PARANOID AND CONSPIRACY BELIEFS: THE ROLE OF ANXIETY AND LIFE SATISFACTION

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Abstract

This study aimed to examine the relationship between paranoid and conspiracy beliefs and how these beliefs further relate to anxiety-trait, anxiety disorders, and satisfaction with life. The research was attended by 814 participants who were administered the Paranoia Scale, the Slovak Conspiracy Belief Scale, the State-Trait Anxiety Inventory, and the Satisfaction With Life Scale. The results suggest that paranoid beliefs were associated with conspiracy beliefs, anxiety-trait, and life satisfaction. All of the variables together accounted for almost 40% of the variance of paranoid beliefs. In addition, the presence of anxiety disorders had a relatively strong effect on the level of paranoid beliefs. However, life satisfaction and anxiety-trait were not related to conspiracy beliefs. These results suggest the more attention should be drawn to mental health as both anxiety level and life satisfaction, along with conspiracy beliefs significantly predicted paranoid beliefs.

Keywords: anxiety, conspiracy beliefs, life satisfaction, paranoid beliefs

Introduction

Paranoia is generally understood as a style of thinking manifested as exaggerated, self-centered tendencies that arise in everyday behavior (Fenigstein & Vanable, 1992). Such paranoid beliefs are associated with irrational distrust, suspicion, and fear that something bad might happen, or with the feeling that other people might want to cause such an event (e.g., Newman Taylor & Stopa, 2013; Freeman et al., 2006). Empirical studies have demonstrated that paranoia exists on a continuum spanning both psychopathology and the general population (Bebbington et al., 2013; Ellett et al., 2003; Freeman et al., 2005; Hajdúk et al., 2018). In general, paranoid thoughts are not a clinical problem, becoming so only when they are excessive, exaggerated, or unfounded, and cause distress (Freeman et al., 2005). These thoughts can take many forms and can vary considerably in intensity, but they have a similar basis - that other people intend to cause one harm (Freeman et al., 2006).

A similar nature can be observed in a conspiracy theory, which is defined as an intended conspiracy of powerful people or organizations secretly working together to achieve a certain, usually a sinister goal (Wood et al., 2012). While conspiracy refers to a true causal chain of events, conspiracy theory refers to accusations of conspiracy, which may or may not be true (Douglas et al., 2019). Freeman and Bentall (2017) present some common characteristics of conspiracy theories: (1) the world or an event is held to be not as it seems; (2) there is believed to be a cover-up by powerful others; (3) the believer's explanation of events is accepted only by a minority; and (4) the explanation is unsupported when the evidence is weighed up. We can find some association between paranoid and conspiracy beliefs as both of them have a suspicious basis. Therefore, we can assume that even individuals who believe in conspiracy theories could have the paranoid trait. Darwin et al. (2011) supported this assumption as their findings suggest that paranoid ideations are strongly associated with belief in conspiracy theories. An association has also been found between conspiracy beliefs and schizotypal personality traits (Barron et al., 2018; Darwin et al., 2011; Swami et al., 2013; Van der Tempel & Alcock, 2015), whereas suspiciousness (Swami et al., 2016), delusional ideation (Dagnall et al., 2015), ideas of reference (Barron et al., 2014) and odd beliefs or magical thinking (Barron et al., 2014; Swami et al., 2016) emerged as predictors of conspiracy beliefs. The research of Barron et al. (2018) also suggests a relationship between conspiracy beliefs and components of schizotypy, specifically ideas of reference and odd beliefs or magical thinking. Another study suggests that belief in conspiracies is related to hostility and a low level of trust (Abalakina-Paap et al., 1999), which can also be described as aspects of paranoia. Freeman and Bentall (2017) mention that conspiracy beliefs are closely related to the spectrum of paranoia, in which one perceives individual threats from others. Therefore the authors conclude that unsubstantiated conspiracy and paranoid beliefs are forms of excessive mistrust that can have negative effects on the individual as well as on society.

