskin Rigidity Test (BRT) (Breskin, 1968). This is a short non-verbal test, the administration of which takes 3 minutes. The test is based on the Gestalt theory and its laws of perception. It contains 15 pairs of visual items and reveals one’s mental flexibility versus rigidity. It renders solid psychometric data (Maltby & Lewis, 1996; Proroković, 2002).
- b) We measured the susceptibility to conspiracy stories with the help of the method developed by S. M. Smallpage et al. (2023) who compiled and verified the List of Conspiracy Theories (LCT). It contains eight most frequent conspiracy stories and was validated in eight countries to identify intercultural differences.

All data were statistically confronted through statistical procedures. We used descriptive (AM, sd) and inferential statistics. We worked with Excel and SPSS statistical software.

2.3. Population and Sample

The presented study is a pilot study within more broadly conceived research, the aim of which is to compare the observed variables internationally (Slovakia, Czech Republic, Poland, Lithuania) and three main age cohorts (adolescents, adults and seniors) will be included in the population set. The current pilot study is aimed at the subset of adolescents, namely university students, as a specific group with expected higher cognitive standards. According to available statistics, there are a total of 115,768 university students in Slovakia (full-time and part-time students) (Statistical Yearbook – Universities, 2023/2024). Given the size of the population, at least 383 respondents will be needed in the second phase of our research at a Confidence Level of 95% and a Confidence Interval of 0.05. We will use similar procedures for other target groups. For the needs of the pilot study and in accordance with the procedures for the pilot study, we selected a sample with $N=23$ respondents. Their mean age was 19,49 years ($sd = 1,03$). We ensured respondent anonymity by standard coding.

3 Results

All collected data were first analyzed through descriptive statistical procedures, the results of which are illustrated in Table 1. The basic indicators do not differ from the reference data (standardized data) for each of the monitored variables. S. Breskin (1968) stated an average score of 7.60 points in the test, however, the respondents in our sample achieved a score of 7.48 points. The sample was relatively heterogeneous in this respect ($sd=3.145$), i.e. there are relatively huge interindividual differences in this variable and it covers the entire score range. Moreover, its distribution shows signs of normal distribution (Table 2). In the area of creative performance, the respondents in the sample achieved an average score of 29.52 points in comparison with the 30.7 standard (Urban et al., 2002). It should be noted that although the rating is lower, it is expected considering the absence of the time factor, which is neglected in group administration.

We have noted a high degree of inter-individual variability ($sd=12.47$) in the sample, meaning that it includes respondents with well above-average scores, but also those with deeply below-average results. Moreover, the score in the sample does not show signs of normal distribution (Table 2).

The third monitored variable was belief in conspiracy stories, which was monitored by the number of stories the respondents reported to believe in and/or relate to. The wording and motivation behind this question was adopted from S. M. Smallpage et al. (2023).

Table 1: Average score and other indicators of descriptive statistics for the observed variables of rigidity (BRT score), creativity (TSD-Z score) and the number of conspiracy stories the respondents agreed with (CS score) in the studied sample of Slovak university students

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
BRT_score	23	1.00	14.00	7.4783	3.14599	-.016	.481	-.148	.935
TSD_Z_score	23	12.00	57.00	29.5217	12.47131	.759	.481	-.296	.935
CS_score	23	.00	5.00	1.7391	1.25109	.848	.481	.850	.935
Valid N (listwise)	23								

Source: own processing, 2024

Table 2: Normality of distribution of the monitored variables

Tests of Normality	Kolmogorov-Smirnov ^b			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
BRT_score	.135	23	.200 ^a	.978	23	.865
TSD_Z_score	.188	23	.035*	.917	23	.057
CS_score	.201	23	.017*	.903	23	.030*

a. This is a lower bound of the true significance.

b. Lilliefors Significance Correction

*. Significant diff.

