What Makes You Think That You Are a Health Expert? The Effect of Objective Knowledge and Cognitive Structuring on Self-Epistemic Authority

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KEYWORDS

self-epistemic authority, epistemic motivation, need for closure, efficacy to fulfil need for closure, objective knowledge, cognitive structuring, expertise

ABSTRACT

Self-epistemic authority (SEA) refers to the subjective judgement of the level of expertise and knowledge a person has in a given domain. While it is reasonable to assume that people's perception of SEA reflects their level of objective knowledge in the given domain, there is evidence to show that people are not optimal judges of their own knowledge. Thus, the present study examined the interaction between the participants' trait-like characteristics of need for cognitive closure (NFC) and efficacy to fulfill the need for cognitive closure (EFNC), which affects the use of cognitive structuring, as a source of SEA. Results of the study confirm that objective knowledge as well as a cognitive-motivational epistemic process (interaction between NFC and EFNC) affect SEA. For high EFNC individuals, the effect of NFC on SEA was positive. However, for low EFNC individuals, the relationship was negative.

INTRODUCTION

The concept of self-epistemic authority (SEA) refers to the subjective judgement of the level of expertise and knowledge a person has in a given domain. The concept is derived from the more general notion of epistemic authority (EA), which was introduced by Kruglanski (1989) as a part of his lay epistemic theory. Epistemic authority addresses the extent to which an individual is inclined to treat a source of information (e.g., other people, magazines, the Internet) as valid and unquestioned (for a review, see Kruglanski, 2012). High EA may be so powerful that it can override other sources of information and exert a determinative influence on individuals' opinions and corresponding behaviors. People process the information from high EA sources as more definite, they are more certain of it, and they tend to act more in accordance with its implications (Kruglanski, 2012).

A significant and unique aspect of EA is that both the self and external sources may be assigned varying degrees of EA in different domains. Ascribing high EA to oneself (i.e., *self-epistemic authority* —SEA) means that an individual believes in his/her own expertise or knowledgeability in a given domain (Ellis & Kruglanski, 1992). This self-source, similarly to external sources, may determine information processing, decision-making, and actions - the greater an individual's SEA in a given domain, the more certain they are about their knowledge or judgment in that domain and the less external information they will seek (Kruglanski et al., 2005). Additionally, in the event of an

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inconsistency between the high SEA person and any other source of information relevant to the SEA domain, the person will tend to accept his/her own beliefs as more accurate and valid than those implied by the other source.

Although it may seem reasonable to assume that people's perception of their SEA reliably reflects their actual level of knowledge in the given domain, in fact, inconsistent findings have been reported across studies regarding the relationship between the actual level of knowledge and its perception. Some research demonstrates relatively low correlations between the actual knowledge and its perception in different domains (Naughton & Friesner, 2012). In some studies on confidence and test performance, individuals showed a tendency to be overconfident in their ability to provide correct answers (e.g., Radecki & Jaccard, 1995). On the other hand, significant positive correlations between measures of these two knowledge constructs have been found in some studies, such as the correlation of .54 reported by Brucks (1985) for objective and subjective knowledge of sewing machines or the correlation of .33 between the objective and subjective knowledge of birth control in the study by Radecki and Jaccard (1995). These results suggest that, even though the actual extent of knowledge demonstrated by the individuals remains related to their - SEA, it explains a relatively low percent of variance in SEA, which indicates that SEA is also affected by factors other than actual knowledge. We suggest that the belief concerning one's own level of expertise (SEA) is influenced by the epistemic motivation affecting the extent and direction of the cognitive activity so as to produce a desired conclusion and grant it sufficient certainty.

Epistemic Motivation as a Source of Self-Epistemic Authority

A critical aspect of Kruglanski's (1989) lay epistemic theory is the presumption of fundamental interdependence between the cognitive and motivational aspects of the knowledge formation/modification process. The initiation and termination of this process largely depends on the person's epistemic motivation. A central motivational construct in lay epistemic theory is the need for cognitive closure (NFC), which is defined as the need to have an answer on a given topic, as opposed to further ambiguity (Webster & Kruglanski, 1994).