Both conspiracy and paranoid beliefs have not only similar cognitive, but also emotional basis. The emotion often associated with suspicious thoughts in both constructs is anxiety, which stems from unfounded fears of other people, or from a tendency to suspect and perceive conspiracy where it is not justified. Also, when people are anxious, they often exaggerate the degree of probability that something bad can happen to them, and they see the danger in situations that are in fact completely safe (Freeman et al., 2006). Paranoid thoughts have been repeatedly found to be associated with anxiety (e.g., Hajdúk & Heretik, 2016; Johns et al., 2004) and social anxiety (e.g., Martin & Penn, 2001; Matos et al., 2013). Research also suggests that state and trait anxiety is positively correlated with conspiracy thinking (Grzesiak-Feldman, 2013).

Finally, people convinced of the truth of conspiratorial and paranoid thoughts can feel that the world is a dangerous and evil place where everyone is trying to hurt them. That is why these beliefs could to some extent be related not only to anxiety but also to life satisfaction, which is negatively related to state anxiety (Headey et al., 1993) and trait anxiety (Paolini et al., 2006). In addition, Freeman and Bentall (2017) found in an epidemiologically representative sample that individuals endorsing the conspiracy theories had lower levels of psychological well-being and were more likely to meet the criteria for a psychiatric disorder.

The main goal of this study was to analyze the relationships between paranoid and conspiracy beliefs, and anxiety-trait. Following the theoretical background, it can be assumed that higher levels of paranoid beliefs will be associated with higher levels of conspiracy beliefs, and higher levels of both paranoid and conspiracy beliefs will be associated with higher levels of anxiety-trait. Further, we wanted to explore whether anxiety disorders play a role in the levels of paranoid and conspiracy beliefs and also how these beliefs relate to global satisfaction with life.

Methods

Procedure

The data collection was conducted between February 16th and May 7th, 2020, via the internet and it was terminated when we stopped receiving any more responses. In this study, a mixture of convenient and snowball sampling approach was used. The data were collected through the Google Forms platform. Participants were recruited via social media and asked to take part in the study and share it with their friends. Participation in the study was anonymous and participants provided informed consent electronically.

Participants

The study involved 814 Slovak-speaking participants (609 women, 205 men) in age 18 – 82 years ($M = 24.82$; $SD = 8.36$). The sample consisted of primary school graduates ($n = 2$; .2%), high school students and graduates ($n = 164$; 20.1%), and university students and graduates ($n = 648$; 79.6%). We were also interested in whether the participants are currently suffering from a mental disorder and if so, what type of mental disorder. The mental disorder was reported by 175 participants (21.5%). Anxiety disorders ($n = 137$; 78.2%) were the most common, followed by depression ($n = 79$; 45.0%), alcohol and other drug addictions ($n = 22$; 12.5%) and personality disorders ($n = 8$; 4.5%). Some participants reported other disorders ($n = 15$; 8.6%), including obsessive-compulsive disorder (OCD), eating disorders, attention deficit hyperactivity disorder (ADHD), paranoia, bipolar disorder, or Asperger's syndrome. Some participants identified several comorbid diseases at the same time.

Instruments

The Paranoia Scale (PS, Fenigstein & Vanable, 1992) is the most widely used dimensional measure of paranoia (Freeman et al., 2005). It is a 20-item scale that measures non-

clinical paranoid ideations as a response to everyday events and situations. Each item is rated on a five-point scale (1 - not at all applicable to me, 5 - extremely applicable to me). Scores can range from 20 to 100 with higher scores indicating higher levels of paranoid beliefs. Fenigstein and Vanable (1992) report good internal consistency ($\alpha = .84$) and test re-test reliability (.70), indicating good stability over time. The Slovak version of the scale (Hajdúk & Heretik, 2016) was used in this study, which also has acceptable psychometric properties with Cronbach's $\alpha = 0,89$ and Revell's $\beta = 0,81$.

The Slovak Conspiracy Belief Scale (SCBS, Ballová Mikušková, 2018) was used to measure conspiracy beliefs. The scale contains 25 items, which were created by an analysis of the main Slovak media websites and some alternative websites propagating conspiracy theories and unwarranted statements. Each item is rated on a six-point scale (1 - totally disagree, 6 - totally agree). Given that unwarranted statements in this questionnaire have a similar nature to conspiracy theories, both were included in the study. The total score of conspiracy beliefs and unwarranted statements was computed, where a higher score indicates a higher rate of conspiracy beliefs. Ballová Mikušková (2018) reports high internal consistency (Cronbach's $\alpha = .89$).

