NEW CONTRIBUTIONS OF MULTIDISCIPLINARY AND EMPIRICAL APPROACH TO LEGAL CONSCIOUSNESS

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Abstract: This article introduces a legal consciousness construct consisting of six components (i.e., general legal knowledge, legal awareness, ad hoc legal knowledge, opinion about law, trust in law and legal identity) in individual and cross-cultural perspectives. It also offers two separate approaches to examining legal consciousness, namely legal consciousness as an empirical variable and legal consciousness as an input function of the legal system. The theoretical and methodological potential of legal consciousness as an example of multidisciplinary "behavioural legal science" and the possibilities of practical use of legal consciousness research are discussed in this article. The most relevant methodological, practical and ethical issues of legal consciousness research is also inspected.

Keywords: legal consciousness, behavioural legal science, multidisciplinary approach, research design, legitimacy of law

INTRODUCTION¹

The aims of this article were (i) to conceptualize legal consciousness ("LC") as an object of empirical research in cross-cultural and individual levels, including potential hypotheses testing, (ii) to discuss the benefits and possible difficulties of a multidisciplinary approach towards law as demonstrated by LC research and (iii) to endorse the importance of empirical measurement of LC in both legal theory and praxis.

This article suggests a multidisciplinary and empirical approach to the research of legal constructs. Because of the lack of generalization, objectivity, comparability and reproducibility of rather rational, theoretical and philosophical legal research, its results correspond neither to reality nor the real level of measured constructs in the population, which often makes such approach insufficient.²

It is therefore appropriate to include empirical research in legal science. We incline towards the research paradigm "behavioural legal science",³ which combines empirical and rational methods and consequently provides deeper insight into examined constructs.

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¹ This article is part of project Specific academic research 260361 "Legal Consciousness: Concept, Formation, Effects with respect to the Impact of the Charter of Fundamental Rights of the European Union on Legal Consciousness in the Czech Republic" (in Czech language: "Právní vědomí: pojem, formování, účinky se zvláštním zřetelem k působení Listiny základních práv Evropské unie na právní vědomí v České republice.") solved at the Faculty of Law, Charles University.

² See VALVERDE, M. Law's dream of a common knowledge. Princeton: Princeton University Press, 2009.

³ Cf. BERNS, W. Law and behavioral science. *Law and Contemporary Problems*. 1963, Vol. 28, No. 1, pp. 185–212; KOROBKIN, R. B., ULEN, T. S. Law and behavioral science: Removing the rationality assumption from law and economics. *California Law Review*. 2000, Vol. 88, No. 4, pp. 1051-1144; or SUNSTEIN, C. R., JOLLS, C., THALER, R. H. A Behavioral approach to law and economics. *Stanford Law Review*. 1998, Vol. 50, No. 1, pp. 1471–1550.

The enactment, interpretation and application of legal rules could be at least partially based on empirically gathered and measured data about the population regulated under the legal system. We believe that LC is one of the most important constructs and should be studied using the approach mentioned above.

1. THE CONCEPT OF LEGAL CONSCIOUSNESS

The concept of LC is a century-old idea introduced by Ehrlich.⁴ Nevertheless, science and law experts have still not come to any agreement on the object of interest or even definition of LC. Hence, many ways of approaching LC can be found in the literature.⁵ One of the most famous concepts defines LC as the manner in which ordinary people think of, talk about and understand law in their everyday lives.⁶ Other concepts describe LC as synonymous with legal knowledge and legal competency.⁷ LC could therefore contain terms such as legal knowledge, legal awareness, trust in law and opinion about law, etc.

LC consists of two theoretically distinguishable dimensions in accordance with the aforementioned concepts,⁸ namely the *de lege lata* dimension, where general legal knowledge (LC1), legal awareness (i.e., legal competency, LC2), *ad hoc* legal knowledge (LC3) belong, and the *de lege ferenda* dimension, which consists of opinion about law (LC4), trust in law (LC5) and legal identity (LC6).

LC1 describes a person's general knowledge of legal principles and elementary legal rules. LC2 describes a person's abilities and competency to use this knowledge and orient themselves within the system of legal institutions and processes. LC3 is characterized as the knowledge of specific laws or legal branches. LC4 relates to a person's evaluation of specific laws. LC5 is defined as general trust in law and legal system as a whole. Finally, LC6 consists of the beliefs and values of how an ideal system of legal norms should look, these beliefs and values being a part of a person's identity. LC4 and LC5 are short-term and influenced by current political and legal situations, whereas LC6 is much more stable and consistent regardless of current situations.

⁴ EHRLICH, E. Grundlegung der soziologie des rechts. Berlin, DE: Duncker & Humblot, 1913.

⁵ For review see KENNEDY, D. Toward an Historical Understanding of Legal Consciousness: The Case of Classical Legal Thought in America, 1850–1940. *Research in Law and Sociology*. 1980, Vol. 3 No. 1, pp. 3–24, or STEVENS, H. R. Rules, Laws and Conceptions of Justice in Middle School: An Exploratory Study of Children's Legal Consciousness. Fairfax, USA, 2013. PhD Thesis. In: *George Mason University* [online]. 2013 [2019-02-25]. Available at: http://hdl.handle.net/1920/8351>.

