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# ETHICAL ISSUES AND CHALLENGES IN PSYCHOLOGICAL PRACTICE AND RESEARCH

## Decision Making and Ethical Reasoning in Psychology

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**Background.** Rationality, emotions, and intuition all seem to underlie the decision-making process. In a profession such as psychology, it is crucial to improve the rational dimension of decision making. Ethical reasoning can be compared to moral decision-making, but it is also linked to professional judgment. In psychology and other professions, ethical reasoning seems to be the basis for the development of professional skills.

**Objective.** Present and discuss the role that rationality, emotions, and intuition can play in people's decision making, especially in the field of psychological intervention.

**Design.** A theoretical perspective is presented which takes into account the relevant literature in the field.

**Results.** We support the idea of five fundamental preconditions for ethical reasoning: self-knowledge, excellent training, experience or supervision, humility, and intervention. We recommend that psychologists meet these conditions in their professional decision making in order to promote the best quality of professional practice.

**Conclusion.** We can say that ethical reasoning is a professional moral decision. As professionals, we are primarily intuitive in our decision making, which is why we make decisions almost automatically; but our decisions are based on our professional experience. Psychologists should reflect on and understand the processes involved in decision making in order to avoid conclusions based on their personal experiences.

**Keywords:**  
Reason;  
emotions;  
intuitions;  
decision making;  
ethical reasoning;  
psychology.

## **Introduction**

Throughout life, people are called upon to make decisions. Some are simple and occur intuitively, while others are more complex and require a more significant effort of reflection. In this regard, two processes are responsible for decision making (Frith & Singer, 2008): one is controlled by intuition, and the other requires rational justification (Moll, Zahn, Oliveira, Krueger, & Grafman, 2005). The meaning of the situation and the context in which the person is called upon to decide, can be crucial to the decision-making process. Thus, the role of emotions, or the emotional significance associated with the decision to be made, is essential.

For a long time, emotions were seen as playing a secondary role in decision making, as well as an obstacle to people's rational functioning (Mayer, DiPaolo, & Salovey, 1990). The role of emotions gained acceptance from work in the neurosciences, especially that by Antonio Damásio (1994/2001, 2010), on the importance of emotions in decision making (Ceitil, 2006). According to Damásio (2010), emotions allow human beings to have a sense of their will and to satisfy their needs. Reason, in turn, allows the adaptation of these aspirations to social reality, combining the interests of the individual with those of their peers (Damásio, 2010; Kahneman, 2015; Thaler & Sunstein, 2008).

In professional decision making, it is only through reason that it becomes possible to help others make the choices that are in their best interests. In the field of psychological intervention, decision making plays a central role, since it aims to provide the person with maximum knowledge about him- or herself, thus allowing for conscious and responsible choices (Ricou, 2017). Psychologists must be able to identify and understand their own emotions, in order to be able to recognize omit their intuitions. The psychologist's emotional balance can be considered a fundamental precondition for his or her practice; otherwise, the professional would risk being too focused on his or her own emotional problems, which would make it difficult to understand the client. Understanding the other implies understanding one's own emotions, and can be achieved only through a well-established relationship of trust and by different technical assumptions (Ricou, 2014). The development of this capability is based on the exercise of ethical reasoning as explored in the present study, and should promote personal understanding and increased self-knowledge.

It is essential to reflect on and understand the processes involved in the development of ethical reasoning. Thus, we intend to explore the role of reason, emotions, and intuition in decision making. To this end, throughout this text we present the role that each of these dimensions can play in people's decision-making processes. In addition, we advocate the application of this model to professional decision making in the field of psychology.

## ***Rationality***

A rational decision is a decision based on a hypothetical-deductive model after all the necessary information has been obtained. Although this definition is clear, it is difficult for the individual to have full control over the process. The importance of rationality in decision making has been advocated and strengthened over time

(Filliozat, 1997/2001). In ancient Greece, only rationality and logic were considered (Lehrer, 2009). The idea of a dichotomy between reason and emotion, in which the former controlled the latter, was accepted.

The theory of limited rationality (Simon, 1977, 1987) contradicts the idea of a perfect and comprehensive rationality. In Simon's (1977, 1987) view, human reasoning is subject to environmental, cognitive, and psychological limitations which influence the decision-making process. Rationality in the decision-making process is often approached in an instrumental manner for a specific purpose. According to Over (2004), our mental processes are rational when we aim to achieve our own goals and integrate them with the needs of other people. The distinction between reason and emotions has been overcome, and the integration of all dimensions has been achieved. Damásio (1994/2001), for example, argues that emotions are part of the process of rational choice; without them it would be difficult for a person to make any decision at all.

According to Goleman (1997/1995), the appropriate combination of reason and emotion allows for the strengthening of intellectual capacity. In this regard, Coricelli, Dolan, and Sirigu (2007) state that human decisions cannot be explained through rationality alone. The authors highlight the fact that certain types of affective states can induce specific mechanisms of cognitive control over the processes of choice, such as the reinforcement or avoidance of experienced behaviors.

In professional practice the exercise of rationality should be to understand emotions, learn how to deal with them, and interpret the information they provide, *i.e.*, promote the identification and knowledge of feelings (Ricou, 2014).

### ***Emotions***

Decisions made strictly from a rational standpoint would result in such complex hypotheses that they would render useless the reasoning and effort exerted to make the decision (Damásio, 1994/2001); thus it is accepted that other dimensions are involved in the decision-making process.

Oatley and Jenkins (1998/2002) consider emotions to be at the center of human mental life since they connect people with events and are central to the decision-making process. By reflecting on their emotions, people can use them as intelligent cognitive phenomena and promote behaviors adapted to their goals.

According to Lehrer (2009), both rational and emotional dimensions are involved in decision making. To make a decision based on a deductive logical perspective would be a lengthy process. Therefore, Damásio (1994/2001) proposes the somatic marker hypothesis. According to his theory, the somatic markers involve the use of feelings created through learning from secondary emotions, which serve as an alarm or incentive for the choice of a particular option. From this perspective, it is important to note that Damásio identifies both primary and secondary emotions. The secondary ones correspond to the notion of somatic alterations juxtaposed to mental images, while the primary ones refer to a set of innate emotional responses, commanded mainly by the amygdala. Primary emotions can promote predispositions that can, however, be adjusted in an adaptive way. The rapid and explosive manifestations of these emotions can limit the exercise of human rationality.

Primary emotions are considered innate and similar for all persons, while secondary emotions are defined as self-conscious. Secondary emotions are acquired throughout an individual's personal history and evoked through self-reflection and self-evaluation (Tangney, Stuewig, & Mashek, 2007). If we considered only the primary emotions, it would be essential to learn to control them in order to promote more adaptive responses and select emotionally competent stimuli (Damásio, 2010). The recognition of secondary emotions, influenced by the characteristics of each human being, is in line with the idea that the person is much more than his or her rationality. Therefore, to achieve the best possible results from individual choices, it is not sufficient to simply understand the logical and factual side of events, exercising what Damásio (2010) calls the "autobiographical self." It is also necessary to look in-depth at the motivations, phenomenology, and complexity of people's emotions, in order to increase one's real knowledge about them and promote an understanding of their feelings (Ricou, 2014). In addition, the evaluation of the role of intuition in the decision-making process is crucial (Kahneman, 2015; Thaler & Sunstein, 2008).

### ***Intuition***

To define intuition and arrive at a consensus regarding its role in the decision-making process has been a challenge. McBain (2005) refers to intuition as a temporary mental state that allows one to quickly make decisions; he defines it as a "propositional attitude" that we can express through beliefs, desires, hopes, and fears. Damásio (1994/2001) refers to intuition as a hidden mechanism, outside consciousness, through which we can solve problems without reasoning. Reber and Reber (2001) consider intuition a response to unperceivable signs which are captured unconsciously. In other words, the authors point to the possibility of making decisions in an almost involuntary way. According to Johnson-Laird (2006), when there is very limited information, intuition enables one to make the best decisions; in these situations, he believes that the use of conscious reasoning makes it difficult to find answers.

Haidt (2001), in his model of social intuition, highlights the difference between intuition and rationality. He argues that intuition is automatic and unconscious in relation to its processing; it is faster and requires less effort than the reasoning process. On the other hand, reason justifies intuitive answers, either when we try to make others agree with us, or in cases where our own personal intuitions are dissonant (Moll et al., 2005). McBain (2005) argues that it is intuition that the person primarily values when he or she has to make a decision. In a situation that requires a quick answer, it is difficult to imagine that a cognitive process of anticipatory assessment of the benefits and the harms of a given situation would be used to determine the path to follow. This process would certainly take a very long time and make it difficult to reach a conclusion. Besides, human beings do not deal well with uncertainty; they need answers that give them confidence in their integrity (Ricou, 2014). Therefore, in all situations, we seek quick answers, at least initially.

Even in situations that can be considered predominantly cognitive, such as trying to solve an enigma, the brain does not stop until it finds a solution, even if the conclusion is that there is no answer. If the brain does not find a satisfactory answer,

we can say that the person is in crisis (Ricou, 2014). This crisis may induce suffering, which can be felt in the form of emotional activation, and may be perceived as distress if the person does not find an adequate solution (Ricou, 2014).

Reason does not seem to be sufficient for obtaining a quick and adequate answer. Intuition is apparently linked to emotions but also to learning, values, and the social context (Moll et al. 2005). It seems to be at the center of the decision-making process. We can say that intuition corresponds to the secondary emotions proposed by Damásio (1994/2001) or to the complex emotions of Johnson-Laird (2006). Therefore, it represents the result of the relationship between the core and autobiographical consciousness of Damásio (2010), *i.e.*, between emotions and rationality.

According to several authors (*e.g.*, Ariely, 2009; Damásio, 1994/2001; Filliozat, 1997/2001; Thaler & Sunstein, 2008), the role of intuition or secondary emotions is to provide fusion with reason in order to enhance the ability to make the best choices, at least in situations where serious consequences are at stake.

### ***Professional decision making: Ethical reasoning***

In a profession like psychology, the goal is not to have psychologists give their personal opinions about a given situation. Instead, we need answers based on a professional perspective and the best interests of the clients (Ricou, 2014). Therefore, the decision-making process used in personal dilemmas may not be sufficient to solve the ethical dilemmas in the psychology profession. Professionals have to move away from their personal frames of reference to achieve a better empathic understanding of their clients (Rogers, 1942/1974). To do this, professionals should be able to critically question their own intuition in order to intervene as little as possible with their personal judgment, and also to analyze their feelings.