Need for cognitive closure represents a stable individual trait as well as a state-like characteristic. In its trait-like form, NFC has been described as a tendency to reduce discomfort experienced in the face of cognitive uncertainty through quick formulation of a hypothesis (seizing) and its rapid validation (epistemic freezing). Cognitive processes used by high-NFC individuals to reduce uncertainty are characterized by cognitive structuring, that is, they are category-based, nonsystematic, and heuristic. In contrast, low-NFC individuals prefer to reduce uncertainty by using piecemeal or individuation processes. Consequently, high NFC people tend to be more certain of their conclusions than low NFC people, because they are able to ignore information (epistemic freezing) that increases uncertainty, that is, schema-inconsistent information, and to direct attention toward schema-consistent information that increases certainty (Kossowska & Bar-Tal, 2013; Webster & Kruglanski, 1994). Given the tendency of people to maintain positive perceptions of various important characteristics they possess (Judge & Bono, 2001), it can be assumed that higher NFC may lead to higher SEA by virtue of the high NFC individual's tendency to avoid information which may weaken their certainty in their preferred cognition. In contrast, lower NFC may result in a more accurate perception, and therefore, a closer relationship between SEA and level of objective knowledge.

However, the notion that high NFC predisposes people to use more simplified and effortless processing, implying that cognitive structuring is an automatic and easy default option, has been challenged by Bar-Tal (1994; Bar-Tal, Kishon-Rabin, & Tabak, 1997; Kossowska & Bar-Tal, 2013). In his cognitive motivational model, Bar-Tal postulates that sometimes, cognitive structuring cannot be employed, even by persons with a high NFC. The fact that some people would like to reduce their uncertainty by means of cognitive structuring does not imply that they perceive themselves as able to do so. Similarly, the fact that some people favor reducing their uncertainty through a piecemeal, effortful epistemic process does not mean that they will perceive themselves as capable of doing so. Therefore, people may not act upon their epistemic need. The central concept in this model is the efficacy to fulfil the need for cognitive closure (EFNC). It is defined as the perceived ability to achieve certainty using the processes consistent with one's NFC. For high NFC persons, this means the efficacy to (a) avoid information that clashes with their existing knowledge and/or (b) cease validating their knowledge at an early stage of the process. For low NFC persons, it means the efficacy of systematic comprehension of all available information and a prolonged process of validation. However, those low EFNC individuals who doubt their ability to achieve certainty that way tend to use largely opposite methods. Therefore, there is a disordinal interaction effect between the NFC and EFNC on the person's epistemic behavior.

In other words, a positive relationship exists between NFC and cognitive structuring behaviors only under instances of high EFNC However, under low EFNC, the effect of NFC is opposite to that suggested by the lay epistemic theory. That is, for low EFNC individuals, there is a negative relationship between NFC and instances of cognitive structuring such as lower certainty, a longer process of information gathering, attention to inconsistent information, and less biased information processing (Bar-Tal, 1994; Bar-Tal, et. al 1997; Bar-Tal & Kossowska, 2010; Kossowska & Bar-Tal, 2013).

Thus, a three-way interaction (knowledge × NFC × EFNC) between NFC and objective knowledge on the one hand, and the moderating effect of EFNC on the relationship between NFC and SEA on the other, can be hypothesized. Specifically, for low EFNC individuals, higher NFC will be related to a more positive correlation between objective knowledge and SEA, that is, a more accurate assessment. In contrast, for high EFNC individuals, higher NFC will be associated with a lower correlation between knowledge and SEA, that is, a less accurate and more biased perception of one's own knowledge.

The knowledge domain chosen for examination in the current study was health, where the role of SEA may be of particular importance.

Whereas physician characteristics and recommendations are obvious factors likely to influence patients' compliance behaviors, recent developments in the conceptualization of the reciprocal roles of physicians and patients also stress the characteristics of the patient (Krupat, Bell, Kravitz, Thom, & Azari, 1996). One of these characteristics may be the patient's SEA regarding health. Currently, patients may ascribe EA on health not only to physicians but to themselves as well, possibly as a consequence of the growing access to medical information, mainly on the Internet. Internet-based resources take various forms, including informational websites, online journals, textbooks, and social media. People are able to obtain substantial amounts of information in almost all health-related areas that interest them. Consequently, they may also develop a feeling of expertise in the health domain, which, in turn, may decrease their willingness to follow their caregivers' recommendations (Stasiuk, Bar-Tal, & Maksymiuk, 2016).