⁶ E. g. EWICK, P. and SILBEY, S. S. *The common place of law: Stories from everyday life*. Chicago: University of Chicago Press, 1998; MERRY, S. E. *Getting justice and getting even: Legal consciousness among working-class Americans*. Chicago: University of Chicago Press, 1990.

⁷ E. g. KENNEDY, D. Toward an Historical Understanding of Legal Consciousness: The Case of Classical Legal Thought in America, 1850-1940, pp. 3–24.

⁸ The distinction is based upon the works by ENGEL, D. How does law matter in the constitution of legal consciousness? In: B. Garth – A. Sarat (eds.). *How Does Law Matter*? Illinois: Northwestern University Press, 1998, pp. 109–144; HERTOGH, M. A 'European' conception of legal consciousness: rediscovering Eugen Ehrlich. *Journal of Law and Society*. 2004, Vol. 31, No. 4, pp. 457–481, and PODGORECKI, A. *Knowledge and Opinion about Law*. London: M. Robertson, 1973.

2. RELATIONSHIPS BETWEEN INDIVIDUAL LC COMPONENTS

Even though we claim that the two main LC dimensions (*de lege lata* and *de lege ferenda*) are separate and individual, we assume that they should also interact with each other through certain relationships between all the LC components.

First, a hypothetical positive correlation exists between all three components of the *de lege lata* dimension (LC1–LC3). We even assume that a greater general knowledge of legal principles and basic legal rules (LC1) will, through regression, predict a higher level of *ad hoc* legal knowledge (LC3) and enhanced legal competency (LC2), because there is a high probability that a person with greater general legal knowledge will also have more enhanced legal competency and deeper knowledge of specific branches of law.

Second, we also assume a positive correlation between opinion about law (LC4) and general trust in law (LC5), as people with more critical views about laws may also gradually lose their trust in law and legal institutions in general. However, we also suggest that a legal identity (LC6) will not, because of the stability and characteristics mentioned above, correlate with the rest of the *de lege ferenda* components (LC4 and LC5).

Third, the level of the *de lege lata* components (LC1–LC3) will positively correlate with LC6, as people typically interiorize basic legal values and principles during their legal education and training.

Fourth, we suggest that extreme levels of the *de lege lata* components (i.e., significantly low or high levels of LC1–LC3) will lead to more extreme results in LC4 and LC5, whereas average levels of the *de lege lata* components would imply rather average LC4 and LC5 results, because people of rather low or no knowledge and understanding of the legal system will either be naturally suspicious or naturally credulous about it. Similarly, individuals with an extremely high level of knowledge and understanding could either strongly agree or disagree with the current norms and institutions within the legal system. Therefore, contrary to the former hypotheses, we expect a positive or negative nonlinear, not linear, correlation in this case.

3. CROSS-CULTURAL LEVEL OF LC

In this chapter, we would like to approach LC from a social (as opposed to individual) point of view. In this sense, LC must be understood as a cross-cultural phenomenon. Law is defined as a system of legal norms that are the product of human society.⁹ The character and nature of a specific legal system is therefore dependent on the character and nature of the society that created it in order to regulate itself. Not just law itself but also the LC on the one hand and the culture of society on the other hand are therefore mutually influential. Briefly explained, since LC is the level of individual knowledge, understanding, ability to use, trust and evaluation concerting law, and since individuals are commonly

⁹ Cf. "Law". In: Oxford Dictionaries. [online]. 2019 [2019-02-25]. Available at:

https://en.oxforddictionaries.com/definition/law. Similar definition is used by Gerloch when describing the social dimension of law (see GERLOCH, A. *Teorie práva* (The theory of law). Plzeň: Aleš Čeněk, 2013, p. 21).

dependent on cultural influences in many ways, it could be theorized that LC, at least partially, is culturally dependent too.¹⁰

3.1 LC as an empirical variable

We present several likely and relevant sociocultural, political and economic variables and hypotheses about their influence on the relevant LC components as a demonstration for future empirical research.

First, one of the most examined cross-cultural constructs is cultural dimensions, more specifically, in the context of LC individualism vs. collectivism.¹¹ Some research has already indicated that individualism and collectivism correlate, for example, with a general trust in law and the firmness of the principle of the rule of law.¹² Consequently, we expect that individualism/collectivism will predict the level of LC in the population, specifically that LC1–LC3 will be higher in individualistic societies, where people desire more independence, competition, freedom and pleasure¹³ and therefore prefer independent economic activities that improve their knowledge and competency, especially in civil and commercial law, in order to increase their income,¹⁴ whereas LC4–LC6 will be higher in collectivist societies, where people are theoretically more trustful¹⁵ and less critical¹⁶ about the state and law and accept common social and legal values more easily, have a higher social responsibility and are less likely to violate legal norms.¹⁷

Second, the nature of the political or the legal system appears to be another important variable in the context of LC. The crucial question is whether it is even possible to discuss LC in the context of authoritarian, absolutist, theocratic or totalitarian regimes. We speculate that in the context of non-democratic regimes or non-rule of law, LC can be understood solely as a variable that can be measured but not as an input function of the legal system. Stated differently, people in such regimes indeed have some level of LC, though it is *ex definitione* ignored by the public power, which is ordinarily indifferent to any input

¹⁰ Cf. MIYAZAWA, S. Taking Kawashima seriously: A review of Japanese research on Japanese legal consciousness and disputing behavior. *Law and Society Review*. 1987, Vol. 21, No. 2, pp. 219–241; HERTOGH, M. A 'European' conception of legal consciousness: rediscovering Eugen Ehrlich, pp. 457–481, or COWAN, D. Legal consciousness: some observations. *The Modern Law Review*. 2004, Vol. 67, No. 6, pp. 928-958.