Moral or ethical judgments cannot be based solely on intuition. These judgments include concepts about groups, interpersonal relationships, and social perspectives, and notions about when certain rights should be applied, and when they should be denied (Turiel, 2006). According to Frith and Singer (2008), there are two processes that are responsible for decision making in the face of moral dilemmas. The first is guided by intuition, which is often unconscious and quick, and evokes in the individual a feeling of congruence in relation to the answer. The second is a conscious and rational process that is influenced by education, culture, and context (Moll et al. 2005) and provides legitimacy for the decision. These assumptions can correspond to secondary emotions and autobiographical memory, respectively (Damásio, 1994/2001). According to Ricou (2014), it seems clear that the mechanisms that underlie the analysis of an ethical dilemma are the same as those used in moral judgment. However, he states that caution should be exercised, because psychologists must make decisions, not for themselves, but in the client's best interest.

We presented the role of emotions in decision-making processes since they are the result of complex procedures that involve all the dimensions of human functioning. Emotions seem to be the basis for important decision-making processes, providing guidance about what can be best for the individual. In other words, emotions help the person understand what is best for them, both individually and

in a social context. However, to assess what can be better for others, only reason allows the necessary discernment. So it can be argued that the basis for ethical reasoning in the resolution of any dilemma is reason (Ricou, 2014). It is no coincidence that personal difficulties evoke more significant emotional processing than impersonal problems (Myyry & Helkama, 2007). Thus, reason can increase the distinction between what is best for oneself, and what is best for another person. Furthermore, reason seems to allow psychologists not to confuse their personal interest with the interest of others. In addition, an emotional assessment can lead to a reading based on what “I” think would be the best if “I” were in the other’s shoes. This scenario is not acceptable in the psychological intervention setting. Respecting the dignity of the human person is more than respecting differences; it is helping the person to express him or herself, while promoting the person’s autonomy (Ricou, 2014).

Emotions support empathy and allow the establishment of a relationship of trust that makes it easier to know the other person. However, we emphasize that this recognition of the other person should be done on a rational basis. Therefore, a sentimental assessment of reality, *i.e.*, a reflection on the intuitive response to the other, may not be sufficient.

Psychologists should remove themselves from the situation and focus on their clients. In other words, they should detach their judgment from themselves, to become solely psychologists, guided by the ethical principles that guide their profession and the associated models and techniques. Thus, the psychologist becomes a professional guided by the autobiographical (Damásio, 2010) self, and the intuitive or nuclear self disappears. Of course it is not possible to fully achieve this goal. In the setting of psychological intervention, professionals cannot remove themselves totally from their emotions and evaluate situations according to reason alone. It seems appropriate to point out that psychologists are not perfect, and that error is an intrinsic part of professional practice. It is important that each psychologist be aware of this fact and question his or her performance, in order to decrease the risk of making decisions that harm the client.

Bricklin (2001) defined some points that a psychologist should take into account for an adequate exercise of his or her profession. These ideas were adopted and adapted by Ricou (2014) (see *Table 1*).

Table 1. *Preconditions for ethical reasoning*

- 
1. Self-Knowledge
  2. Excellent Training
  3. Experience or Supervision
  4. Humility
  5. Intervention
- 

The first precondition concerns the psychologists knowing their own beliefs about right and wrong, not allowing these views to influence their professional behavior, and avoiding an attitude of judgment toward the client. It is important to

recognize that understanding one's intuitions is central to avoiding making moral judgments. Psychologists cannot mistake the client's best interest with what he or she would do in a similar situation. The psychologist should guide the client on the basis of psychological science, not his or her own life history.

The second precondition involves ensuring an excellent level of training for psychologists. Poor training can lead to personal intuitive decisions. Training should include a strong grounding in the principles and norms that guide and govern the exercise of the profession, and in the psychological science and techniques associated with its practice. The psychologist needs excellent training to be able to apply psychological theory and restrain the influence of his or her personal experience, *i.e.*, intuitions. The psychologist has the responsibility for achieving this high level of training.

The third precondition for ethical reasoning relates to experience. It is crucial to be aware that intuitive answers can arise in situations in professional practice. It is experience that makes it possible to have a clear awareness of how we can solve problems, and acquire intuitions appropriate to psychological practice. It would be difficult for an inexperienced professional to achieve competence immediately, because there are too many variables for the psychologist to be aware of when dealing with clients. Hence, supervision in the training of psychologists is very important.

Associated with the previous preconditions is the need for the psychologist to be humble. Humility is central to ensuring a responsible attitude in reaching conclusions. All psychologists have personal limitations in their work related to the decision-making process. Even when a psychologist has good self-knowledge, excellent training, and a good deal of experience, he or she should take into account the fact that all hypotheses made about the client's situation are fallible. This is not only because the science is indeterminate, but also because it is impossible for a person to disconnect totally from personal experience. The psychologist must recognize this fallibility and not present absolute scenarios, but rather leave space for the possibility of other options.

Finally, the last point regarding ethical reasoning is intervision. Asking for help from other professionals ensures different perspectives. We are prone to using mechanisms to simplify information in order to be able to streamline the process of finding solutions and making decisions. The more experience a psychologist has, the greater the probability he or she will simplify information. This could lead to the psychologist putting the client into the framework of a comprehensive model that could reduce the understanding of the person's uniqueness. This explains why psychologists should seek intervision. They should discuss their interpretations and proposals for intervention with colleagues, listen to alternatives, and increase their awareness of other perspectives.

The central precondition for good psychological practice seems to be psychologists engaging in deep reflection about their own desires and intuition.

## Conclusion

Decision making seems to stem from the combination of an individual's core consciousness with an autobiographical consciousness (Damásio, 2010). Only reason



can increase the probability of helping someone from a psychological perspective. Emotions will reflect personal desires.

Bearing in mind that intuition is the basis for decision making, it is essential for psychologists to be aware of the high probability of having an intuitive response in each situation. Psychologists must be able to increase their ability to discern when they are relying on their intuition. As previously argued, it is not possible to stop core consciousness and make decisions only from an autobiographical consciousness (Damásio, 1994/2001). From this perspective, we think it is essential to value the role of reason. The exercise of ethical reasoning seems to be the central precondition for achieving solutions that are in the client's best interest.

These preconditions for the exercise of ethical reasoning identified by Ricou (2014), which we support, come from careful reflection on the principles that guide professional psychological practice. The objective is to increase the psychologist's perspectives about the dilemma replace with he or she faces. The psychologist needs a clear awareness of the variables involved in his or her judgment, and should then try to discern the best choice for the client. This includes admitting that it is possible to fail. It means humbly recognizing the need to improve one's knowledge about others and the world. It is a highly cognitive reflection. The first step for psychologists should be to understand their own reasoning and try to avoid the personal intuitions and feelings that tell them what the best choice is. This is difficult, but a decision made on this basis is what's suitable for the client.

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## The Ethical Problems in Forensic Psychological Expert Evaluation: A View from Modern Russia

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**Background.** The implementation of ethical principles in forensic psychology in Russia is facing serious challenges. Expert's evaluations have to be managed in accordance with the basic ethical principles of practical psychology in general. At the same time, the specific activities and role of a forensic psychologist differ from the professional activities and roles of a psychiatrist, psychologist-consultant, or psychotherapist.

**Objective.** This study focused on the identification of the main ethical problems of psychologists, who are obligated to conduct expert evaluations for the court.

**Design.** This study was conducted according to a qualitative paradigm, using a combination of the methods: content analysis of court materials and written expert opinion; analysis of court cases; interviews with experts; and analysis of international standards and guidelines for the professional activities of forensic experts.

**Results.** The ethical problems are determined by several factors: 1) the lack of a scientific basis for the regulations; 2) the complexity of the role structure of the expert's practice; 3) the lack of practically oriented studies devoted to ethics; and 4) the lack of a venue for systematic discussion and supervision. Ethical problems are often solved by specialists exclusively according to their personal attitudes which could be risky in terms of violations of professional ethics.

**Conclusion.** There is a lack of systematic studies on the ethical problems in forensic practice. The preliminary data show that the rapidly growing field of expert evaluation requires the closest attention to developing ethical standards and understanding of the expert's activity and role structure.

**Keywords:**  
ethical problems;  
forensic psychological evaluation;  
expert opinion;  
professional competence.

## Introduction

The field of psychology and law in modern Russia is actively developing in many areas: legal psychology; criminal psychology; investigative psychology; penitentiary psychology; preventive psychology; the psychology of professional work in legal practice; forensic psychology including juveniles; and forensic psychological evaluation and assessment. The practice of applying psychological knowledge in the field of law involves more than 15,000 psychological and psychiatric examinations and evaluations per year.

Leading universities in Russia, including the two oldest and biggest ones (Moscow State University and St. Petersburg State University), are engaged in professional training and research in the field of psychology and law (Vasiliev, 2009; Dmitrieva et al., 2016; Shaboltas, 2017). Educational programs in forensic psychology, and professional training for students planning to be engaged in the area of forensic psychological examinations, include several major components focused on methodological, technological, and ethical aspects of an expert's work (Engalychev et al., 2006; Moskovaya, 2019). The same approach to professional training for experts who should be capable of conducting psychological examinations is promoted in educational standards in other countries (Committee on Ethical Guidelines for Forensic Psychologists, 1991, APA, 2013).

The relevance of studying the ethical problems of forensic expert examination, particularly in the work of forensic expert-psychologists, is due to a shortage of theoretical and methodological work to determine appropriate strategic guidelines for further empirical research in this area, as well as to an increase in the need for independence and objectivity of the judicial process. (Ivanova, 2013; Penionzhok, 2017; Iudici et al, 2015).

## Objectives and Methods

The aim of this study was to identify and analyze the main ethical problems in the professional activity of forensic psychologists who are obligated to conduct evaluations and assessments for the court. The research objectives included: 1) the comparative analysis of a current expert's experience in Russia and other countries, specifically focused on the issues of solving ethical dilemmas and problems in the forensic area; and 2) defining the perspectives for solving ethical problems in an expert psychologist's professional actions. The study was conducted according to a qualitative paradigm, using a combination of qualitative methods: *i.e.*, the content analysis of court materials and experts' written opinions; analysis of court cases; qualitative interviews with forensic psychologists; and analysis of international standards and guidelines for the professional activities of forensic experts.