METHOD

Participants and Procedure

This study was conducted in Poland. Participants included 173 women and 170 men, aged 20–61 years, with a mean age of 35.29, *SD* = 10.96, and a mean number of years of schooling being 15.45, *SD* = 2.72. Six interviewers recruited participants on the street and in two academic institutions. Participants were asked the following question for screening: "Is your profession connected to health care (e.g., physician, nurse, paramedic, etc.)?" Respondents who indicated that they worked in a healthcare profession were excluded from the final sample.

People who agreed to take part in the study met the interviewer at home or in other convenient settings, such as a university classroom. After the study was described to the participants, informing them that participation was anonymous, voluntary, and could be withdrawn at any time, the participants' verbal consent was obtained. Participants agreeing to take part in the study completed the paper-and-pencil questionnaire individually.

Measures

HEALTH KNOWLEDGE TEST

A test consisting of 42 multiple choice items was created on the basis of a medical handbook for nonprofessionals (Janicki & Barczynski, 2011), aiming to assess the participants' objective knowledge of various areas of medicine. Evidence of content-based validity was supported by use of a panel of six experts—surgeons, physicians specializing in internal medicine, and orthopedists. These experts reviewed the content of each item and confirmed items appropriate for the purpose of the test. Twelve of the questions were considered appropriate by fewer than four experts, and were omitted as a result. The final version of the Health Knowledge Questionnaire consisted of 30 items, in which respondents were asked to select the best possible option from a choice of three answers. Cronbach's α for the scores obtained using the 30-item measure was .72. The participants' level of knowledge was represented by the percent of correct answers (*M* = 72.28, *SD* = 14.33).

To ensure that the questionnaire was appropriately challenging, participants were asked to evaluate the items' difficulty on a scale from 1 to 7 (where 1 represented *completely not difficult* and 7 represented *very difficult*). The questionnaire was evaluated as slightly difficult (*M* = 4.61, *SD* = 1.28).

NEED FOR COGNITIVE CLOSURE

We used four of the five subscales of the 32-item Polish version (Kossowska, 2003) of Webster and Kruglanski's scale (1994): Preference for order and structure in the environment, predictability of future contexts, affective discomfort occasioned by ambiguity, and closed-mindedness. We excluded the decisiveness subscale because it has been recognized as tapping efficacy to fulfil cognitive closure but not motivation (Roets & Van Hiel, 2007). Respondents rated 27 items on a six-point scale (from 1—*completely disagree*, to 6—*completely agree*). The mean score of all items was 3.79, *SD* = .56. The higher the mean score, the higher the need for cognitive closure (Cronbach's α = .76).

SELF-EPISTEMIC AUTHORITY IN HEALTH

To assess the extent to which participants perceived themselves as experts in health, we used a questionnaire developed and validated by Raviv, Bar-Tal, Raviv, Biran, and Sela (2003). The questionnaire consisted of nine statements (e.g., "I have much knowledge on health issues," "My arguments in health-related issues are based on verified knowledge"), each of which was answered on a six-point scale (from 1—*completely disagree,* to 6—*completely agree*). The mean score for all items was calculated (Cronbach's α = 0.79). The higher the mean score, the higher the evaluation of one's own knowledge in matters of health. The mean was 3.37, *SD* = .68.

RESULTS

Table 1 presents the correlation matrix among the study variables. The table shows that only objective knowledge was significantly correlated with SEA.

We used a three-step hierarchical regression to examine the study hypotheses. In the first step, we introduced the three main effects. In the second step, we examined the three two-way interactions, and in the third step, we examined the effect of the three-way-interaction.

TABLE 1.
The Correlation Matrix

	1.	2.	3.
1. Self-Epistemic Authority	-		
2. Objective Knowledge	.17**	-	
3. Need for Cognitive Closure	.01	.03	-
4. Efficacy to Fulfill the Need for Cognitive Closure	.07	.03	−.21**

** $p < .01$

TABLE 2.
Regression Analysis of SEA Predictors

	B	*SE*	β	*t*	*p*
Objective Knowledge (OK)	.008	.003	.169	3.16	.002
Need for Cognitive Closure (NFC)	.032	.064	.027	.501	.617
Efficacy to Fulfill the Need for Cognitive Closure (EFNC)	.057	.041	.075	1.37	.170
OK × NFC	−.008	.004	−.802	−1.729	.085
OK × EFNC	.000	.003	.013	.035	.972
NFC × EFNC	.162	.058	.904	2.808	.005
OK × NFC × EFNC	.004	.005	2.297	.956	.340

Table 2 shows that, in the first step, only objective knowledge achieved significance and in the second step, only the interaction between NFC and EFNC achieved significance.