Source: own processing, 2024

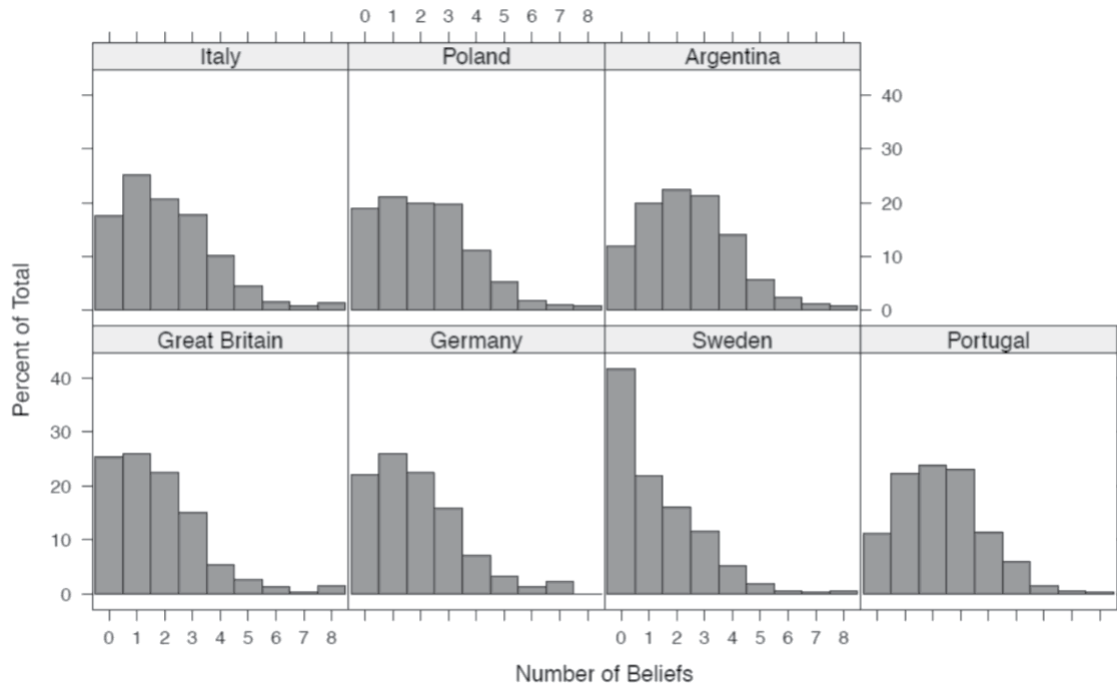


Figure 2: Distribution of conspiracy belief count in each country
Source: Smallpage et al. (2023, p. 11)

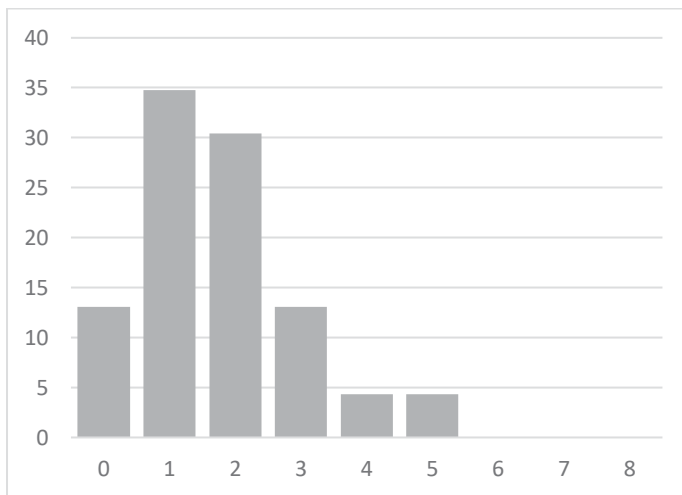


Figure 3: Comparison with the results from Slovakia
Source: own processing, 2024

Table 3: Results of the statistical analysis of relationships between the monitored variables: rigidity (BRT score), creativity (TSD-Z score) and belief in conspiracy stories (CS score)

Nonparametric Correlations			BRT_score	TSD_Z_score	CS_score
Kendall's tau_b	BRT_score	Correlation Coefficient	1.000	-.231	.047
		Sig. (2-tailed)	.	.141	.781
		N	23	23	23
	TSD_Z_score	Correlation Coefficient	-.231	1.000	.109
		Sig. (2-tailed)	.141	.	.507
		N	23	23	23
	CS_score	Correlation Coefficient	.047	.109	1.000
		Sig. (2-tailed)	.781	.507	.
		N	23	23	23