The State-Trait Anxiety Inventory (STAI-T, Spielberger et al., 1970; Slovak version by Müllner et al., 1980) was used to measure anxiety-trait. The inventory consists of a total of 40 items, of which 20 are intended to measure state-anxiety and another 20 to measure anxiety-trait. For this study, we used only the anxiety-trait subscale. Each item is rated on a four-point scale (1 - almost never, 4 - almost always). STAI-T scores range from 20 (almost never anxious) to 80 (almost always anxious).

The Satisfaction With Life Scale (SWLS, Diener et al., 1985) is a 5-item self-report measure that measures global life satisfaction. Each item is rated on a seven-point scale (1 - strongly disagree, 7 - strongly agree), so the possible range of scores on the questionnaire is

from 5 (low satisfaction) to 35 (high satisfaction). The instrument has acceptable psychometric properties with Cronbach's $\alpha = .87$ (Diener et al., 1985). The questionnaire was translated into the Slovak language for the purpose of this study.

Statistical analysis

The data were analyzed using IBM SPSS 23 and JASP 0.14.1. We used the raw scores of the questionnaires that were generated as a result of adding the individual scale values. Descriptive analysis, Pearson correlation analysis, linear regression analysis, and t-tests for two independent samples were performed in the statistical data processing. The Cronbach's reliability coefficient was used to evaluate the internal consistencies of the scales.

Results

Descriptive statistics and internal consistency estimates for PS, SCBS, STAI-T, and SWLS can be found in Table 1. The Cronbach's coefficient α was used to evaluate the reliability of the research methods, which showed a good internal consistency for each method.

Table 1. Descriptive statistics and reliability of examined variables.

	<i>M</i>	<i>SD</i>	99% CI	Skewness	Kurtosis	Cronbach's α
PS	47.68	14.50	46.36, 48.99	.21	-.66	.90
SCBS	65.87	20.82	63.98, 67.75	.57	-.21	.91
STAI-T	49.41	13.19	48.21, 50.60	.06	-.86	.94
SWLS	22.79	6.73	22.18, 23.40	-.38	-.50	.86

First, the relationships between paranoia, conspiracy beliefs, anxiety-trait, and life satisfaction were examined using Pearson's correlation (Table 2). The results of the correlation analysis showed significant relationships between paranoia and conspiracy beliefs, anxiety-trait, and life satisfaction ($p < .001$). Relationships between conspiracy beliefs and anxiety-trait ($p = .166$) and life satisfaction ($p = .771$) were not significant.

Table 2. Bivariate correlations with 99% confidence intervals.

	PS	SCBS	STAI-T
PS			
SCBS	.26 [.18, .34]		
STAI-T	.56 [.49, .62]	.05 [-.04, .14]	
SWLS	-.44 [-.51, -.37]	.01 [-.08, .10]	-.64 [-.69, -.58]

Note. Correlations presented in bold are significant at $p < .001$.

As the next step, a regression analysis was conducted, with conspiracy beliefs, anxiety-trait, and life satisfaction as predictors, and paranoid beliefs as an outcome variable, as the relationships between these variables and paranoid beliefs emerged as significant in the correlation analysis. The regression model is consistent with these results, as all of the variables – conspiracy beliefs ($\beta = .241$; $p < .001$), anxiety-trait ($\beta = .441$; $p < .001$) and life satisfaction ($\beta = -.164$; $p < .001$) showed up to significantly contribute to the paranoid beliefs. All of the variables together accounted for 38.1% of the variance.

Table 3. Linear regression analyses predicting PS.

	PS					
	<i>b</i> (<i>SE</i>)		99% CI	β	<i>t</i>	<i>p</i>
Constant	20.733 (3.526)		13.811 – 27.655		5.879	<.001
SCBS	.168	(.019)	.130 – .206	.241	8.697	<.001
STAI-T	.485	(.039)	.407 – .562	.441	12.292	<.001
SWLS	-.354	(.077)	-.505 – -.202	-.164	-4.583	<.001
<i>F</i> (3, 810) = 166.191, <i>p</i> < .001, <i>R</i> ² = .381, <i>R</i> ² _{Adjusted} = .379						

Further, analyses were conducted to explore whether the differences in measured variables exist between the participants who reported the anxiety disorders and those who did not. Depending on this criterium, participants were divided into two groups. As Table 4 shows, there indeed were significant differences in paranoid beliefs, anxiety-trait, and life satisfaction ($p < .001$).