To probe for significant interactions, we performed a moderation analysis using Process macro, Model 1, with NFC as an independent variable, EFNC as a moderator, SEA as a dependent variable, and objective knowledge as a covariate, with the option of Johnson – Neyman technique (Hayes, 2013; Preacher, Rucker, & Hayes, 2007). All simple slopes of the participants' SEA on NFC were calculated for each level of EFNC, with objective knowledge as a covariate. Table 3 shows that regression coefficients of the dependent variable on the participants' NFC increased linearly from the lower level of the participant's EFNC to the highest. Also, Table 3 shows that the regression line was significantly negative only from the lowest level of EFNC to the value of 2.31. It was significantly positive from 4.65 to 6.00. These results show that for low EFNC, NFC had a significant, negative effect on SEA, and for high EFNC, NFC had a significant, positive effect on SEA.

DISCUSSION

The present study examined the factors which determine individuals' SEA in the health domain. It was based on the assumption that people's perception of their extent of knowledge is influenced not only by their actual knowledge, but also by cognitive structuring.The results confirmed that the level of the individuals' objective knowledge positively affected thier SEA. This is in line with literature regarding the relationship between objective and subjective knowledge (Brucks, 1985; Carlson, Vincent, Hardesty, & Bearden, 2009; Klerck & Sweeney, 2007; Radecki & Jaccard, 1995). However, relative to other studies, the percent of explained variance was very low (less than 3%). In explaining the low covariation, it could be suggested that health is a domain in which people do not have much objective knowledge nor opportunity to establish a valid perception of their expertise. However, the relative mean of the objective knowledge, as well as the participants' judgement that the Health Knowledge Test was not too difficult, implies that the results cannot be explained by the participants' low knowledge or lack of experience within the health domain.

The low covariation between actual knowledge and SEA points to the possibility that the people's judgment of their own level of expertise is biased. This is consistent with the finding regarding the significant interaction between NFC and EFNC in its effect on people's SEA. The results show that, for high EFNC individuals, higher NFC was associated with higher SEA. In contrast, for low EFNC individuals, higher NFC was associated with lower SEA. That is, for high EFNC individuals, their level of NFC affected their level of SEA independent of their actual knowledge. It is possible to infer that higher NFC was associated with greater overestimations of the partcipiants' expertise and knowledge

TABLE 3.
Simple Slopes of Participants' Self-Epistemic Authority on Participants' Need for Cognitive Closure According to Their Efficacy to Fulfill the Need for Cognitive Closure

Level of participant's ENFC	B of participants' SEA on participant's NFC	SE	*t*	LLCI	ULCI
1.33	−.37	.16	−2.31*	−.68	−.05
1.56	−.36	.14	−2.26*	−.62	−.04
1.80	−.29	.13	−2.19*	−.56	−.03
2.03	−.26	.12	−2.10*	−.50	−.01
2.26	−.22	.11	−1.99*	−.44	−.01
2.31	−.21	.11	−1.96*	−.43	.00
2.50	−.18	.10	−1.84	−.39	.01
2.73	−.15	.09	−1.65	−.33	.02
2.96	−.11	.08	−1.39	−.27	.04
3.20	−.07	.07	−1.04	−.22	.06
3.43	−.04	.06	−.60	−.17	.09
3.66	−.05	.06	−.07	−.13	.12
3.90	.03	.06	.51	−.09	.15
4.13	.07	.06	1.07	−.05	.19
4.36	.10	.06	1.54	−.02	.24
4.60	.14	.07	1.90	−.05	.28
4.64	.15	.07	1.96*	.00	.30
4.83	.17	.08	2.16*	.01	.34
5.06	.21	.09	2.34*	.03	.39
5.30	.25	.10	2.46*	.05	.45
5.53	.29	.11	2.55*	.06	.51
5.76	.32	.12	2.61*	.08	.57
6.00	.36	.13	2.65*	.09	.63

Note. ENFC = efficacy to fulfill the need for cognitive closure; SEA = self-epistemic authority; NFC = need for cognitive closure; LLCI = lower level for confidence interval; ULCI = upper level for confidence interval.