## Results

Nowadays the implementation of ethical principles and rules during forensic psychological examinations and expert evaluations by expert psychologists in modern Russia faces a number of challenges and problems. To a large extent, they are determined by the following factors:

- the lack of a scientific basis for the regulations governing the activities of forensic expert psychologists. This is partly because forensic evaluation, which utilizes psychological knowledge, in its modern form is a relatively young field of activity in Russia. It only appeared in the USSR in the late 1960s and the beginning of the 1970s, thanks to the efforts of M.M. Kochenov (Kochenov, 1977, 2010; Shaboltas, 2017);
- the complexity of the role structure of an expert's professional practice, which assumes various modes of professional behavior – *i.e.*, counsellor, researcher, and forensic expert with a certain legal status;
- the lack of practically oriented studies devoted to the ethical problems of forensic psychological evaluation; and
- the lack of a forum for the systematic discussion, formulation, and solution of ethical problems in this sphere of professional activity.

In assessing the current general state of expert research, one of the most experienced and famous specialists in forensic evaluation and assessment, Professor Irina Mamaichuk, writes: “The ethical principles of an expert psychologist require further development and specification in accordance with the types of assessment, subjects of expert research (victim, suspect, witness) and their age, as well as specific expert tasks.” (Mamaichuk, 2011).

Currently the practice of professional expert psychologists is primarily guided by the “Code of ethical principles and rules for conducting forensic psychiatric assessment” adopted by the RSP (Russian Society of Psychiatrists) in 2002. It follows the basic ethical values and principles for practical psychology and human research accepted by professional organizations in other countries (Kim, 2004; Halpern, 2005). The ethical principles of the forensic expert-psychologist's professional activity can also be found in short and generalized form in textbooks, mainly in the works of F.S. Safuanov (Safuanov, 1997, 1998, 2014) and V.V. Nagaev (Nagaev, 1998, 2000).

At the same time, the activities of forensic psychologists conducting assessments for the courts are specialized and differ significantly from the activities of other professionals in the field, such as psychiatrists, psychologist-consultants, or psychotherapists (Strasburger et al., 1997). This is due, first of all, to the ambiguity of the expert's professional position, which has to take into account both the psychological component and legal aspects of the process. On the one hand, an expert psychologist has to work in accordance with the humanistic principles accepted in psychology. On the other hand, his forensic psychological evaluation, which is intended as a means of clarifying the truth in the judicial case at hand, imposes a number of restrictions on the expert. It creates some duality in his position regarding the need to follow the specific ethical principles accepted in professional psychological activity, such as respect, competency, integrity, “no harm,” beneficence, etc.

Moreover, the situation is paradoxical from the standpoint of the humanistic function of psychology, since the professional activity itself intrinsically lacks the most important aim of psychology – the orientation to help the client. To be specific: the “client,” or the person under assessment, is not considered as sick or in need of psychological help, but appears only as a source of necessary information. Thus,

in fact, in the process of the forensic psychologist's work, the subject-subject relationships which are specific to psychological work, turn into subject-object ones, which undoubtedly affects the quality of psychological rapport with the person under assessment (Wolfram, 2015). Therefore, the person under expert evaluation often doesn't understand the role of the psychologist in this process.

This fact is confirmed by statistical data. In particular, during the evaluation process, about 86% of the people under examination try to get answers to their personal questions from the psychologist. For example, there are a lot of cases where the people under evaluation asked a psychologist how to behave with their elderly relatives, with whom communication is difficult due to their age differences. They also asked questions about how to act during a job interview, and asked for advice on establishing relationships with teachers at the school where their child was studying, etc. The need to establish rapport with the person under appraisal by answering personal questions, which are very important to them and often are not directly related to the expert evaluation, takes about 30% of the time allotted to the procedure itself. At the same time, the absence of this psychological component of the assessment process can reduce not only the quality of psychological contact, but also the informational content of the evaluation.

Thus, on the one hand, the expert psychologist acts in the interests of the person under evaluation, which are usually understood very abstractly and broadly. But, on the other hand, the expert's activity is determined by the tasks of a specific forensic psychological evaluation – in the framework of a criminal or civil process, *i.e.*, he has, first of all, to act in the interests of the law or the Service that commissioned the evaluation. And sometimes, in the psychological sense, the interests of the individual and the law may not coincide.

So, for example, in the framework of a criminal process, the person under evaluation has to become a subject of a psychodiagnostic examination without consideration for his attitude toward this procedure, which most often proceeds under duress, as ordered by a court, investigator, or interrogator. And the data, although obtained legally and exclusively in a certain professional space, becomes public without the person's consent, and may become the reason for the loss of his rights (Melton et al., 2007).

The articulation of guidelines for a forensic psychologist's work seems to be better clarified internationally. Greenberg and Shuman in their work conclude that it is important to strictly delineate the roles of an expert psychologist and a psychotherapist, in their exercise of specific professional tasks. Moreover, the authors state that it is not possible to carry out professional activities in both areas simultaneously; the psychologist at the beginning of his/her career must clearly determine his/her professional specialization and area of the competency – forensic or psychotherapeutic (consulting) (Greenberg & Shuman, 2007).

However, this position is not shared by all psychologists. So, for example, Heltzel states that if a psychologist, in accordance with his competence and ethical principles, is able to combine both types of activity at the same time (therapeutic and forensic), there is no need to introduce appropriate prohibitions and restrictions (Heltzel, 2007).

Moreover, for a psychologist to refuse to release significant information which he/she has gained from a client facing a court in a particular procedural status,

means reducing the possibility of justice being done, and even, to some extent, can damage the psychologist's professional reputation. For example, the Ohio Psychology Council Guide (USA) states that "Prevailing standards basically require you to define and stay in one role with client." This paragraph can be interpreted as a prohibition against combining the roles of a psychotherapist and an expert psychologist with a client. The American Psychological Association Code in 2002 included standards applicable to the activities of an expert-psychologist on the possibility of dual activities (psychotherapeutic and forensic), etc. These standards are accepted by most U.S. state associations (APA, 2013).

The specific nature of the forensic expert psychologist's role becomes evident in the organization of the judicial process itself (Drogin & Barret, 2003; Bollingmo et al., 2009; Kosmowski, 2018; Barber-Rioja & Garcia-Mansilla, 2019). So, despite the fact that the expert bears great responsibility, both by his legal status and moral attitudes, the expert is not informed about the results of the court's decisions; that is not a mandatory component of the process. The mechanism of interaction between the judiciary and expert organizations nowadays does not work in practice. This is especially true in criminal cases. As shown by the experience of foreign expert psychologists, it is crucial not to cut off cooperation with lawyers and to actively study the court case in question. Moreover, if they notice professional mistakes by an investigator, interrogator, or criminalist, forensic psychologists should speak up and discuss these limitations and errors, either in informal conversation with them or in legally executed statements (DeClue, 2005; McAuliff & Bornstein, 2012).

Such practice is almost non-existent in Russia, or is extremely rare. Among forensic expert psychologists with more than five years of professional experience who were interviewed in this study (N=21), 80% experienced some discomfort in this regard. Moreover, this situation does not allow psychologists working in this field to conduct systematic research on, or empirical analysis of, not only the psychological, but also the legal aspects of the problem; to define the logic of the expert work as a whole; and to summarize their practical work in court.

Of no less importance in understanding the nature of ethical problems in forensic practice in modern Russia are the frequent cases of internal and external experts' struggles to maintain their independence in expressing their views on the subject and the case being examined. During the evaluation process, the expert often must be exposed to obvious or latent pressure. In particular, if the expert works in a governmental organization, he or she could be influenced by the system of expectations developed there regarding expert conclusions on certain types of evaluations, especially in criminal cases.

If the expert works in an independent organization, the commercial interests of that organization could be used as leverage against him/her. If the main professional activity of a psychologist is to conduct evaluations, and his/her conclusions and statements in court constitute the main or only source of his/her income, this can lead to him/her coming to false conclusions, in order to obtain approval and additional payments from one of the parties of the judicial process or their representative (lawyers). Such behavior damages the reputation of expert psychologists in general, and may lead to the establishment of an external oversight body (such as Board of experts) for psychological experts.

In turn, pressure can be exerted in the form of deliberately inappropriate questions being submitted to an expert, which are aimed at identifying only one particular side of the situation under study: one beneficial, for example, to the investigator, or which ignores questions about the circumstances of the crime, and thus can radically affect the judicial process. The questions posed may force the expert to go beyond his/her competence. An example of such a question, which contains a logical error, is the following: “Given the individual psychological characteristics of the parents and the child, the nature of their relationship, which parent should the minor child live with?”

An analysis of 30 cases aimed at determining where a child should live showed that in 83% of the cases, the expert’s choice falls on the parent the child currently lives with, on the basis of the fact that the child is “already used to this situation.” Moreover, the considerations of the child’s gender, the individual psychological characteristics of the parents themselves, as well as clarification of the circumstances under which the child was taken to live with one or another parent, are often completely ignored.

An expert may experience obvious or latent pressure when working on cases affecting state interests or the interests of certain state authorities. For example, psychological evaluations in cases of Article 280 of the Criminal Code, or in cases causing a wide public resonance, and involving strong social stigmatization (for example, cases about pedophilia and the like), can often trigger internal restrictions, “prohibitions,” and even internal censorship by the expert himself. Although statistical analysis in this area is very difficult, it can be assumed that the level of difficulty of these assessments is always very high; the costs in time spent exceeds those needed for conducting assessments in other types of cases; and the results of the assessments are repeatedly disputed, *i.e.*, in 62% of cases.

The most urgent ethical problems arise in conducting forensic psychological evaluations in civil processes, such as disputes between parents about the upbringing and domicile of their child. Here the legal and social role of the psychologist-expert increases significantly (Verstova & Verstov, 2019).

This type of expert evaluation has several specific features and differs from other types in the high intensity of the conflict between the people under evaluation, and the prognostic orientation of expert research. This increases the risk of emotional involvement by the expert in a legally significant situation of the persons under evaluation, and often the expert takes responsibility for the life and fate of the child. That situation often leads to an incorrect ethical position by the psychologist-expert, due to the combination of his therapeutic and expert role (Greenberg & Shuman, 2007). In turn, his transition to the role of psychologist-consultant inevitably leads to bias in the interpretation of the data he gathers as an expert.

### **Case Studies**

The following cases, which we analyzed as part of this study, are good illustrations of the considerations mentioned above.