¹¹ See HOFSTEDE, G. The cultural relativity of organizational practices and theories. *Journal of international business studies*. 1983, Vol. 14, No. 2, pp. 75–89.

¹² YAMAGISHI, T. Individualism-Collectivism, the Rule of Law, and General Trust. In: P. V. Lange – B. Rockenbach – T. Yamagishi (eds.). *Trust in Social Dilemmas*. New York: Oxford University Press, 2017, pp. 197-215.

¹³ TRIANDIS, H. C., SUH, E. M. Cultural influences on personality. *Annual review of psychology*. 2002, Vol. 53, No. 1, pp. 133–160.

¹⁴ See AJUHA, K., VAN DER SCHAAR, M., ZAME, W. R. A Theory of Individualism, Collectivism and Economic Outcomes. In: *arXiv.org* [online]. 1. 7. 2016 [2019-02-25]. Available at: https://arxiv.org/abs/1512.01230, *arXiv:1512.01230v2* [physics.soc-ph], pp. 1–37.

¹⁵ SHIN. H. H., PARK, T. H. Individualism, Collectivism and Trust: The Correlates Between Trust and Cultural Value Orientations among Australian National Public Officers. *International Review of Public Administration*. 2004, Vol. 9, No. 2, pp. 103–119.

¹⁶ LUN, V. M., FISCHER, R., WARD, C. Exploring cultural differences in critical thinking: Is it about my thinking style or the language I speak? *Learning and Individual Differences*. 2010, Vol. 20, No. 6, pp. 604–616.

¹⁷ WATSON, P. J., SHERBAK, J., MORRIS, R. J. Irrational beliefs, individualism-collectivism, and adjustment. *Personality and Individual Differences*. 1998, Vol. 24, No. 2, pp. 173–179.

into the political and legal system.¹⁸ Nevertheless, it can be assumed that the specifics of a political regime, especially the political and legal participation possibilities, freedom of information, and quality of civic society are the relevant variables in the context of LC. From one point of view, more open and participatory regimes are expected to enhance its citizens' LC1–LC3, because people are taught legal competency throughout their participatory praxis. LC6 will also be enhanced, as open regimes are more sensitive to the values shared among the population. From the other viewpoint, the openness and participation of a regime could either increase or decrease the level of LC4–LC5, as citizens in open regimes can approve or disapprove any components of the legal system according to their free opinion and (dis)trust.

Third, several relevant economic variables, such as the human development index (HDI) or gross domestic product (GDP) per capita, could also be influential in the context of LC. We assume that in economically developed countries, people have better access to education, and therefore their legal knowledge and competency (LC1–LC3) should be higher. Furthermore, if people are successful in their economic environment, they tend to question less its core mechanisms and values as well as the axiological core of the legal system that regulates it. Hence, LC6 will also be enhanced in wealthier countries, and LC4 and LC5 will be quite volatile depending on the partial influences of legal development on the economic situation of citizens and their families.

Fourth, we suggest one specific variable in the context of LC concerning the link between law and religion. If the legal system draws its norms and principles from religion and, moreover, uses religion and its socializing and educational capacities towards its ends (as typically, but not solely, observable in Sharia law) all LC components are increased, because under this relationship the law can acquire divine authority and legitimacy.

To summarize these examples of relevant variables and hypotheses, we reason that the relationship between cultural, political and economic specifics of society and the level of LC can be determined.

3.2 LC as an input function

It should be mentioned that LC can be understood as not only an empirical variable but as an input function of the legal system. From this point of view, the concept of LC can be imagined as a set of demands placed on the legislator, or more generally, the legal system as a whole. It is possible to differentiate two inputs into the legal system through LC: a primary input function, which is the information originating in society and communicated to the legal system (typically legislators) in order to initiate change, and a feedback input function, which is the information generated by society in response to already existing norms.

Contrary to circumstances today where public interest is often considered the view supported by the loudest or most influential interest group, proper and methodologically sound empirical research of LC could indeed offer both an objective primary input and relevant feedback to legislators.

¹⁸ VÁŇA, T. Aplikovatelnost teorie komunikace na zkoumání politických systémů 1 [Applicability of the communication theory on the political systems research 1]. Acta Politologica. 2014, Vol. 6, No. 2, pp. 177–179.