* $p < .05$

in the health domain. This relationship between NFC and biased thinking has often been demonstrated (for reviews, see: Kruglanski, 2012 ; Kruglanski & Webster, 1996; Webster & Kruglanski, 1997). However, the negative slope of SEA on NFC in the case of low EFNC individuals (even if nonsignificant) is clearly inconsistent with the lay epistemic theory. In contrast, this effect is consistent with Bar-Tal's conceptualization of the cognitive motivational model and the empirical support for the disordinal interaction between NFC and EFNC on various manifestations of cognitive structuring (Bar-Tal, 2010; Bar-Tal & Guinote, 2002; Dolinska, Dolinski, & Bar-Tal, 2017; Kossowska & Bar-Tal, 2013; Otten & Bar-Tal, 2002).

In the context of the present study, the negative slope of SEA on NFC for low EFNC individuals may indicate that low EFNC/high NFC individuals either (a) display a biased underestimation or (b) a less overconfident and more accurate judgement of their level of SEA. However, if the second possibility were to be correct, it would result in a significant three-way interaction, as explicated in the Introduction section. The fact that the interaction between NFC and EFNC did not moderate the effect of objective knowledge on SEA (a nonsignificant three-way interaction) rather indicates that the low EFNC/high NFC individuals tend to underestimate their level of expertise in the health domain regardless of their actual level of health knowledge.

This means that there are two independent sources of SEA, objective knowledge and a cognitive motivational epistemic process. In other words, people may perceive themselves as experts in two greatly different circumstances. In one, people perceive themselves as experts because they really are experienced and have the knowledge or the ability in a given domain. In the other, people tend to judge their level of expertise based on their epistemic motivations and their EFNC.

According to the lay epistemic theory, a high degree of EA conferred upon a source may effect a freezing on a given judgement. Based on the results of our study, future research should investigate if this freezing effect of epistemic authority involves both epistemic motivation as well as the efficacy to fulfill it.

Given the current study's conclusions and explanations, it should be acknowledged that that we have tested the cognitive-motivational sources of SEA only in a medical context. To overcome this limitation, future studies should also focus on other contexts, where people cannot form solid beliefs regarding their knowledge (e.g., the economic or political context).

REFERENCES

Bar-Tal, Y. (1994). The effect on mundane decision-making of the need and ability to achieve cognitive structure. *European Journal of Personality, 8*, 45–58. doi: 10.1002/per.2410080105

Bar-Tal, Y. (2010). When the need for cognitive structure does not cause heuristic thinking: The moderating effect of the perceived ability to achieve cognitive structure. *Psychology, 1*, 96–105. doi: 10.4236/psych.2010.12013

Bar-Tal, Y., & Guinote, A. (2002). Who exhibits more stereotypical thinking? The effect of need and ability to achieve cognitive structure on stereotyping. *European Journal of Personality, 16*, 313–331. doi: 10.1002/per.453

Bar-Tal, Y., Kishon-Rabin, L., & Tabak, N. (1997). The effect of need and ability to achieve cognitive structuring on cognitive structuring. *Journal of Personality and Social Psychology, 73*, 1158–1176. doi: 10.1037/0022-3514.73.6.1158

Bar-Tal, Y., & Kossowska, M. (2010). Efficacy at fulfilling the need for closure: The construct and its measurement. In: J.P. Villanueva (Ed.), *Personality traits: Classifications, effects and changes* (pp. 47–64). New York City, NY: Nova Publishers.

Brucks, M. (1985). The effects of product class knowledge on information search behavior. *Journal of Consumer Research, 12*, 1–16. doi: org/10.1086/209031

Carlson, J. P., Vincent, L. H., Hardesty, D. M., & Bearden, W. O. (2009). Objective and subjective knowledge relationships: A quantitative analysis of consumer research findings. *Journal of Consumer Research, 35*, 864–876. doi: 10.1086/593688

Dolinska, B., Dolinski, D., & Bar-Tal, Y. (2017). Cognitive structuring and placebo effect. *Personality and Individual Differences, 119*, 30–34. doi: 10.1016/j.paid.2017.06.030

Ellis, S., & Kruglanski, A. W. (1992). Self as an epistemic authority: Effects on experiential and instructional learning. *Social Cognition, 10*, 357–375. doi: 10.1521/soco.1992.10.4.357

Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York City, NY: Guilford Press.