Table 4. Independent sample t-test for the group with and without the anxiety disorders (AD).

	Without AD (<i>n</i> = 678)		With AD (<i>n</i> = 136)		Welch's <i>t</i> -test (<i>df</i>)	Cohen's <i>d</i>	99% CI
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
PS	45.96	14.18	56.24	13.01	-8.276 (204.640)	-.755	-1.015, -.494
SCBS	66.00	21.11	65.22	19.38	.421 (204.582)	.038	-.204, .280
STAI-T	46.77	12.25	62.53	9.34	-16.968 (238.579)	-1.447	-1.742, -1.150
SWLS	23.66	6.46	18.46	6.40	8.645 (194.189)	.810	.545, 1.073

Note. Welch's *t*-test presented in bold are significant at $p < .001$.

Based on the differences mentioned above ($d = .755 - 1.447$), a partial correlation analysis was conducted. After controlling for anxiety disorder, the results showed that anxiety disorders had just little effect on the zero-order correlations reported earlier. Paranoid beliefs significantly correlated with conspiracy beliefs ($r = .27$; $p < .001$), anxiety-trait ($r = .51$; $p < .001$), and life satisfaction ($r = -.40$; $p < .001$). Also, life satisfaction again significantly correlated with anxiety-trait ($r = -.59$; $p < .001$).

Discussion

The aim of this study was to examine the relationship between paranoid and conspiracy beliefs and also to find out how these beliefs further relate to anxiety-trait, anxiety disorders, and global satisfaction with life.

First, the relationship between paranoia and conspiracy beliefs was examined as both beliefs have a suspicious basis. Conspiracy beliefs could have a close connection with the spectrum of paranoia, in which one perceives individual threats from others (Freeman & Bentall, 2017). Therefore, it could be assumed that higher levels of paranoid beliefs will be associated with higher endorsement of conspiracy theories. In the present study, this association was indeed found. These results are consistent with previous findings (e.g., Darwin et al., 2011; Freeman & Bentall, 2017). In addition, it was also found that conspiracy beliefs relatively strongly predicted the level of paranoia.

For both paranoid and conspiracy beliefs, anxiety could play an important role, which can stem from unfounded fear of other people, or from a tendency to suspect and perceive conspiracy where it is not justified. Research points to a close connection between paranoia and some type of anxiety (e.g., Hajdúk & Heretik, 2016; Johns et al., 2004; Martin & Penn, 2001; Matos et al., 2013). In this study, specifically, anxiety-trait was investigated, which strongly correlated with paranoia and emerged as its strongest predictor. In addition, this research also focused on anxiety disorders, which had a relatively strong effect on the level of paranoid beliefs. On the other hand, the partial correlations showed that the presence of anxiety disorders had just little effect on the correlations reported earlier. Although an association between conspiracy beliefs and anxiety-trait was expected, results suggest that anxiety-trait was not related to conspiracy beliefs. Furthermore, the presence of anxiety disorder did not play an important role in whether or not one believed in conspiracy theories.

In this context, it is also worth noting that participants in this research showed higher average scores in anxiety, compared to other studies that worked with STAI (e.g., Grzesiak-Feldman, 2013; Gudjonsson et al., 2002; Novotný et al., 2006). The authors of the Slovak version of STAI (Müllner et al., 1980) point out that precisely those participants with psychiatric difficulties have significantly higher scores in anxiety (M is around 50; in current research $M = 49.41$). The higher level of anxiety in participants could then be explained by the fact that participants who stated that they currently suffer from a mental disorder (21.5%) were also included in the study, with up to 78.2% of participants in this group reporting that they suffer from the anxiety disorders. In general, anxiety-trait is closely linked to anxiety disorders (Foot & Koszycki, 2004). This finding could also contribute to the higher average anxiety in our research sample. In addition, our research was conducted at the time of the beginning of the COVID-19 pandemic, when the Slovak government has ordered strict preventive regulations aiming to prevent the further spread of the pandemic, which could also have affected the level

of anxiety among respondents. Furthermore, the results Ferreira et al. (2021) showed that those individuals quarantined at home reported higher anxiety and lower health-related quality of life.