**Case 1.** The expert psychologist conducting the evaluation for the court has been working for a long time as a consultant with a mother and child from a disintegrating family. The psychologist has never met the child’s father. His professional



focus in counselling was on the traumatic experiences of the child, which arose due to conflict between the parents, and its extension to the field of child rearing. Under the influence of an anxious mother, the emphasis of the psychologist's intervention was on dealing with the negative consequences of father's actions.

By order of the mother, the expert writes a specialist opinion in which the child's father was described in the most negative terms. The subsequent psychological and pedagogical evaluation completely refutes the conclusions made by the specialist. Thus, this case illustrates the incompetence of a psychologist acting both as an expert and a psychologist-consultant with one of the parties of the judicial process.

Such cases create the basis for concluding that, indeed, the combination of roles can lead to serious professional mistakes, and that Greenberg and Shuman's categorical position of prohibiting double roles has reasonable grounds. This approach is also supported by the ethical principle of keeping confidentiality in psychological work and relations with the client, which may be violated due to the need for public testimony in court.

**Case 2.** At the request of the father, and based on the examination of the father and his sons of 5 and 8 years old living with him, the expert prepared a written evaluation. The mother of the boys was never seen or examined by the expert. In the evaluation, the psychologist pointed out that the mother is a woman with low social responsibility and bad behavior, *i.e.*, she uses illegal drugs and leads an immoral lifestyle. The expert concluded that communication between the boys and their mother injures the children and negatively affects their future social well-being. Later objective case materials refute the expert's conclusions regarding the mother's personality and her behavior.

Detailed analysis of the evaluation and assessment practice shows that a significant number of the conclusions made at the request of one parent (in pre-trial evaluation) were carried out by psychological service organizations that had previously dealt with the traumatic experiences undergone by the child or one parent. The other parent, as a rule, never appears in these evaluations. Such assessments are found in the case files of 30% of cases in civil processes of divorce and determination of with which parent the children will live. And in 57% of cases, the results of subsequent expert evaluations, mandated by the court and including the study of both parents, completely refuted the previous conclusions reached by the specialist.

The prognostic nature of expert opinions very often creates serious ethical problems. Today's research methods do not allow the psychologist to predict a child's future with a high degree of confidence: in particular, the level of a child's psychological well-being when he/she lives with one of the parents, his social success, and harmonious development. However, the judicial system often requires such predictions, thus causing a kind of conflict or moral dilemma for the expert himself, which is solved by the experts according to their personal attitudes and beliefs.

Foreign standards, namely the APA Code, mention this problem and give certain recommendations. For example, the standard procedure requires psychologists to base their opinions on information and methods sufficient to substantiate their conclusions, and if they are asked to express opinions based on insufficient

information and data, they should point out the limitations of their findings and recommendations. If the situation becomes conflictual, the psychologist as an expert has the right to withdraw from the obligation to conduct an evaluation.

Thus, the following problem should be the first to be addressed. One of the basic values which determines the ethical principles of the forensic psychologist's and expert's activities is professional competence. By F.S. Safuanov's definition, it consists of special knowledge and the art of conducting forensic expert evaluations. The latter provides the expert with the opportunity to use the broadest range of methods and measures of psychological diagnostics available. However, this feature often increases the risk he/she will use popular, but scientifically poorly substantiated methods and tests during the research for his/her evaluation, methods that do not have clear evidence supporting their empirical viability and validity. This situation is resolved quite well in many countries. According to the Standards applicable to the activities of the expert-psychologist which are described in APA Code, professionals are obliged to follow an evidence-based approach and use only those diagnostic tools, the reliability and validity of which has been established for the tested category of people.

Currently, in Russia, the issue of which methods and techniques are permitted has not yet been resolved. There is no officially accepted and approved list of methods, which are recommended for conducting expert's evaluation procedures for the court. First of all, this applies to quality methods of psychological diagnostics, including projective techniques. According to our data, in investigating a child's individual prospects, about 98% of expert evaluations use this method; in evaluating adults, the percentage is 80%. In 18% of cases, we found that only projective research methods were used in the framework of a forensic psychological or pre-trial evaluation of a child. For adults, this trend is more successful and occurs in 4% of cases.

At the same time, projective drawings, which are so popular among many experts, require special attention, both from the standpoint of evaluating their validity and reliability, and from the standpoint of the reliability of interpreting their diagnostically significant content. Moreover, according to our observations of the evaluations done in disputes between parents about the upbringing and domicile of a child, we can often see children being trained to draw in a needed way by one of the disputing parent. This practice once again demonstrates the absolute inadmissibility of using only experimental projective methods to evaluate the psychological characteristics and prospects of a child. There is an urgent need for analyzing, systematizing, and testing the data obtained by using projective techniques by other methods, before relying on projective methods in forensic evaluation.

However, the most significant ethical requirement related to the work of any psychologist is the necessity to follow high professional standards in the professional activity itself. An analysis of 20 reviews of the results of a forensic psychological and pre-trial evaluation shows that in 60% of cases, the incorrectly selected methodological strategy for conducting the expert evaluation leads the psychologist-expert to incorrect interpretations of quality materials, which then forms the basis for court decisions.

**Case 3.** The review of an expert evaluation made by a private expert revealed that the expert used only one diagnostic method for examining a 9-year-old child –

various drawing techniques. The expert, without relying on any well-known system for interpreting drawings, describes the obtained results in a predominantly psychoanalytic manner, and solely on this basis comes to the conclusion that the mother is too much aggressive and has a negative effect on her child's development. We note especially that no objective data or references to negative behavior by the mother were mentioned by the child. To be specific, on the basis of the fact that the child drew his mother's legs with darker lines, the expert concludes that "the mother of the child is aggressive and can hit her daughter with her feet."

**Case 4.** The review of the conclusion by a child psychotherapist who, by order of the father, has been examining an should be 11-year-old girl on her relationship with her mother (whom the father has divorced), showed that the mother was absent at the time of the expert evaluation, and the child did not see her for more than a month. The specialist asks the child direct questions about how she relates to her mother and interprets the child's response as follows: "The expert asks 'how do you feel about your mother?' Lisa is silent for a long time and looks at the floor, which indicates that mother makes her fear." Subsequent complex expertise does not reveal a negative attitude of the child toward the mother.

In particular, studies have demonstrated that the main factors influencing the results of an expert psychological forensic evaluation, are the following: 1) the use of exclusively projective methods for examination and assessment of children (18%) and adults (4%); 2) the presence of totally subjective interpretations not described in the scientific literature and supported by empirical studies (24%); 3) the absence of references to scientific literature (52%); 4) the absence of one of the parents in the framework of the forensic evaluation (6%) and in the framework of pre-trial research (76%); 5) the posing of inappropriate questions to adults (32%) and to children (24%); and 6) the lack of an adequate methodological framework for the problems being researched (34%). Special attention should be paid to the problem of inappropriate or inadequate questions, which in some cases numbered in the tens.

## Conclusion

It is quite obvious that there is a lack of systematic studies on the ethical problems in forensic psychological practice in modern Russia. However, the available data and preliminary results of investigations and observations show that the rapidly growing field of forensic psychological expert evaluation requires the closest attention in terms of developing not only specific ethical standards, but also a better understanding of the specific expert's activity and role structure. In fact, Russia can utilize the successful experience of professional psychological associations from other countries in regulating and managing ethical issues in forensic practice.

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## Ethical and Moral Levels in the Functioning of the Personality of the Educational Psychologist

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**Background.** There is a growing movement worldwide for ethical regulation of psychologists' research-oriented, educational, and practical activities. However, expectations that the better the code of ethics, the safer and more effective the professional activity will be, are not being met. For this reason, it is beneficial to distinguish two levels of the psychologist's professional functioning: that related to his or her role, and that on the personal level; this makes it possible to more adequately analyze the psychological aspects of ethical and moral regulation in professional interaction.

**Objective.** To compare the psychological foundations of the educational psychologist's ethical and moral professional behavior at the role and personal levels.

**Design.** Analysis, generalization, and identification, through a review of the literature, of the main factors influencing the ethical and moral regulation of professional behavior of psychologists.

**Results.** Surveys of specialists show that it is difficult both for the client and for the psychologist to follow a formal ethical code unconditionally. We considered the limitations of ethical regulation of professional activity, when, even with a good knowledge of the ethical norms on the part of the specialists, external monitoring is required to guarantee the safety of their subjects. We emphasize that the wide variety of psychological assistance provided by psychologists to their clients requires different degrees of personal involvement on the part of the specialist. We propose to distinguish two levels of professional interaction in the psychologist's activity: the role level and the personal level, corresponding to different mechanisms of the moral regulation of the specialist's behavior. At the role level, there is no need for deep personal involvement; the external motives of moral regulation (knowledge of the code requirements and fear of administrative sanctions for negative consequences) serve as psychological mechanisms of compliance with ethical standards. On the personal level, other psychological mechanisms are required for the performance of professional duties, such as internal motives underlying moral behavior (a mature and sensitive conscience and a positive philosophy of life). The personal level of moral professional behavior regulation makes it possible to provide a much greater degree of safety in the interaction between psychologist and client, and in the absence of external oversight.

**Conclusion.** We compare two approaches to the explanation of the psychological foundations of moral functioning: models enumerating the personal qualities defining moral behavior and models of integrated moral functioning. The article describes the existential-ontological concept of moral functioning, correlating the maturity of individual moral consciousness, awareness of the adoption of a particular ethical system of norms and ideals, and the conscience. We conclude that it is necessary to educate future specialists as mature, integrated personalities, ensuring integrated moral functioning in their professional interactions.

**Keywords:** ethical regulation of psychologists' activity; moral functioning; authenticity; identity; conscience; existential concept of moral functioning; situations of moral choice

## **Introduction**

Ethical issues facing psychologists are today a focus of the world psychological community (Forman & Roulz, 2004; Garber, 2014; Leach & Welfel, 2018; Lindsay, 2012; Klyueva & Armashova, 2016; Tarasova, 2017; Miklyaeva, Veselova, Semenova, & Bakhvalova, 2019). The ethical component of the profession is formed under the influence of public morality and depends on specialists' practical experience. Ethical requirements mature not as a result of scientific research, but after assessing the results of practical interaction with clients and subjects of psychological care (Lindsay, 2012).

The school psychologist's support for subjects of the educational process takes very diverse forms. Analysis of the literature on ethical regulation of psychologists' work shows that for the recipient of psychological assistance as well as for the specialist, unconditional adherence to ethical professional codes is impossible or may even be harmful (Forman & Roulz, 2004; Garber, 2014; Klyueva & Armashova, 2016; Kolay, 2012; Pryazhnikov, 1999, 2004; Tang & Tan, 2015). A situation of moral choice in professional activity when any decision, even one that meets ethical requirements, causes harm to any of the participants, poses a moral dilemma (Razin, 2014).