Janicki, K., & Barczyński, M. (2011). *Domowy poradnik medyczny* [Home Medical Guide]. Warsaw, Poland: Wydawnictwo Lekarskie PZWL.

Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluation traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*, 80–92. doi: 10.1037//0021-9010.86.1.80

Klerck, D., & Sweeney, J. C. (2007). The effect of knowledge types on consumer-perceived risk and adoption of genetically modified foods. *Psychology and Marketing, 24*, 171–193. doi: 10.1002/mar.20157

Kossowska, M. (2003). Różnice indywidualne w potrzebie poznawczego domknięcia [Individual differences in the need for cognitive closure], *Przegląd Psychologiczny, 46*, 355–373.

Kossowska, M., & Bar-Tal, Y. (2013). Need for closure and heuristic information processing: The moderating role of the ability to achieve the need for closure. *British Journal of Psychology, 104*, 457–480. doi: 10.1111/bjop.12001

Kruglanski, A. W. (1989). *Lay epistemics and human knowledge: Cognitive and motivational bases*. New York City, NY: Plenum Press.

Kruglanski, A. W. (2012). Lay epistemic theory. In P. A. M. van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (pp. 201–223). SAGE Publications Ltd.

Kruglanski, A. W., Raviv, A., Bar-Tal, D., Raviv, A., Sharvit, K., Ellis, S.,

& Mannetti, L. (2005). Says who?: Epistemic authority effects in social judgment. In M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 37, pp. 345–392). London, England: Elsevier. doi: 10.1016/S0065-2601(05)37006-7

Kruglanski, A. W., & Webster, D. M. (1996). Motivated closing of the mind: "Seizing" and "freezing." *Psychological Review, 103*, 263–283. doi: 10.1037/0033-295X.103.2.263

Krupat, E., Bell, R. A., Kravitz, R. L., Thom, D., & Azari, R. (2001). When physicians and patients think alike: Patient-centered beliefs and their impact on satisfaction and trust. *The Journal of Family Practice, 50*, 1057–62.

Laine, C., & Davidoff, F. (1996). Patient-centered medicine. A professional evolution. *The Journal of the American Medical Association, 275*, 152–156. doi: 10.1001/jama.1996.03530260066035

Naughton, C. A., & Friesner, D. L. (2012). Comparison of pharmacy students' perceived and actual knowledge using the pharmacy curricular outcomes assessment. *The American Journal of Pharmaceutical Education, 76*, doi: org/10.5688/ajpe76463

Otten, S., & Bar-Tal, Y. (2002). Self-anchoring in the minimal group paradigm: The impact of need and ability to achieve cognitive structure. *Group Processes and Intergroup Relations, 5*, 267–284. doi: 10.1177/1368430202005004001

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42*, 185–227. doi: 10.1080/00273170701341316

Radecki, C. M., & Jaccard, J. (1995). Perceptions of knowledge, actual knowledge, and information search behavior. *Journal of Experimental Social Psychology, 31*, 107–138. doi: 10.1006/jesp.1995.1006

Raviv, A., Bar-Tal, D., Raviv, A., Biran, B., & Sela, Z. (2003). Teachers' epistemic authority: Perceptions of students and teachers. *Social Psychology of Education, 6*, 17–42. doi: 10.1023/A:1021724727505

Roets, A., & Van Hiel, A. (2007). Separating ability from need: Clarifying the dimensional structure of the need for closure scale. *Personality and Social Psychology Bulletin, 33*, 266–280. doi: 10.1177/0146167206294744

Stasiuk, K., Bar-Tal, Y., & Maksymiuk, R. (2016). The effect of physicians' treatment recommendations on their epistemic authority: The medical expertise bias. *Journal of Health Communication, 21*, 92–99. doi: 10.1080/10810730.2015.1049308

Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology, 67*, 1049–1062. doi: 10.1037/0022-3514.67.6.1049

Webster, D.M. & Kruglanski, A.W. (1997) Cognitive and social consequences of the need for cognitive closure. *European Review of Social Psychology, 8*, 133–173. doi: 10.1080/14792779643000100

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