Source: own processing, 2024

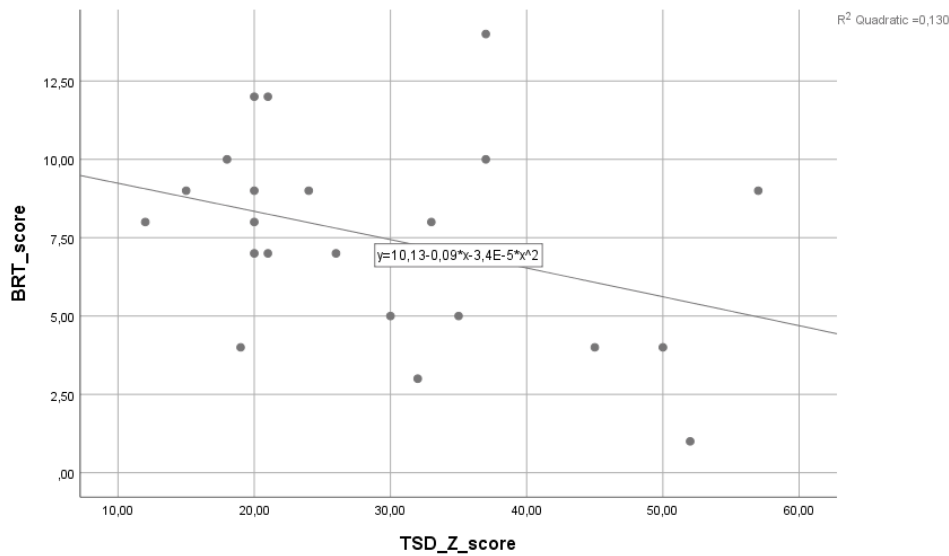


Figure 3: Expected negative linear relationship between rigidity (BRT score) and the level of creativity (TSD-Z score) in the investigated sample of university students
Source: own processing, 2024

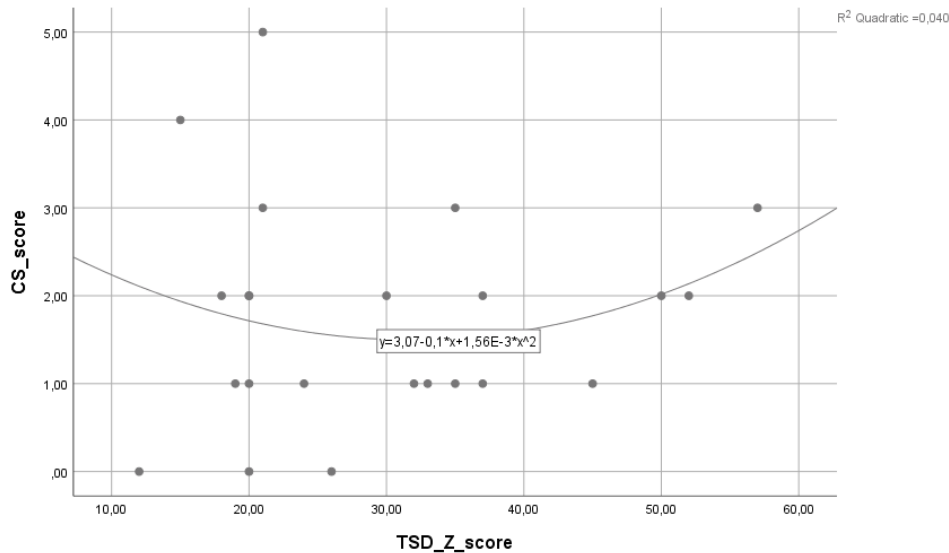


Figure 4: Estimation of the possible non-linear relationship between beliefs in conspiracy stories (CS score) and the level of creativity (TSD-Z score) in the investigated sample of university students.

Source: own processing, 2024

These authors tested two different conditions for identifying the penetration of conspiracy stories in seven countries. Randomly formed groups of respondents were presented with two different wordings of questions aimed at the belief in conspiracy stories. The authors obtained remarkably consistent results across the board in all tested countries, and found that the respondents in the groups with the question “how many of the presented stories do you believe in” admitted to a greater number of conspiracy stories than the respondents in the groups with the question “which of the presented stories do you believe in” (on average by 0.5 sd, Condition 1 $AM_1=1.53$, Condition 2 $AM_2=2.31$) (Enders et al., 2021). The authors attribute the above to socially desirable responses and a systematic underestimation of conspiracy beliefs. In our sample, we identified an average score of 1.74, which is in the lower part of the interval compared to other countries. The reasons and possible interpretations of this result are discussed in the relevant section.

The expected significantly negative linear relationship between creativity and rigidity was not confirmed in our sample (see, Table 3) (RQ2) although the data in the graph form indicate this direction (Figure 3). We also have to provide a negative answer to RQ3: no significant relationship between the belief in conspiracy stories and rigidity was noted in the studied sample of university students (Table 3).