In this sense, LC can be also understood as the equivalent for legitimacy of a legal system that has so far been anchored in either the material¹⁹ or procedural²⁰ philosophical explanations. From now, an alternative, more scientific explanation of the legitimacy of law could be introduced through LC research. In the context of LC, the legitimacy of law is given directly by its form and content²¹ rather than by any extra-legal explanations. In another words, if the legal norms are understandable (LC1), accessible (LC2), recognizable (LC3) and rationally (LC4), intuitively (LC5) and axiologically (LC6) acceptable to people, they are considered legitimate irrespective of anything else.²²

Legitimacy here is presented as a result of empirical LC research that completely changes the position of legal science. It is not an analysis *of* the legal system but rather a source of information *for* the legal system that aims to support its adaptability and effectiveness in society. Development of legal science in this manner nonetheless requires a change in attitude towards a more multidisciplinary approach. As with economics, which abandoned the abstract and unrealistic concept of rational *homo oeconomicus* and replaced it with empirical analysis of intuitive human cognition and behaviour in the context of market economics to begin a new era of economic science called behavioural economics,²³ our notion is that legal science is at the same edge of transformation towards a more scientific approach characterized by collaboration with behavioural sciences (especially psychology and sociology). The first articles examining the transformation to behavioural legal science have already emerged.²⁴

Since the complexity of our society and its legal system is slowly increasing, we expect that the optimal source of legitimacy for the legal system in the near future will be the proper scientific analysis of people's demands for and reactions to legal development. Behavioural legal science could provide the findings to allow gradual adaptation of law-making and law-interpretation processes. Laws could potentially be anchored in scientific findings (of LC as an input function) and, therefore, be independent of the amateur, pop-

¹⁹ E.g., god, nature, charismatic authority of the legislator (WEBER, M. Politics As a Vocation. Philadelphia: Fortress Press, 1965), social contract (e.g. HOBBES, T. Leviathan. Baltimore: Penguin Books, 1968; LOCKE, J. Two Treatises on Civil Government. London: G. Routledge and Sons, 1887; ROUSSEAU, J, J. The Essential Rousseau: The Social Contract, Discourse on the Origin of Inequality, Discourse on the Arts and Sciences, The Creed of a Savoyard Priest. New York: New American Library, 1974), "grundnorme" (KELSEN, H. Pure Theory of Law. Clark: The Lawbook Exchange Ltd., 2002).

²⁰ E.g., tradition (WEBER, M. Politics As a Vocation), legality itself (RAZ, J. The authority of law: Essays on law and morality. Oxford: Oxford University Press, 2009; WEBER, M. Politics As a Vocation), "deliberation" (HABERMAS, J. Three normative models of democracy. Constellations. 1994, Vol. 1, No. 1, pp. 1–10).

²¹ Cf. FULLER, L. L. The morality of law. New Haven: Yale University Press, 1969, pp. 33–38.

²² In this context the legitimacy of law based on LC has in common features with the theory introduced by Alexy who highlights two important aspects of legitimacy, namely the social efficacy and the elimination of extreme injustice. While the latter aspect refers to more "iusnaturalistic" approach (i.e. the compliance with important principles of law), the former aspect could be further developed through LC research presented in this article (cf. ALEXY, R. *Begriff und Geltung des Rechts*. Freiburg im Breisgau: Verlag Herder, 2016).

²³ See THALER, R. Toward a positive theory of consumer choice. *Journal of Economic Behavior & Organization*. 1980, Vol. 1, No. 1, pp. 39–60, or KAHNEMAN, D., TVERSKY, A. *Choices, values, and frames*. New York: Russell Sage Foundation, 2000.

²⁴ E. g. BERNS, W. Law and Behavioral Science. pp. 185-212; KOROBKIN, R. B., ULEN, T. S. Law and behavioral science: Removing the rationality assumption from law and economics. pp. 1051–1051, or SUNSTEIN, C. R., JOLLS, C., THALER, R. H. A Behavioral approach to law and economics. pp. 1471–1550.

ulist, irrational and generally low-quality political opinions and group interests of today. The consequences of such a transformation could indeed enhance the functions of and interactions between politics, economy, civic society, culture and many other social spheres.

4. INDIVIDUAL LEVEL OF LC

Since cross-cultural points of view provide comparisons between countries rather than specific information about the exact level of LC in a population, the individual point of view (i.e., the level of LC in individual citizens in a specific culture) appears to be even more useful in this case. Moreover, research of individual differences in LC in the population could have a greater impact on the character and functioning of legal systems.

4.1 LC as an empirical variable

As in the previous chapter, this section begins with a list of likely and relevant sociodemographic, psychological and cognitive variables in individual LC levels and hypotheses about their influence on relevant LC components.

First, as with other research constructs in social science, the LC concept is probably also influenced by sociodemographic factors such as age, education, occupation, sex and gender, socioeconomic status (SES), religion and political opinion or subcultural membership. For example, we expect statistical differences in a person's level of LC in relation to SES. People with a higher SES should also reach a higher level of legal knowledge and competency (LC1–LC3) and a higher level of opinion, trust and identity concerning (LC4–LC6), as these people will generally have easier access to education, which should, at least partially, explain their own economic success by the quality of the legal environment.