Finally, this research focused on how global satisfaction with life is related to paranoid and conspiracy beliefs. The results suggest a negative relationship between life satisfaction and paranoid beliefs. In addition, life satisfaction has been shown to be a significant negative predictor of paranoid beliefs. In contrast, the relationship between life satisfaction and conspiracy beliefs was not significant. In conclusion, conspiracy beliefs, anxiety-trait, and satisfaction with life accounted for almost 40% of the variance of paranoid beliefs.

It should be kept in mind that data for this study were collected in two problematic periods. More than a half of the data was collected in the run-up to the parliamentary elections (February 2020), when the situation in the country was tense and some alternative media and websites spread conspiracy and unwarranted statements, which may have resulted in increased levels of anxiety, paranoia, or conspiracy beliefs. For example, in this research, relatively frequent agreement with the conspiracy relating to the government was observed: „*Our country is not governed by our government, in reality, it is led by financial groups*“ ($n = 311, 38,3\%$). In this regard, Douglas et al. (2019) point out that conspiracy theories arise frequently during political events, which is usually accompanied by low political trust, feelings of powerlessness, uncertainty, and unpredictability. The second half of the data, as mentioned above, was obtained in a period associated with the pandemic situation and the persistence of COVID-19 (March – May, 2020), when a growing number of emerging coronavirus misinformation and conspiracy theories were spreading through the media. For example, in this study, up to 358 (44%) participants agreed with the statement: „*Some viruses and diseases could have been deliberately disseminated into the general population as a biological weapon.*“, which could be related to the current ongoing pandemic situation. It is the sudden social changes and events, which are mainly of a negative nature that cause people uncertainty, fear, and the feeling of

lack of control. These aversive feelings that people experience in crisis stimulate a motivation to make sense of the situation, by accepting various conspiracy theories (Van Prooijen & Douglas, 2017). Based on the fact that we could call this period a period of great social change, or a crisis associated with a spreading pandemic, we could also assume that this period could be associated with a higher level of anxiety, paranoia, and lower satisfaction with life.

The topic of conspiracy and paranoid beliefs has been growing in popularity in the last years. Some of the recent findings are suggesting that it deserves even more attention. For example, research of Kowalski et al. (2020) suggests that coronavirus conspiracy and paranoid beliefs are negatively related to adherence to safety guidelines. Higher levels of coronavirus conspiracy thinking were associated with less adherence to all government guidelines and lower willingness to take diagnostic or antibody tests or to be vaccinated. Such ideas were also associated with other general conspiracy beliefs and paranoia (Freeman et al., 2020). Given the stakes, conspiracy beliefs may seem particularly dangerous.

Current research has several limitations. The first one being the data collection method. The data were collected online and a mixture of convenient and snowball sampling approach was used. Therefore the views of those who are not online could not be assessed. Also, it should be noted that another limitation of this research was the fact that only self-assessment methods were used to obtain the data. It is not possible to assess whether the participants who reported a mental disorder were actually diagnosed and also to assess the severity of the reported disorder. At the same time, even if some of the participants were not properly diagnosed, that does not necessarily mean that the disorder was not present. Also, as mentioned above, the results of this research could be influenced to some extent by the fact that data were collected in two specific periods, before the parliamentary elections and during the pandemic situation.

In conclusion, due to the negative consequences of conspiracy beliefs, it is reasonable to say that they possess a threat. However, we must not forget that, especially during a

pandemic, more attention should also be directed to the mental health of the individuals. The negative effects of a pandemic on mental health could, among other things, be reflected in anxiety and global satisfaction with life, which, along with conspiracy beliefs proved to be significant predictors of paranoia in this study.