Moral dilemmas are being actively studied today in psychological science, in relation both to general issues of the psychology of moral choice (Álvarez & Rodríguez-González, 2016; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001) and to the professional activities of psychologists (Klyueva & Armashova, 2016). A school psychologist's activity is always something more than the application of skills and abilities within the framework of existing knowledge, and always includes a preliminary ethical assessment of future actions. Ethical considerations in some cases precede practical action, and raise the question of its admissibility in the context of a particular life situation.

Ethical regulation is formed from the accumulated experience of working with clients and subjects of assistance. Specialists' practical actions to meet ethical requirements are, on the one hand, the result of comparing the task and the means available to solve it, and, on the other hand, the assessment of past actions gained in practical experience (Lindsay, 2012). At the same time, experience shows that different activities by psychologists include ethical problems to varying degrees and require different degrees of the specialist's involvement in the professional interaction. Psychologists' work in education, psychodiagnostics, and psychoprophylaxis can be effectively carried out at the role level with good knowledge and compliance with the ethical code. Counseling and psychotherapy related to the solution of a client's emotional and other personal problems require a deeper personal involvement, and the psychological mechanisms that ensure ethical compliance in these two cases will be different.

The disadvantages of ethical regulation are known and consist of the following: (a) even with good knowledge of the ethical norms on the part of specialists, external oversight is required to guarantee the safety of the subjects of the professional interaction; (b) there is a possibility that a specialist will make a suboptimal moral decision if there is an ethical dilemma. At the same time, the personal level of moral professional behavior can provide a much greater degree of security in the interaction between the psychologist and the client, even in the absence of external oversight (Forman, Roulz, 2004; Garber, 2014).

The psychological mechanisms of integrated moral functioning are being actively discussed today in the foreign psychological literature. Currently, there are two different points of view addressing the psychological foundations of moral functioning: (a) approaches that list the qualities of the moral personality and components of the moral sphere (Haidt, 2001; Kohlberg, 1984; Narvaes & Lapsley, 2009); (b) approaches focusing on integrated moral functioning (Blasi, 1983, 2004; Hardy & Carlo, 2005; Narvaes & Lapsley, 2009; Veselova, 2003).

The existential-ontological concept of moral functioning implies moral functioning integrated into the personality, and links the maturity of individual moral consciousness, the awareness of adopting a particular ethical system of norms and ideals, with the conscience. The conclusion is reached that it is necessary to educate future specialists as mature, integrated personalities, ensuring integrated moral functioning in their professional interactions.

## Method

We conducted a theoretical study of the ethical and moral regulation of the psychologist's professional activity, taking into account the scientific principles of *essential analysis* and *conceptual unity* of the study. The principle of essential analysis assumes a correlation in the studied phenomena of the common, special, and single. This principle involves the movement of research thought from description to explanation and prediction. The following basic requirements must be fulfilled: taking into account changing views on the problem; allocation of the main factors influencing understanding of the phenomenon under study; disclosure of the inconsistency of the subject. The principle of conceptual unity of research involves a consistent analysis of the problem on the basis of a single defined concept.

## Results

### *Levels of Functioning of a School Psychologist in Professional Interaction*

We believe it is necessary to formulate a difference in the specialist's professional functioning at two different levels, corresponding to the degree of involvement in professional interaction: the *role level* of involvement, which assumes ethical regulation of professional activity, and the *personal level*, which assumes a deeper involvement in professional interaction and the moral readiness of the specialist to function at this level. N.S. Pryazhnikov speaks about the ethical regulators of the school psychologist and identifies three levels: (a) *legal*, based on international and state normative documents, such as the "Universal Declaration of Human Rights", the "Convention on the Rights of the Child", the "Law of the Russian Federation on Education", etc.; (b) *ethical*, reflected in numerous ethical codes and statutes, setting out ethical principles and requirements at different levels; (c) *moral*, assuming a certain value-semantic maturity of the psychologist's personality (Pryazhnikov, 1999). We believe that the legal level is always included in the ethical level, as ethical codes require the mandatory implementation of international and state regulatory documents; that is a mandatory requirement for specialists.

Psychologists' work in education, psychodiagnostics, and psychoprophylaxis can be effectively carried out at the role level given good knowledge of and compliance with professional duties. Counseling related to the client's emotional and per-



sonal problems requires a deeper personal involvement in professional interaction and corresponds to the personal level.

Table 1 presents the levels of the psychologist's professional interaction with clients and subjects in the educational environment.

Table 1

*Levels of a specialist's functioning in a professional environment*

Psychologist's educational activities	Psychologist-client interaction at the role/personal level	Necessary professional skills and personal qualities
Psychological education	Lecturer–audience interaction (role level)	Competence
Psychological prophylaxis	Psychologist–group interaction (role level)	Knowledge of and compliance with the code of ethics
Psychological diagnosis	Psychologist–test subject interaction (role level)	Knowledge of the ethics of role-playing
Psychological consultation	Personality–personality interaction (personal level)	Moral readiness of the specialist for deep personal involvement in interaction

In the first column, you can see possible activities by the psychologist in the educational environment. The second column indicates the level of professional interaction. The third column presents the necessary professional skills and personal qualities corresponding to the particular type of activity.

### ***Ethical and Psychological Aspects of the Educational Psychologist's Professional Interactions at the Role Level***

The ethical regulation of professional interaction corresponding to the role level is based on the specialist's moral responsibility to clients, colleagues, and society, as established by the ethical code of the educational psychologist. However, there are specific, as yet unresolved problems in this respect (Eticheskie kodeksy..., 2003; Model'nyi kodeks ..., 2014). It would seem that the better the ethical code, the safer and more effective the professional activities will be, both for the client and for the specialist, but surveys of specialists show that psychologists can find it difficult to follow ethical norms unconditionally (Forman & Roulz, 2004; Kolay, 2012; Pryazhnikov, 2004). Although school psychologists understand the ethical norms and the essence of ethical responsibility, they recognize that in some situations they violate ethical norms, and some situations cause them difficulties because these are not ethically regulated in any way, although they should be.

These situations pose ethical dilemmas. The ethical dilemma is a situation of moral choice, and involving only mutually exclusive solutions, and none of these solutions is perfect from a moral point of view. Someone will suffer when a situation presents a moral dilemma – either the client or his relatives, or the specialist – or some legal regulations will be violated. Therefore, in moral dilemmas, the ethical code will not help. Only a mature, moral person with experience and moral reliability can solve the problem.

A large problem of the school psychologist's ethical regulation at the role level is the absence in Russia of a special mechanism for external oversight of compliance with ethical standards; there are no special supervisory boards developing policies and rules for the protection of participants in professional interaction (Garber, 2014). This is a big flaw in ethical regulation, since even with good knowledge of ethical norms, external oversight is required to guarantee the safety of the subjects of professional interaction. L. Kohlberg also found that good knowledge of moral norms and agreement with them is not an indicator of personal high morality. A person may be convinced that "one should not steal", "one should not tell lies", "one should fulfill the obligations one has assumed", but will in some circumstances behave in the opposite way (Antsyferova, 1999). It is also necessary to further clarify and improve the ethical codes themselves, in relation to the psychologist's activities in innovative areas of education, for example in inclusive and integrative education (Miklyayeva et al., 2019).

The authors analyzed the Model Code of the teacher, intended for ethical regulation of the educational psychologist's activity, and found that its content does not reflect the work performed in the new conditions of integrated and inclusive education, and needs to be supplemented (Model'nyi kodeks ..., 2014). We found it advisable to specify the content of the principles of respect and competence in relation to the problems of inclusion and integration, as well as to disclose the content of the confidentiality principle. The study showed that in conditions of integration and inclusion, there are a number of moral dilemmas that cannot be resolved based on existing professional ethical codes, especially in situations of deeper immersion of a specialist in the problems of children with disabilities, necessary for the psychological and pedagogical support of inclusive subjects (Eticheskii kodeks ..., 2003; Miklyayeva et al., 2019; Yamshchikova, 2017). In these cases, such qualities of the educational psychologist's personality as moral maturity and moral reliability come to the fore, allowing him or her to adhere to general ethical principles in difficult professional situations of ethical dilemmas. The criteria for the psychologist's success require a broader context, including spiritual and moral aspects (Dvoretzskaya & Loshchakova, 2016).

The problem of the general ethical crisis is discussed by Robert Kenny from the University of Pittsburgh, who says that the modern crisis in ethics is caused by a pathological desire for profit; he reminds us of the psychological mechanism of conscience, an attentive attitude to which will contribute to the moral education of specialists and to moral professional behavior (Kenny, 2016).

### ***Features of the School Psychologist's Moral Functioning at the Personal Level***

Professional interaction at the personal level requires professional knowledge and skills, as well as the moral readiness of the specialist for deeper personal involvement in professional interaction. Maturity of personality is also required.

In psychology, there has long been a discussion about the role of the personality of the psychologist-consultant in positive changes in the personality of clients, their attitudes, behavior, etc. (Deurzen, 2007; Garber, 2014; Klyueva & Armashova, 2018). There are several lists of personal properties that determine the effectiveness of psychological counseling and psychotherapy; however, these lists rarely mention actual moral qualities. Moral reliability is not mentioned, although it is the most important

quality of the helping specialist (see, e.g., Gledning, 2002; Kochyunas, 1999; Makhnach, 2011; Puchkova, 2016; Tsvetkova, Volkova, Korzhova, & Miklyaeva, 2017).

Moral reliability can be defined as the ability to comply with the ethical code in the most complex and unforeseen situations of interaction with people in crisis situations, with clients who have severe psychological conditions, in situations of moral dilemmas. This quality is necessary for working in circumstances such as unplanned lengthening of the working day, the performance of unpaid services, or the need for personal participation in the troubles and problems of a ward.

A mature, integrated personality is morally reliable. There are three criteria from Allport's list of criteria for maturity that are relevant to moral functioning: a unifying philosophy of life, including special moral value orientations; differentiated religious feelings that justify the person's moral choice; a personalized (mature) conscience (Allport, 2002). According to Allport, maturity of conscience corresponds to the highest postconventional level of moral functioning as described by Kohlberg (Antsyferova, 1999; Kohlberg, 1969). With a mature conscience, a person acquires the following qualities: independence from the opinions of society, and the priority of one's own point of view over that of society. Further, the person does not obey rules incompatible with the dictates of conscience and functions as an independent moral subject.