Another example could be found in a person's education. People with a higher level of education should indeed have a higher level of legal knowledge and competency (LC1–LC3), because education should correlate with their learning, understanding and memory skills. However, their attitudes, trust and identity concerning law (LC4–LC6) could fall under a Gaussian distribution. We expect that people with a middle level of education will reach the highest LC4–LC6, whereas people with a low or a high level of education will be more critical and reserved about law. This could be explained by the perception of alienation and injustice by persons with lower education.²⁶ LC6 should also depend on the specifics of the political and legal system. People with higher education will reach a higher level of LC6 in democratic societies, but a lower LC6 in autocratic societies.

²⁵ E. g. BOSMA, H., GERRITSMA, A., KLABBERS, G., VAN DEN AKKER, M. Perceived unfairness and socioeconomic inequalities in functional decline: the Dutch SMILE prospective cohort study. *BMC public health*. 2012, Vol. 12, No. 1, pp. 818–824.

²⁶ E. g. HUBER, C. R., KUNCEL, N. R. Does College Teach Critical Thinking? A Meta-Analysis. *Review of Educational Research*. 2016, Vol. 86, No. 2, pp. 431–468.

We assume that different levels of LC could be observed in people of varied political opinions and religious beliefs. People with more liberal and atheist attitudes will achieve a higher level of LC4–LC6 in liberal regimes than illiberal ones, and conversely, people with more conservative, fundamentalist or religious attitudes will reach a higher level of LC4–LC6 in illiberal regimes than liberal ones. People who are socialized in minor subcultures, whose cultural, moral and legal values and norms do not correspond to the country's general legal system could have a lower level of all these components than people socialized in the majority culture.

Second, the level of LC could be affected by cognitive and executive functions. People with higher intelligence (i.e. cognitive performance measured by intelligence tests) will have a higher level of legal knowledge and competency (LC1–LC3) because they are generally better at learning²⁷ and recognition.²⁸ However, as with our hypotheses concerning education, their level of LC4–LC6 could be lower than people with average intelligence. Other cognitive and executive functions, such as attention, memory, decision-making, thinking and cognition style will also most likely affect a person's ability to learn and recognize legal knowledge and competency.

Third, personality is used as an important predictor in much research, and it appears to be an important variable even in the context of LC. Countless theories in psychology describe personality.²⁹ We selected one of the most frequently used models to illustrate: the Big Five³⁰ introducing five personality traits, specifically openness to experience, conscientiousness, extraversion, agreeableness and neuroticism. Openness to experience could possibly enhance a person's level of LC1–LC3, because they may find legal literacy interesting or appealing in some way. Conscientiousness will probably also enhance a person's level of LC1–LC3 as a result of self-discipline and the ability to stay focused during learning activities. Conscientious people may also expect similar behaviour from their colleagues and therefore appreciate the legal system as a tool for enforcement of such behaviour on others, which would therefore increase their level of LC4-LC6. We do not expect any differences in the level of LC in people with varied levels of extraversion. Agreeableness may increase the trust in other people and the altruistic intentions of the individual. Hence, people with a high level of agreeableness will be more reserved as far as using the legal system as a coercive tool is concerned. These people will therefore reach a lower level of LC4-LC6. Finally, since neuroticism is typical for generally negative emotions towards any experience, the legal system included, this personal trait will probably decrease the level of LC4-LC6.

Fourth, previous experience with courts and other legal institutions could undeniably affect the level of LC4–LC6, that is, a person's perception and evaluation of law. Positive experiences will increase the level of LC4–LC6, whereas negative experiences will decrease it.

²⁷ E. g. JENSEN, A. R. The relationship between learning and intelligence. *Learning and Individual Differences*. 1989, Vol. 1, No. 1, pp. 37–62.

²⁸ E. g. FAGAN, J. F. Recognition memory and intelligence. Intelligence. 1984, Vol. 8, No. 1, pp. 31–36.

²⁹ For review see HALL, C. S., LINDZEY, G., CAMPBELL, J. B. *Theories of personality*. 4th ed. Hoboken: John Wiley & Sons Inc., 1998.

³⁰ MCCRAE, R. R., COSTA, P. T., Jr. A contemplated revision of the NEO Five-Factor Inventory. *Personality and Individual Differences*. 2004, Vol. 36, No. 3, pp. 587–596.

Fifth, numerous other relevant psychological, cognitive or sociological constructs may affect the level of a person's LC. For example, priming³¹ could probably temporarily change the level of LC4–LC6. Similarly, ego depletion could temporarily decrease the level of LC1–LC3³² and also temporarily increase or decrease the level of LC4–LC6.³³ Furthermore, moral development,³⁴ empathy,³⁵ patriotism³⁶ and conformism³⁷ could also potentially influence a person's level of LC4–LC6.

4.2 LC as an input function

The LC concept understood as an input function at the individual level can be used as a tool whereby important limitations are set on both the legislature and judiciary.