As part of our analysis, we also determined whether creativity (TSD-Z score) serves as prophylaxis against the belief in conspiracy stories (CS score). The statistical confrontation of our data did not show this relationship (Table 3) (RQ1). Considering the fact that weak correlations do not necessarily mean that there is no connection between the variables at all, but rather that no linear relationship exists, we tried to identify a quadratic function based on the measured data as illustrated in Figure 4. The convex shape of the curve indicates that the tendencies in the susceptibility to conspiracy theories are similar in the extreme values of creativity (low and high) and weaker in the medium values. This finding is interpreted and discussed in the next section.

4 Discussion and Limits

The results make us conclude that the reliability estimate of internal consistency in the rigidity test is at ($\alpha > 0.69$) in the presented pilot study. These results are consistent with those presented by A. Proroković (2002) two decades ago who verified the psychometric properties of the rigidity questionnaire on a Croatian sample of university students ($\alpha > 0.70$). At the same time, it was shown that the internal consistency of the rigidity test is in the acceptable range and borderline good, which is a better result in comparison with Serbian university students ($\alpha > 0.50/0.60$) whose psychometric properties in the rigidity questionnaire were verified relatively recently by J. S. Starčević (2020).

In our sample, the susceptibility to/belief in conspiracy stories was in the lower part of the interval (an average score of 1.74) and, compared to other countries, it is closer to the results collected in Sweden and Great Britain than to the countries with a higher degree of belief in conspiracy stories, such as Portugal and Poland, in the research studies by S. M. Smallpage et al. (2023). Considering the 2022 (Globsec Trends, 2022) Globsec findings, according to which Slovakia is one of the most conspiratorial countries (54% of respondents believe in conspiracy theories and manipulative narratives), the results obtained by us are surprising and optimistic. They indicate that the younger generations at universities have a higher resistance to conspiracy stories than the rest of the population. However, these indications must be examined more closely and supported by data from older cohorts, and also from younger respondents from an unsorted population (outside the university environment). If the above trends are confirmed through extensive research, they may signal a positive impact of higher education on the resistance to conspiracy stories and an adequate level of critical thinking. However, the findings presented by us have significant limitations because our data were collected from a considerably small sample of respondents, which did not form a representative sample.

The results did not confirm our assumptions regarding creativity and resistance to premature conclusions in people who are more resistant to conspiracy theories. We noticed that the respondents with lower creativity were more likely to succumb to conspiracy stories, however, the relationship between these two variables is apparently not linear, and it seems that people with both low and high creativity (as opposed to those with average creativity) show similar signs in relation to conspiracy stories. However, we believe that it is too early to interpret this trend considering the small size of the sample, non-significant results and the fact that the findings cannot be generalized.

5 Conclusion

Based on the above facts, we can draw the following conclusions:

- the results suggest a negative relationship between rigidity and human creativity but are non-significant in the observed sample of university students;
- a significant linear relationship between human creativity and the belief in conspiracy stories (CS) was not confirmed although a trend indicating a possible non-linear nature of this relationship (in the studied sample) was shown;
- a significant linear relationship between rigidity and the belief in conspiracy stories (CS) was not confirmed;
- the research has limitations (low number of respondents, gender imbalance, lack of other factors and moderators) as it was only focused on a section of one single age cohort.

This preliminary study needs to be supplemented by other identification and diagnostic methods (specific creativity tests, identification of the need for structure and personality variables) as well as by a more robust and representative research sample, possibly also including different age cohorts.

Likewise, the confrontation with outputs created through artificial intelligence (AI) also poses a huge challenge – especially those that deliberately manipulate sound, images or even entire video recordings (the so-called deep fakes). Certain forms of deep fake can already generate new conspiracy stories or create evidence for those that have been known for some time. For example, one of them is a fake video of President Nixon announcing the Apollo 11 disaster (Stocker, 2019).

The ability to face and process such content will definitely require other skills and knowledge, especially in the field of technology, in addition to sound personal judgment, a flexible mind and critical thinking.

On the other hand, when used correctly, AI can also become a means of improving critical thinking and reducing the beliefs in conspiracy stories. Stimulating research along these lines was carried out by T. H. Costello et al. (2024) with 2190 participants (believers in conspiracy stories). Through mutual dialogue, AI was able to reduce the belief in specific stories that each of them articulated by an average of 20%. Likewise, their conspiratorial thinking generally decreased and this result persisted even after two months since the conclusion of the study.

Despite the limitations in the interpretation frameworks of the research results presented by us, we believe that the pilot study has shown certain tendencies. It has also been shown that the tendency to succumb to conspiracy stories is a more complex phenomenon, which requires a multi-layered approach, and as suggested by other studies (Costello et al., 2024), the sources of this resilience can also be found in the constructive use of creative dialog and skills, which also encourage and foster critical thinking.

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