The interaction of two people, the decisive moment of which is the creation of a relationship of trust between them, is at the center of the psychologist's professional interaction at the personal level, whether in counseling or psychotherapy. The meeting of the helping specialist with a client is a meeting of two personalities, and their interaction is carried out at the universal level – "face to face". This is very well expressed by Carl Rogers, who associated the effectiveness of psychological assistance with the fact that the consultant interacts with the client as a unique person and not as a teacher, lecturer, instructor, scientist, etc. Any approach based on the assumption that the client is the object of training is useless (Rogers, 1994). Rogers poses the question as follows: How can we establish a relationship with a person that he or she can use for their own development? He emphasizes the importance of the consultant psychologist's understanding of the fundamentals of human nature, which he believes is not given enough attention. The quality of professional interaction depends on the psychologist's life philosophy, worldview, basic beliefs about existential issues of life, and idea of what a person should be at the highest stage of development, the person's main, essential quality (Rogers, 1994).

In Russian psychology, a similar view about the way of treating another person was expressed by S. L. Rubinstein, who is now considered the founder of Russian moral, ethical psychology. The significance, the value of persons is determined by what relations they are able to establish with others. According to B. S. Bratus', this is the interface of psychology and ethics (Bratus', 2008). Such an understanding of the person is inherent in Russian humanitarian thought (Mironenko, 2019).

Our research has shown that there is a deep connection of the worldview or philosophy of life according to G. Allport (Allport, 2002) with the moral principles of a person associated with the basic, often unconscious, existential-ontological beliefs of the specialist and with the state of that person's conscience (Veselova, 2009). Conscience is not only a mechanism of moral behavior regulation, but also a deep structure of personality, through which a person can learn about their own nature

(about the unity of the natural essence of all people), and, in particular, about their own genuineness (i.e., their own correspondence to this nature) (Heidegger, 1997).

One of the most important qualities necessary for effective interaction of the consulting psychologist with the client is authenticity. By authenticity, Rogers understood people's awareness of their own experiences and feelings, their accessibility, the ability to live, experience, and express themselves in communication with other people, while rejecting various social roles (Rogers, 1994). Often the term genuineness is used as a synonym to refer to this quality, but in essence these terms are different. The term authenticity has a much narrower meaning than genuineness.

Authentic people *are* themselves, accept themselves as they are, express sincere agreement that these features are present in the structure of their self-concept. But, authenticity is not always associated with positive qualities, including moral ones. It is possible to be authentic, but not genuine, in the sense of conformity to human moral nature.

The concept of the genuineness of a personality is linked by experts in existential psychotherapy with the effectiveness of the therapist, the effectiveness of his or her personality as an integrated instrument for working with the client (Deurzen, 2004, 2007). Genuineness is a quality of personality directly related to moral functioning based on fundamental existential-ontological beliefs and an autonomous conscience. It is the phenomenon of conscience that brings people back again and again to the possibility of being themselves. The genuineness of the educational psychologist's and psychotherapist's personality is the most important professional quality, although it is quite mysterious and still indeterminate. It can be assumed that genuineness is the correspondence of the state of conscience to a person's true nature, in the sense of its highest possible moral development, manifesting itself in interaction with other people.

Both Russian and foreign researchers today have come to the conclusion that it is possible to explain moral behavior only by considering a person as an integrally functioning subject (e.g., Mukhametzyanova, Korzhova, & Gaysina, 2017).

One of the main concepts of integrated moral functioning is that of Augusto Blasi (2004). His model has three components: (a) moral judgments involving responsibility; (b) the moral self (moral identity); the correspondence of this image to an ideal personality; (c) internal consistency of the self; integrity as the desire to live in harmony with oneself, to have a holistic view of the self and to be responsible for one's own actions.

The integrated personality is also at the theoretical foundation of Russian research into moral functioning. The works of M.M. Bakhtin (1994) form the philosophical basis of this view: "There are no moral norms that are certain and significant in themselves, but there is a moral subject with a certain structure .... which one has to rely on: It will know what will be moral and proper, and when that will be so..." (Bakhtin, 1994, p. 14). Bakhtin's moral subject presents himself or herself as a responsible, active participant – a "person".

Psychological analysis of human behavior in a situation of moral choice shows that we are dealing with the problem of the maturity of moral consciousness in a personality, an awareness of the acceptance of a particular ethical system of norms and ideals in the context of a broader worldview.

An important question here is the personal identification with ideals embodying the corresponding ethical principles and world outlook.

Conscience as a sensory system in the sphere of morality sets the level of sensitivity to situations of moral choice, irrationally determines the correspondence of individual actions to the image of the moral self adopted by the person.

If people acted in one way or another under the influence of external factors, their actions would not be subject to moral evaluation, and they themselves would not bear any responsibility for them or for their thoughts. Thus, the ethical ideal is important for the realization that a person is not entirely a natural being, but in addition to natural qualities has spiritual freedom, although this freedom arises only when moral consciousness is fully matured.

In the existential-ontological concept of moral functioning (Veselova, 2003), it is assumed that there is a common human nature expressed in the natural moral law inherent in all people. Everybody can learn this law from their own conscience. However, in the process of socialization, conscience can be suppressed by the moral law of society. As a result, people form their own version of conscience, at a much lower level of development than natural moral law. They may have an intrapersonal conflict in which the requirements of natural moral law, as awareness of the voice of conscience, are suppressed with the help of psychological defenses. Therefore, it is necessary to develop sensitivity of conscience and the ability to overcome psychological defenses, as the way to form a mature personality.

## **Conclusions**

We draw the following conclusions from the results of the study:

1. Two different levels of school psychologists' interaction with their clients are identified, corresponding to various psychological mechanisms of ethical regulation of professional behavior.
2. At the role level, a specialist does not need deep personal involvement in professional interaction with the client; the psychological mechanisms of compliance with ethical standards are knowledge of the ethical code and fear of administrative sanctions for negative consequences.
3. To perform professional duties at the personal level, it is necessary to have internal motivation of moral behavior, providing qualities such as a mature and sensitive conscience and a positive philosophy of life.
4. One can explain moral professional behavior only by considering a person as an integrally functioning subject. Thus the following psychological aspects of personality maturity are important: personal identification with the positive ideals embodying the corresponding ethical principles and world outlook; development of conscience as sensory system in the sphere of morals, setting a level of sensitivity to situations of moral choice defining conformity of individual acts to the image of the moral self; and personal responsibility for one's actions.
5. Understanding the mechanisms of integrated moral functioning will create adequate training programs for students in psychology and ensure the safety of all participants in professional interactions.

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## Teaching and Learning Psychology Ethics as a Meaningful and Enjoyable Experience<sup>□</sup>

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**Background.** It is crucial for psychology students and graduates to study ethics. However, neither teaching nor learning ethics is always an easy process. Course syllabi often include philosophical texts, specialized concepts, and numerous ethics or procedural codes. Could we consider all of this as a cognitive process? The students should be aware of all the vulnerabilities that can impact ethical decision-making, such as cognitive errors, emotional factors, social and organizational pressures, and situational factors.

There is a great deal of new research on the advantages of including emotional dimensions in the decision-making process (Decety & Cacioppo, 2012; Decety & Cowell, 2015); this research even claims that emotions strengthen the contribution of the cognitive process, and as a result enrich the final ethical judgments. Additionally, there is also a kind of hidden curriculum that we provide to students (Goold & Stern, 2006; Hafferty & Franks, 1994). It is exactly this area (internships, the way we relate to the students) to which we need to pay attention during their undergraduate and graduate years.

**Conclusion.** Expecting students to learn and internalize knowledge in a meaningful way necessitates new modes of instruction. Specifically, teaching and learning ethics in an interactive way, while paying attention to both good decision-making skills and emotional cues, would provide exactly what students would enjoy and learn from the most. In this article, we will suggest that, if the question is how to sensitize students to ethical issues in psychology, and in the profession, it is important to give them an active role and responsibility for disseminating ethical principles. We will also introduce different techniques that help combine knowledge with emotionality while teaching ethics in psychology.

**Keywords:**  
psychology ethics; ethics in psychological practice; teaching ethics; teaching techniques; new methods; ethics course

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## Introduction

Ethics course syllabi usually offer very rich philosophical texts, many ethics-specific concepts, and several exemplary ethics codes. According to Prentice (2014), although many students appreciate the need for lectures on basic ethical principles, some regard such lectures as dull rather than motivating.

It is clear that teaching only theoretical knowledge will not lead to full awareness and understanding of ethical issues. The main concern of this article is how we can make ethical knowledge more interesting and meaningful for our students and our colleagues. How can we successfully ensure that our students take on and carry forward an ethical understanding throughout their professional lives? The learning process surely has to be supported by other than academic means (Balogh, 2002) to achieve such a goal. Students learn best when they can emotionally connect to the subject, when they find meaning, and when they are active participants in the process. Let's start with the importance of the concept of values.

In essence, the ethical behavior of psychologists is based on values. Ethical codes translate professional values and beliefs into standards which define how the professional should act appropriately (Lindsay, 2008). On the one hand, values are largely determined by factors including religion, core beliefs, and culture. On the other hand, there are many universally shared values, such as fairness, and not harming others. It is to be expected that professional ethical codes would reflect both the values of psychologists which are shared internationally, and the culturally specific ones (Lindsay, 2008). Young psychology students especially need to understand the close relationships between the codes, cultures, and values. Exercises to discuss our individual values, cultural values, virtues, and ultimately professional values and how they relate to ethics, could well be included in the ethics curricula, as suggested by various scholars (Korkut, 2010; Sinclair, 2012; Pettifor, 2004; Pettifor, 1996; Pettifor, & Ferrero, 2012).

We cannot give students theoretical knowledge on all possible ethical dilemmas and how to solve them all. They are expected to learn "ethical decision-making steps" to be employed while facing ethical dilemmas (Ruiz, 2009). To achieve this, we usually use models based on a rational understanding, such as the following example from Koocher and Keith-Spiegel (1998, pp. 14–15).

1. Determine that the problem is an ethical one.
2. Consult the codes of ethics or guidelines available for possible mechanisms of solution.
3. Consider which is the best possible decision.
4. Locate a trusted colleague with whom to consult.
5. Evaluate the rights, responsibilities, and vulnerabilities of all affected parties.
6. Generate a set of alternative decisions.
7. Enumerate the consequences of each decision.
8. Make the decision.
9. Implement the decision.