References

- Abalakina-Paap, M., Stephan, W. G., Craig, T., & Gregory, W. L. (1999). Beliefs in Conspiracies. *Political Psychology*, 20(3), 637–647. <https://doi.org/10.1111/0162-895X.00160>
- Ballová Mikušková, E. (2018). Conspiracy Beliefs of Future Teachers. *Current Psychology*, 37(3), 692–701. <https://doi.org/10.1007/s12144-017-9561-4>
- Barron, D., Furnham, A., Weis, L., Morgan, K. D., Towell, T., & Swami, V. (2018). The relationship between schizotypal facets and conspiracist beliefs via cognitive processes. *Psychiatry Research*, 259, 15–20. <https://doi.org/10.1016/j.psychres.2017.10.001>
- Barron, D., Morgan, K., Towell, T., Altemeyer, B., & Swami, V. (2014). Associations between schizotypy and belief in conspiracist ideation. *Personality and Individual Differences*, 70, 156–159. <https://doi.org/10.1016/j.paid.2014.06.040>
- Bebbington, P. E., McBride, O., Steel, C., Kuipers, E., Radovanović, M., Brugha, T., Jenkins, R., Meltzer, H. I., & Freeman, D. (2013). The structure of paranoia in the general population. *The British Journal of Psychiatry*, 202(6), 419–427. <https://doi.org/10.1192/bjp.bp.112.119032>
- Dagnall, N., Drinkwater, K., Parker, A., Denovan, A., & Parton, M. (2015). Conspiracy theory and cognitive style: A worldview. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00206>

- Darwin, H., Neave, N., & Holmes, J. (2011). Belief in conspiracy theories. The role of paranormal belief, paranoid ideation and schizotypy. *Personality and Individual Differences*, 50(8), 1289–1293. <https://doi.org/10.1016/j.paid.2011.02.027>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding Conspiracy Theories. *Political Psychology*, 40(S1), 3–35. <https://doi.org/10.1111/pops.12568>
- Ellett, L., Lopes, B., & Chadwick, P. (2003). Paranoia in a nonclinical population of college students. *The Journal of Nervous and Mental Disease*, 191(7), 425–430. <https://doi.org/10.1097/01.NMD.0000081646.33030.EF>
- Fenigstein, A., & Venable, P. (1992). Paranoia and Self-Consciousness. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/0022-3514.62.1.129>
- Ferreira, L. N., Pereira, L. N., da Fé Brás, M., & Ilchuk, K. (2021). Quality of life under the COVID-19 quarantine. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*. <https://doi.org/10.1007/s11136-020-02724-x>
- Foot, M., & Koszycki, D. (2004). Gender differences in anxiety-related traits in patients with panic disorder. *Depression and Anxiety*, 20(3), 123–130. <https://doi.org/10.1002/da.20031>
- Freeman, D., & Bentall, R. P. (2017). The concomitants of conspiracy concerns. *Social Psychiatry and Psychiatric Epidemiology*, 52(5), 595–604. <https://doi.org/10.1007/s00127-017-1354-4>

- Freeman, D., Freeman, J., & Garety, P. (2006). *Overcoming Paranoid and Suspicious Thoughts*. London: Robinson.
- Freeman, D., Garety, P. A., Bebbington, P. E., Smith, B., Rollinson, R., Fowler, D., Kuipers, E., Ray, K., & Dunn, G. (2005). Psychological investigation of the structure of paranoia in a non-clinical population. *The British Journal of Psychiatry*, 186(5), 427–435. <https://doi.org/10.1192/bjp.186.5.427>
- Freeman, D., Waite, F., Rosebrock, L., Petit, A., Causier, C., East, A., Jenner, L., Teale, A.-L., Carr, L., Mulhall, S., Bold, E., & Lambe, S. (2020). Coronavirus Conspiracy Beliefs, Mistrust, and Compliance with Government Guidelines in England. *Psychological Medicine*, 1–30. <https://doi.org/10.1017/S0033291720001890>
- Grzesiak-Feldman, M. (2013). The Effect of High-Anxiety Situations on Conspiracy Thinking. *Current Psychology*, 32(1), 100–118. <https://doi.org/10.1007/s12144-013-9165-6>
- Gudjonsson, G. H., Sigurdsson, J. F., Brynjólfssdóttir, B., & Hreinsdóttir, H. (2002). The relationship of compliance with anxiety, self-esteem, paranoid thinking and anger. *Psychology, Crime & Law*, 8(2), 145–153. <https://doi.org/10.1080/10683160208415003>
- Hajdúk, M., & Heretik, A. (2016). Subklinická paranoja a jej vzťah k emočnému distresu a vzťahovej väzbe. *Československá psychologie : časopis pro psychologickou teorii a praxi*, 60(1), 26–37.
- Hajdúk, M., Klein, H., Harvey, P., Penn, D., & Pinkham, A. (2018). Paranoia and interpersonal functioning across the continuum from healthy to pathological – Network analysis. *British Journal of Clinical Psychology*, 58. <https://doi.org/10.1111/bjc.12199>
- Headey, B., Kelley, J., & Wearing, A. (1993). Dimensions of mental health: Life satisfaction, positive affect, anxiety and depression. *Social Indicators Research*, 29(1), 63–82. <https://doi.org/10.1007/BF01136197>