First, certain limitations stem from the *de lege lata* components (LC1–LC3), concerning especially the form, complexity, length, accessibility and understandability of statutes and judicial decisions. The most important question is what the consequences imply in situations when a statute or a decision significantly exceeds these limitations. To put this question in another way, can we speak about the violation of human rights derived from the principle of the rule of law when a statute or a decision is either unavailable or too complex to be intelligible or understandable to the ordinary citizen? Shall such a statute or decision be held unconstitutional for that reason? What does "to significantly exceed" mean exactly? And finally, how can we legitimately apply the principle *ignorantia iuris non excusat* in situations when these limitations are significantly exceeded? Shall we either reduce the applicability of this principle or sustain it and abolish the excessive statute or decision?

Second, another set of limitations is derived from the *de lege ferenda* components (LC4– LC6) concerning the rational, intuitive and axiological acceptability of legal norms. According to these limitations, statutes cannot be impossible to obey, absurd or irrational, discriminatory, or contradictory to basic human rights or generally accepted values in society, and administrative or judicial decisions may not contain unexpected, surprising, arbitrary or illogical legal argumentation or interpretation of law. These limitations therefore constrain the content of statutes and decisions rather than their form. The question is whether it is possible to hold a statute or decision unconstitutional simply for the reason

³¹ CALLAN, M. J., KAY A. C., OLSON, J. M., BRAR, N., WHITEFIELD, N. The effects of priming legal concepts on perceived trust and competitiveness, self-interested attitudes, and competitive behavior. *Journal of Experimental Social Psychology*. 2010, Vol. 46, No. 2, pp. 325–335.

³² E.g. ENGLERT, C., BERTRAMS, A. Ego Depletion Negatively Affects Knowledge Retrieval in Secondary School Students. *Educational Psychology*. 2017, Vol. 37. No. 9, pp. 1057–1066.

³³ E.g. WHEELER, S. C., BRIÑOL, P., HERMANN, A. D. Resistance to persuasion as self-regulation: Ego-depletion and its effects on attitude change processes. *Journal of Experimental Social Psychology*. 2007, Vol. 43, No. 1, pp. 150–156.

³⁴ E.g. DE VRIES, B., WALKER, L. J. Moral reasoning and attitudes toward capital punishment. *Developmental Psychology*. 1986, Vol. 22, No. 4, pp. 509–513.

³⁵ E.g. WAGAMAN, M. A., SEGAL, E. A. The Relationship between Empathy and Attitudes toward Government Intervention. *Journal of Sociology & Social Welfare*. 2014, Vol. 41, No. 4, pp. 91–112.

³⁶ E.g. LIVI, S., LEONE, L., FALGARES, G., LOMBARDO, F. Values, ideological attitudes and patriotism. *Personality and Individual Differences*. 2014, Vol. 64, pp. 141–146.

³⁷ E.g. MALLINSON, D. J., HATEMI, P. K. The effects of information and social conformity on opinion change. *PloS one*. 2018, Vol. 13, No. 5, e0196600.

that the statute or decision fails to meet the demands of rational, intuitive or axiological acceptability for the ordinary citizen or even for legal experts.

Here we would like to note that similar ideas concerning the limitations of law derived from the principle of the rule of law have already been (although in considerably restricted form) introduced by Fuller,³⁸ who offered a set of eight demands of the inner morality of law, which partially correspond to the limitations presented here. Limitations of the *de lege lata* components (LC1–LC3) seem to encompass generality,³⁹ public promulgation, non-retroactivity, clarity and intelligibility, non-contradictoriness and relative constancy. The two remaining demands, specifically the possibility to obey and the obvious application of legal rules, are, in our opinion, rather a part of limitations derived from *de lege ferenda* components (LC4–LC6).

To summarize the aforementioned limitations derived from the LC concept, it could be insisted that law shall be accessible, intelligible and understandable to the ordinary citizen, otherwise its legitimacy is diminished. Similarly, the legitimacy of law also diminishes when it fails to meet the criteria of acceptability. However, we need to distinguish between illegitimacy from one point of view and unconstitutionality from the other. The level of LC (legitimacy in this case) needs to drop below a certain minimal limit of tolerance in order to be held unconstitutional. Hence, not every illegitimate or less legitimate legal norm is automatically unconstitutional.

As for the limitations of the *de lege lata* components (LC1–LC3), the Constitutional Court of the Czech Republic tried to set more precise criteria for identifying significantly exceeded legal norms and stated that *"the uncertainty of a legislative instrument must be regarded as contradictory to the requirement of legal certainty and hence to the rule of law* (...), only if the intensity of such uncertainty precludes the possibility of determining its normative content by means of the usual interpretative procedures" and that *"the Constitutional Court* (...) can enter this area only when the constitutional order has been violated and, concurrently, the inaccuracy, uncertainty and unpredictability of the legal regulation extremely distorts the basic requirements for the statute within the framework of the rule of law."⁴⁰ Consequently, in accordance with the doctrine of self-restraint, the criteria for unconstitutional inaccuracy, uncertainty and unpredictability shall be rather restrictive. To hold any statute or decision unconstitutional for the reason of failing to meet the demands derived from the LC1–LC3 components should remain the matter of *ad hoc* decision in each specific case, which is indeed the most appropriate approach.