### ***The role of emotions***

The above-mentioned rational decision-making steps are very valuable, but understanding ethical problems strictly as cognitive processes is not enough. Students should be aware of the vulnerabilities that can undermine ethical decision-making, such as cognitive errors, emotional factors, social and organizational pressures, and situational factors. Let's now have a brief look at what the literature suggests to us in that respect.

When people make ethical decisions, they have a tendency to consider immediate and concrete factors instead of more abstract ones (Glover, 2012). They tend to bring together, process, and remember information in self-serving ways (Langvoort, 1997). As an example, Prentice (2014) asserts that a person's views on gay marriage might well change if his or her child disclosed their sexual orientation. He gives as an example a senator who announced that he had switched from opposing gay marriage to supporting it, just because his son had announced that he was gay.

There is a great deal of research on the advantages of incorporating emotional aspects in the decision-making process (Decety & Cacioppo, 2012). Empathy, for example, can have important consequences for decision-making (Decety & Cowell, 2015). Emotions such as empathy, guilt, shame, anger, and disgust play a huge role in humans' ethical decision-making, and often lead people to make impulsive ethical judgments that they cannot rationally defend (Haidt, 2012). Kelly (2011) argued that the emotion of *disgust* evolved in order to keep people from eating poison and from exposing themselves to germs. Studies show that by simply subjecting people to a repulsive smell-spray in a room, or leaving used tissues around, the *disgust* emotion can be triggered. The result is a harsher ethical judgment than would otherwise have been exhibited.

Researchers can greatly change people's responses by showing them funny videos before they are presented with an ethical dilemma. Many similar studies show that emotions do strengthen the effect of the cognitive process and support the final ethical judgment. Therefore, it is a good idea to convince the students to realize that their ethical judgments and actions are not nearly as logic-based as they may seem. Although Sigmund Freud and his concept of the "unconscious" is not explicitly included in Nobel Prize winner Daniel Kahneman's (2011) work, Kahneman makes it clear that most human decision-making is done intuitively by what Kahneman calls "System 1." Most ethical decisions are made emotionally and intuitively before the cognitive parts of the brain ("System 2") take over.

It is critical for students to understand the role of emotions in moral judgments. Even well-trained, sensitive, mature psychologists can find themselves in risky situations, subject to unpredictable and unclear dilemmas, insufficient guidance, and loyalty pressures (Koocher & Keith-Spiegel, 1998, pp. 6-10). Therefore, an important goal for ethics professors could be to challenge students with respect to their vulnerability to ethical mistakes. Maybe we are not as ethical as we think we are?

So, with these questions in mind, Prentice (2014) kept asking his students why anyone should care to act ethically. All of his students said they desired to act ethically, and they seemed to mean it. According to Prentice, the mind's ability to believe what it wants to believe is very strong. Thinking that a realistic worldview is

much better than one based on an illusion, Prentice tried to convince his students through exercises that being ethical can be harder for them than they might expect. The main reason for unethical behavior is that the “want” self takes precedence. So the professor encourages his students to be aware of the conflicts between their “should” self and their “want” self.

In a similar fashion, one of the greatest problems is that people often use rationalizations to allow themselves to act unethically in certain situations. Greene (2014, p. 301) says, “Rationalization is the great enemy of moral progress.” According to Anand, Ashforth, & Joshi (2004), rationalizations act against moral intent. Therefore, all these authors point out that if we hear ourselves using rationalizations such as “If I don’t do it, someone else surely will,” we had better stop and think for a while and ensure we monitor ourselves carefully.

Sadly, most ethical mistakes are not made because people have not read enough ethics theory (Jennings, 2005). Rather, when those well-educated people make bad decisions, it is because of cognitive mistakes, social and organizational pressures, situational factors, and/or rationalizations like that mentioned above. Understanding these influences helps us to be aware of those factors that prevent people to engage in unethical behavior.

Drumwright, Prentice, & Biasucci (2015) in their extensive review of the literature bring together many factors which can cause people to make decisions with serious ethical consequences without adequate consideration of the facts. For example, the desire to please the authorities can cause people to suspend their own ethical judgment. If the superior is unethical, people are capable of doing horrible things, as shown in the Milgram study (1963). In their article, those authors discuss that brain scans reveal that resistance to group pressure can be psychologically costly: the pull to conform to the behavior of peers can be extremely powerful.

Individuals have a tendency to make different decisions depending upon how a question is framed. People will often make riskier and even less ethical decisions to avoid a loss than they would have taken to secure a gain. Many situational and environmental factors could adversely affect ethical decision-making in ways we do not even notice, such as time pressure and transparency. People are more vulnerable to ethical mistakes if they are tired, or if they feel depleted.

### ***Where to Teach Ethics?***

The discipline and science of psychology require sensitivity to ethical issues. Therefore teaching and training in ethics is a crucial component of the undergraduate psychology curriculum if we want students to learn ethics codes and behave ethically (Ruiz, 2009). Postgraduate studies provide the best opportunity to learn about conducting ethical research and all the basic ethical concepts. According to Fairman (2005), we try to train young researchers to employ ethical decision-making in their future work. Similarly, Wolpe (2010) claims that we want to train young scientists to recognize ethical issues when they arise and teach them the “tools” to cope with them.

Now I would like to come to some other opportunities for best planting the seeds of ethical values, and for paying attention to the emotional factors that could

influence ethical decision making. The importance of learning ethics through modelling is huge. It is a well-known fact that if you tell a child not to lie, and as a parent, you yourself lie, the child will in fact do as you do, not as you say. The best learning is achieved by having “models” for morally-appropriate behavior.

Beside the teaching of the theoretical aspects, there is a hidden curriculum that we provide to students through our interaction with them, and this needs to be attended to during their undergraduate and graduate years. Residency settings and internships provide students with a great amount of experience (Goold & Stern, 2006) and an opportunity for them to learn through experience. Hafferty & Franks (1994) observe the positive effect of such a “hidden curriculum” among students. A study by Tabachnick, Keith-Spiegel, and Pope (1991) in the United States provided data from APA members working in institutions of higher education. The results showed the importance of their being “role models” for their students, providing examples of self-examination through an ethical lens.

But what exactly changes while we are teaching ethics? James Rest (1994) suggests that there are four key steps to acting ethically. First, people must perceive the ethical dimensions of an issue that they are facing (this is moral awareness). Second, they must have the ability to decide upon a course of action that is ethical (moral decision-making). Third, they must have the intent to act on that ethical decision (moral intent). Finally, they must have the motivation and courage to act upon that desire (moral action). Moral awareness is very critical here. Individuals are better prepared to make ethical decisions if they are aware of the related values and implications of the decisions they are facing (Moore & Gino, 2013).

Drumwright, Prentice, & Biasucci (2015) emphasize how teaching behavioral ethics can contribute in a meaningful way to improving ethics education. Understanding the above-mentioned cognitive errors, social and organizational pressures, and situational factors, could help enhance awareness of those factors that would eventually lead to unethical behavior. Teaching ethics, according to the authors, provides support for all the steps in Rest’s (1994) model, from moral awareness to moral action.

Prentice’s excellent review (2014) of research findings in the teaching of ethics revealed that problem-based learning was preferred by students over conventional teaching. Detailed case studies were useful in teaching ethical decision-making skills. Curricula which allow the active involvement of students in ethical decision-making, as opposed to more passive lectures, tended to best support the development of ethical judgment. Through activating teaching strategies such as group discussions, case analysis, and reflection sessions, students were able to apply ethical knowledge in real situations. Many of these findings show promise for improving students’ ethics education and their future ethical behavior.

A similar finding comes from a recently completed study by Korkut and Aktas (2019). With the use of a book on teaching ethics which provides a series of CDs and visual material (Korkut, 2017), students were encouraged to role-play the scenarios provided in the classroom. Later, often in small groups, they discussed the vignettes while using a decision-making model. This method was used with the intent of helping students integrate ethical theory with their emotions, and to better understand how ethical conflicts arise.

The study tried to evaluate the changes in the ethical behavior, moral values, and the adoption of ethical rules by the students as a result of the ethics curriculum, class practices, and exercises. Comparing pre-test and post-test applications of Dynamic Interpersonal Therapy (DIT), students who took the course showed an increase in post-conventional schema scores. Again, the pre-test and post-test comparisons showed that *passive* answers decreased, and *active attitude* answers increased significantly. Altogether, the results demonstrated the importance of psychology students taking a course on the acquisition of ethical values and knowledge, as well as being more active in terms of ethics.

### ***While Teaching Ethics, Which Techniques Should Be Employed?***

Expecting students to learn and internalize knowledge in a meaningful way necessitates unconventional methods. The content must be stimulating and motivating, and our teaching method should activate the emotions as well as rational thought. Let's have a closer look at different techniques that would help us to combine knowledge with emotionality while teaching ethics in psychology.

1. *Case studies* are an excellent basic method in learning ethics. By analyzing real situations, students can learn how to handle similar situations.
2. It is very efficient to break a class down into *small groups* and give them case studies to discuss.
3. Prentice (2014) says students consider *reflective group discussions* about dilemmas to be a technique associated with significant learning.
4. *Stories* (Levinson, 2015) which include ethical dilemmas as examples of the right and wrong ways to use one's skills, along with the outcome of each, grab students' attention. This method is most effective through debriefing the students.
5. Actual or past events with ethical aspects occurring at a given time in the society, or in the professional society, could be discussed in *debates*.
6. Balogh (2002) suggests using *media journals* (the discussion points there) as an interactive method.
7. Fisch (1997) suggests using *films* and *movies* which include ethical dilemmas such as a sexual intimacy problem with a client.
8. *Role-playing* is an excellent training technique for developing many interpersonal skills, including observing emotions and developing empathy. By assuming roles and acting out situations that might occur, students learn how to handle various situations before they face them in reality.
9. Technology provides new ways of learning. Using CD-ROMs or computer-based training is much more sophisticated than employing the original text-only programs. The new technologies provide stimulating graphics, audio, animation, and/or video. The Ethics handbook with two CDs from Turkey (Korkut, 2014) is an example.
10. A *multimedia* approach tends to be more provocative and challenging, and therefore more stimulating to the adult mind. Multimedia training materials are typically found in DVD format.