- Johns, L. C., Cannon, M., Singleton, N., Murray, R. M., Farrell, M., Brugha, T., Bebbington, P., Jenkins, R., & Meltzer, H. (2004). Prevalence and correlates of self-reported psychotic symptoms in the British population. *The British Journal of Psychiatry: The Journal of Mental Science*, 185, 298–305. <https://doi.org/10.1192/bjp.185.4.298>
- Kowalski, J., Marchlewska, M., Molenda, Z., Górska, P., & Gawęda, Ł. (2020). Adherence to safety and self-isolation guidelines, conspiracy and paranoia-like beliefs during COVID-19 pandemic in Poland—Associations and moderators. *Psychiatry Research*, 294, 113540. <https://doi.org/10.1016/j.psychres.2020.113540>
- Martin, J. A., & Penn, D. L. (2001). Social cognition and subclinical paranoid ideation. *British Journal of Clinical Psychology*, 40(3), 261–265. <https://doi.org/10.1348/014466501163670>
- Matos, M., Pinto-Gouveia, J., & Gilbert, P. (2013). The Effect of Shame and Shame Memories on Paranoid Ideation and Social Anxiety. *Clinical Psychology & Psychotherapy*, 20(4), 334–349. <https://doi.org/10.1002/cpp.1766>
- Müllner, J., Ruisel, I., & Farkaš, G. (1980). *Dotazník na meranie úzkosti a úzkostlivosti*. Bratislava: Psychodiagnostické a didaktické testy.
- Newman Taylor, K., & Stopa, L. (2013). The fear of others: A pilot study of social anxiety processes in paranoia. *Behavioural and Cognitive Psychotherapy*, 41(1), 66–88. <https://doi.org/10.1017/S1352465812000690>
- Novotný, V., Heretik, A., sr., Heretik, A., jr., Pečeňák, J., & Řitomský, A. (2006). *Epidemiológia vybraných úzkostných porúch na Slovensku*. Nové Zámky: Psychoprof.
- Paolini, L., Yanez, A. P., & Kelly, W. (2006). An examination of worry and life satisfaction among college students. *Individual Differences Research*, 4, 331–339.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. (1970). *Test Manual for the State- Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.

- Swami, V., Pietschnig, J., Tran, U. S., Nader, I. W., Stieger, S., & Voracek, M. (2013). Lunar Lies: The Impact of Informational Framing and Individual Differences in Shaping Conspiracist Beliefs About the Moon Landings. *Applied Cognitive Psychology*, 27(1), 71–80. <https://doi.org/10.1002/acp.2873>
- Swami, V., Weis, L., Lay, A., Barron, D., & Furnham, A. (2016). Associations between belief in conspiracy theories and the maladaptive personality traits of the personality inventory for DSM-5. *Psychiatry Research*, 236, 86–90. <https://doi.org/10.1016/j.psychres.2015.12.027>
- Van der Tempel, J., & Alcock, J. E. (2015). Relationships between conspiracy mentality, hyperactive agency detection, and schizotypy: Supernatural forces at work? *Personality and Individual Differences*, 82, 136–141. <https://doi.org/10.1016/j.paid.2015.03.010>
- Van Prooijen, J.-W., & Douglas, K. M. (2017). Conspiracy theories as part of history: The role of societal crisis situations. *Memory Studies*, 10(3), 323–333. <https://doi.org/10.1177/1750698017701615>
- Wood, M. J., Douglas, K. M., & Sutton, R. M. (2012). Dead and Alive: Beliefs in Contradictory Conspiracy Theories. *Social Psychological and Personality Science*. <https://doi.org/10.1177/1948550611434786>