However, we argue that more attention should be afforded the relationship between the principle of *ignorantia iuris non excusat* and the demands derived from LC1–LC3. The Constitutional Court of the Czech Republic held that this principle "*presupposes that the leg-islative instrument has already come into effect and into force.*"⁴¹ In another decision, the

³⁸ See FULLER, L. L. *The morality of law*. pp. 33–38.

³⁹ If legal rules are not sufficiently general, a legal system becomes increasingly complicated and unintelligible on account of the increasing number of specific *ad hoc* rules it contains.

⁴⁰ Judgement of the Constitutional Court of the Czech Republic Pl. ÚS 21/14, par. 171, 172. Author's unofficial translation for the purposes of this text only.

⁴¹ Judgement of the Constitutional Court of the Czech Republic I. ÚS 420/09, par. 22. Author's unofficial translation for the purposes of this text only.

Constitutional Court held that the applicability of this principle was also dependent on the prospectivity of legal norms.⁴² We believe that each of the aforementioned limitations, if significantly exceeded, can make enforcement of the *ignorantia iuris non excusat* principle problematic. Promulgation and non-retroactivity are, in our opinion, not sufficient.

Concerning the limitations of the *de lege ferenda* components (LC4–LC6), the approach here should be even more restrictive than in the case of the *de lege lata* components. A statute or decision cannot be simply held unconstitutional only for the reason that people (or most of them) do not agree with it, do not trust the institutions that enacted or delivered such law or judgement, or identify themselves with values that contradict the legal system. Low LC4–LC6 in the population should be a warning for the legislature and judiciary rather than an indicator of unconstitutionality for a constitutional court. Nevertheless, in extreme cases (e.g., norms impossible to be obeyed, discriminatory or contradictory to the protection of constitutionally recognized rights), even limitations derived from LC4–LC6 could lead to unconstitutionality.

5. ISSUES AND LIMITATIONS OF LC RESEARCH AND ITS USE IN PRAXIS

In this chapter, we discuss several methodological, practical and ethical issues regarding the empirical research of LC.

Concerning methodological issues, several problems stemming from the nature of the LC construct and the scientific method itself can be discussed. First, the LC construct should be understood as a theoretical construct, not as a real phenomenon. Scientists therefore have to be aware of the problem of indirect measurement.⁴³ In other words, the nature of the LC construct allows its examination and measurement only through its manifestation. Thus, it is impossible to measure LC directly. This is a general issue in almost every construct in social sciences, but it can be minimized by applying several unique techniques and procedures.

Second, since the LC is also a cross-cultural construct, adequate methodological and statistical procedures for any cross-cultural comparison are necessary.⁴⁴ Close attention should be paid to the translation of methods, equivalence of items, measurement and also constructs, culture bias, culture-fair procedures, cultural diversity, response bias, cross-cultural comparability, etc.⁴⁵ Advanced statistics, especially multilevel analysis, multi-group confirmatory factor analysis and invariance measurement, should be performed.

⁴² Judgement of the Constitutional Court of the Czech Republic Pl. ÚS 77/06, par. 39.

⁴³ See BLALOCK, H. M. Multiple Causation, Indirect Measurement and Generalizability in the Social Sciences. *Synthese*. 1986, Vol. 68, No. 1, pp. 13–36.

⁴⁴ For review see BERRY, J., POORTINGA, Y., BREUGELMANS, S., CHASIOTIS, A., SAM, D. *Cross-Cultural Psychology: Research and Applications*. Cambridge: Cambridge University Press, 2011; BUIL, I., CHERNATONY, L., MARTÍNEZ, E. Methodological issues in cross-cultural research: An overview and recommendations. *Journal of Targeting, Measurement and Analysis for Marketing*. 2012, Vol. 20, No. 3-4, pp. 223-234, or VAN DE VIJVER, F., LEUNG, K. Methodological issues in psychological research on culture. *Journal of Cross-cultural Psychology*. 2000, Vol. 31, No. 1, pp. 33–51.

⁴⁵ Cf. BERRY, J., POORTINGA, Y., BREUGELMANS, S., CHASIOTIS, A., SAM, D. Cross-Cultural Psychology: Research and Applications; BUIL, I., CHERNATONY, L., MARTÍNEZ, E. Methodological issues in cross-cultural research: An overview and recommendations. pp. 223–234.

Third, any method used to measure LC should have satisfactory psychometric properties, especially standardization, objectivity, validity and reliability, and in the case of cross-cultural research, transferability. As far as we know, such methods have not yet been developed which represents the most significant methodological issue in current LC research.

As far as practical (i.e., applicability) issues of LC research are concerned, one serious problem can be expected. There is no reason why politicians or judges would want or even be able (because of insufficient knowledge and understanding of scientific methods and the interpretation of results) to adapt their activities according to the results offered by behavioural legal science, specifically LC research. A possible solution could rest in the decision-making of constitutional courts, that should hold serious infringements of the limitations implied from LC concept unconstitutional. Another important problem could be created by the rigorous and consequently time-consuming nature of proper scientific method, which would sometimes struggle to meet the demands of quick responses in politics and law to current issues. This problem could be minimized, however, by conducting general (as opposed to specific or *ad hoc*) LC research regularly.

The most important practical question though concerns the place and function of LC empirical measurement in the legislative procedure. LC measurement could be a significant improvement on the current Regulatory Impact Assessment ("RIA"). One of the most neglected deficiencies of RIA may be seen in its absence of assessing the sociopsychological impact of legal regulation, i.e., the impact on the six LC components and therefore on the legitimacy of the legal system.⁴⁶ We assert that both the *ex ante* and *ex post* investigations of the understandability, accessibility, recognizability and rational, intuitive and axiological acceptability of laws for individuals and society should be one of the most important and inherent assessments in the framework of RIAs in the future.

Concerning ethical issues, the independence and impartiality of LC research is the first question of great importance. It would be a serious ethical problem to produce biased results according to the needs of certain interest groups or political subjects. Such a situation would be even more dangerous than the current state of affairs, and hence, subjective opinions would be supported by seemingly valid scientific evidence. This problem is even amplified under non-democratic regimes, where the government itself could be understood as an interest group misusing biased empirical research for its own ends. Another ethical problem limited to non-democratic (or illiberal) regimes presents itself. Inhabitants of these states could be exposed to the risk of persecution because the results of research may undermine the legitimacy or authority of the regime. Even if testing was anonymous, persecution could still take place based on the overall results. There is also a high probability that respondents would not be sincere, and that the result would therefore be biased.

Second, the LC research itself could significantly influence the legitimacy of the regime and its legal system and therefore the level of measured LC components. In other words,

⁴⁶ See VLÁDA ČR. Obecné zásady pro hodnocení dopadů regulace (RIA) [General Principles of Regulatory Impact Assessment, RIA]. In: *ria.vlada.cz* [online]. 3. 2. 2016 [2019-02-25]. Available at: <htps://ria.vlada.cz/wp-content/uploads/Obecn%C3%A9-z%C3%A1sady-pro-RIA-2016.pdf>. Adopted as the Government resolutions No. 922/2011, 26/2014, and 76/2016, pp. 26–28.

the simple fact that the LC is measured and that the results of this measurement are published could indeed change the level of LC in the population. More specifically, it could be anticipated that scholars' interest in opinion about law (LC4), trust in law (LC5) and the values of respondents concerning the legal system (LC6) could enhance population's level of LC4–LC6 and therefore change the results of the research.⁴⁷ If the results of the LC measurement were published, the population, because of its natural tendency to conformity⁴⁸ could again be influenced by it. To explain another way, if the results showed that the level of LC (especially LC4 and LC5) were generally low, the real level of LC would further decrease, and conversely, the high results of LC measurement could further increase the population's real level of LC4 and LC5.

Third, analogously to IQ measurement,⁴⁹ LC measurement designed for a specific cultural and legal environment could be discriminatory when applied elsewhere. LC measurement should therefore be adapted to the specific characteristics of the population and culture under analysis.

Fourth, it should be discussed whether the consequences of scientific approach towards law-making are actually desirable. If empirical LC research and its results became an inherent part of law-making processes, the democratic legitimacy and authority of the legislative bodies could be endangered by the authority and legitimacy of erudite scholars. In other words, democracy could be challenged by a modern form of sophocracy or technocracy. It must be emphasized that this is not the goal. A more scientific approach towards law does not imply a "dictatorship of science", but rather science as a simultaneous supporter and limiter of democratic institutions. Scientific evidence should not replace but complement democratic decision-making. If properly applied, it could serve as a valuable source of useful information and additional tool under the system of checks and balances that limit the excesses of state power. This "scientific branch of state power" could be a valuable addition to the current constitutional system of democratic institutions.

CONCLUSION

This article offered (a) a conceptualization of the LC phenomenon and its six components, i.e., general legal knowledge, legal awareness, *ad hoc* legal knowledge, opinion about law, trust in law and legal identity; (b) a brief introduction to a multidisciplinary "behavioural legal science" that could significantly influence the nature of legal science in the future; (c) a set of hypotheses concerning the relationships between the aforementioned LC components; (d) a theoretical distinction between LC as an empirical variable relating to many other variables and LC as an input function of a legal system determining its legitimacy; (e) an analysis of LC from individual and cross-cultural perspectives; (f) the

⁴⁷ This problem can be avoided by decreasing the face validity of the research tool to the minimum acceptable level.

⁴⁸ ASCH, S.E. Opinions and social pressure. *Scientific American*. 1955, Vol. 193, No. 5, pp. 31–35.

⁴⁹ Cf. STERNBERG, R. J., GRIGORENKO, E. L. Intelligence and culture: How culture shapes what intelligence means, and the implications for a science of well-being. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2004, Vol. 359, No. 1449, pp. 1427–1434.

possibilities of practical use of the LC construct within the legal system and (g) discussion about the methodological, practical and ethical issues concerning LC research and measurement.

We believe this article could be a valuable contribution and potentially introduce LC and behavioural legal science to the professional public as well as initiate a more detailed discussion on these hitherto neglected topics, which would be extremely helpful in future research.