11. *Audioconferencing, tele- or videoconferencing* allow the trainer to be in one location and trainees to be in remote locations. Lectures and demonstrations can be effective using this method.
12. Web meetings, or *webinars*, contain audio and visual components. They provide a chance for questions and interactive discussion with the presenter as well.
13. If the question is how to sensitize students to ethical issues in life and in the profession, one of the best methods is to give them an *active role and responsibility in disseminating ethical knowledge*. They could be encouraged to “create” their own projects or take part in larger projects related to ethics. For example, in Turkey we have published two books on ethics in psychological practice which include active contributions by students. In one project, students made a significant contribution to the preparation of instructional CDs and movies by role-playing some scenarios (Korkut, 2014). In another project, Ph.D students contributed to the translation of a book by Pope & Vasquez (2016).
14. Last but not least, we should bear in mind that psychology is wedded to the social, cultural, political, and economic conditions of its times, as Danziger (1997) asserts. It is relevant to ask: “Where are we when trying to teach ethics to students? In what context are we teaching ethics?” The *Zeitgeist*, or socio-political spirit of the times, sometimes matters a lot.

Jeff Sugarman (2015) offers a critique and warns us that psychologists need to be ideologically aware if they are to comprehend their disciplines and professional practices ethically. Our students are not unaware of the problems surrounding us, and they observe our position in the face of them. Could we provide *a space for discussion of the conflict situations that are emerging in the larger society or in the world*? How can we as psychologists encourage our students, while we are teaching ethics, to also learn about cultural sensitivity, human rights, and environmental changes? The idea here is to nurture *critical thinking skills* during the lessons. Of course, since discussions would increase the uncertainty and the vulnerability in students, there is a need to first create a safe learning environment.

## Conclusion

In sum, teaching and learning ethics in an interactive way, while paying attention to both rational decision-making skills and emotional aspects, would be exactly what students would enjoy and learn from the most. Once more, as Balogh (2002) and Schwartz (2002) nicely point out, a theoretical, cognitive emphasis on its own would not produce an enduring change in awareness and understanding of ethical issues. The learning process should be supported by other means.

To improve the quality of teaching and avoid “dryness,” some strategies can be employed to help “generalize” the knowledge. The emotional factors influencing our ethical decisions, as well as the social and political circumstances and realities, can be carefully included in the learning process. All of these can make training deeper, more fun, and more enjoyable. Students can integrate theoretical knowledge with emotionality much more effectively, by all these means.

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## Ethics of Clinical Supervision: An International Lens

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**Background.** Although widely acknowledged as a distinct professional practice, clinical supervision has not consistently been a component of graduate training in psychology, and has not achieved recognition commensurate with its importance to the field in the United States or internationally. Although competence in supervision had been inferred, multiple international studies reveal high frequencies of unethical, inadequate, and harmful supervision. Implicit in clinical supervision is ethical acumen, practice, modeling, teaching, and adherence to multiple ethical principles and codes. Specifically, this role calls for respect, integrity, doing no harm, competence, confidentiality, and not entering multiple relationships that may do harm.

**Objective.** The objective of the current article is to describe the essential components of ethical clinical supervision and training, ethical imperatives for both supervisor and supervisee, and aspects of training and supervision that ensure protection of the client. A framework of enlightened globalization harmonizes rules and ideals of the profession with cultural diversity and provides both a structure and guidance for supervisors and supervisees.

**Results.** We analyze the ethical development of supervisees which occurs through a complex process of integration of personal values and ethical positions with professional ethics; through an intentional, systematic process; and through supervision, to enhance their metacompetence (*i.e.*, knowing what one knows and doesn't know).

**Conclusion.** Through a review of the strategic literature, we define current international and cultural perspectives on ethical practice and training, outline critical ethical issues, and provide strategies for effective and ethical clinical supervision, including an informed consent document and a supervision contract.

**Keywords:**  
clinical supervision;  
ethics;  
ethical clinical supervision;  
supervision;  
international supervision

## **Introduction**

Clinical supervision is internationally acknowledged to be the most important influence on psychologists' clinical practice (Orlinsky, Ronnestad, & the Collaborative Research Network of the Society for Psychotherapy Research, 2005). It is the main means of instilling ethical knowledge, skills, and attitudes in a supervisee during the training process. Supervisors thus bear significant responsibility to their supervisees and clients; their highest responsibilities are to protect the client and public; to ensure no unsuitable supervisees enter the profession; and to support and advance the development, competence, and ethical practice of their supervisees.

A sea change in supervisory practice, and the magnitude of the change toward a competency-based framework, have caught many supervisors by surprise (Gonzalez & Calvert, 2014). Specific ethical supervisory practices (Barnett & Molson, 2014; Falender & Shafranske, 2014, in press; Pettifor, McCarron, Schoepp, Stark, & Stewart, 2011) have been described. However, clinical supervision is generally not the subject of formal coursework during a psychologist's training. Supervisors who have no formal training may supervise the same way they were supervised, through a process of osmosis or absorption of the practices of their supervisors. This process is fraught with peril for both ethics and practice, since it is increasingly clear that a substantial quotient of inadequate or harmful supervision occurs in multiple international locales. Furthermore, low value may be attached to the importance of clinical supervision by individuals who lack formal supervisory training (Rings, Genuchi, Hall, Angelo, & Cornish, 2009), and by training directors who even urge that it be eliminated from the training process (Stedman, Schoenfeld, & O'Donnell, 2013).

When supervisory training is offered, it may be through a psychotherapy-based model, which may not be systematic or include all the multiple components and dimensions of supervision (Falender, 2018; Falender & Shafranske, 2010). Specifically, psychotherapy models may not systematically and directly address the supervisee's emotional reactivity, multicultural diversity, or legal and ethical aspects, for example. Ethical clinical supervision requires competence in all aspects of client assessment, intervention, and outcomes through multicultural frameworks, as well as competence in the provision of effective supervision in these. All aspects of local ethical codes and standards must be known and upheld, including informed consent; competence; oversight and monitoring; reflection and caution in multiple relationships; modeling reflective ethical behavior; identifying ethical issues in a positive framework; and problem-solving.

Contrary to the assumption that all supervisors are competent, supervisees report significant levels of less than adequate supervision. Consensus exists across disciplines and international venues about what constitutes effective versus inadequate or harmful supervision. Harmful supervision was defined as "the supervisor's actions or inactions resulting in psychological, emotional, or physical harm to the supervisee" (Ellis et al., 2014, p. 7). Inadequate supervision may not be harmful, but poses significant risk, as it may be characterized by failure to meet legal and ethical standards (*e.g.*, competency, time, consistency, attention); supervisory disinterest; lack of investment; failure to provide accurate and timely feedback and evaluation of supervisee competencies; or disrespect or disregard of supervisee input.

Studies in multiple countries also identify the incidence of inadequate and harmful supervisory practice: in the United States, Ellis et al. (2014, 2017) and Ladany, Mori & Mehr (2013); in Ireland, Ellis, Creaner, Hutman, & Timulak (2015); in South Africa, Hendricks & Cartwright (2017); in Australia, Lovell (2007); and in Korea, Bang & Goodyear (2014). Ladany and colleagues (Ladany, Lehrman-Waterman, Molinaro, & Wolgast, 1999) and studies conducted by our Pepperdine University research group (Hansell, 2018; Wall, 2009) found supervisees' perception of ethical misconduct by their supervisors was associated with lower alliance ratings by supervisees. When supervisors allow use of treatment methods of which they have limited knowledge, or schedule supervision on an as-needed basis rather than providing regular supervision sessions, the consequences affect the alliance as well as the integrity of supervision, and ultimately the quality of client care. Both inadequate and harmful supervision constitute ethical breaches with significant impact upon both client and supervisee wellbeing.

Other studies identify ethical errors that supervisees perceive their supervisors to have committed. In a study of 151 beginning- to intern-level supervisees, 51% reported at least one ethical violation by their supervisors. Among the most frequently reported infractions were failure to provide supervisees with adequate performance evaluations; violating supervisee confidentiality; not working with alternative perspectives; disregard for session boundaries; and disrespectful behavior (Ladany, Lehrman-Waterman, Molinaro, & Wolgast, 1999). These findings are generally replicated by Wall (2009).

## Method

To enhance ethical clinical supervision, a number of perspectives and objectives are required. First, general parameters of ethical supervision will be discussed. Next, international guidelines for clinical supervision and the ethics of clinical supervision will be listed, showing the agreement among them on the central concepts that distinguish supervision from clinical practice, followed by identifying the specific ethical standards and their importance in clinical supervision internationally. Cultural variants of ethical codes and particular aspects of ethics will be described. Next we'll discuss the trajectory of supervisee ethical development. Finally, a summary discussion of ethical competence for supervisors is provided.

## Results

### *Parameters of Ethical Clinical Supervision*

There is significant international agreement on the ethical aspects of clinical supervision. The following are some of the premises:

1. There is a firm line between clinical supervision and personal psychotherapy. That is, an individual who is providing clinical supervision holds power over the future of the supervisee. It is not appropriate for such an individual, the supervisor, to also conduct therapy with that supervisee. This premise is specified in multiple ethical codes internationally.
2. Respect for the Dignity of Persons and Peoples

3. **Competence.** Supervisors must be competent both in the clinical services the supervisee renders and in the practice of clinical supervision. If either the clinical presentation or the supervision are beyond the competence of the supervisor, the supervisor is responsible for determining a course of action to ensure adequate supervision. Proceeding ethically is essential. This includes beneficence and doing no harm.
4. **Informed consent.** An informed consent agreement should cover expectations for the supervisee and the supervisory process; contingencies in case of emergencies or cancellations; limits to the confidentiality of supervisee disclosures; jurisdictional legal and reporting regulations; recordkeeping; and specific information relevant to the entire setting. A written supervision contract formalizes the aspects and expectations for performance and successful completion of the supervisory sequence.
5. **Boundaries and multiple relationships.** Establishment of clear boundaries to allow both supervisor and supervisee to maintain objectivity is imperative. As described in a later section, some aspects of boundaries may be culturally variable (*e.g.*, gift giving). However, given the power of the supervisor and the vulnerability of the supervisee, clarity of boundaries and a thoughtful approach to boundary crossings is essential. For example, if a supervisor had lunch frequently with one supervisee and never with the others, what impact might that have on a) the supervisee's behavior and judgments, and b) on the other supervisees in the setting?
6. **Evaluation.** Supervisors are responsible for providing ongoing feedback, monitoring of client care and outcomes, and ensuring the progressive growth of the supervisee's competence. Feedback should be normative, ongoing, and frequent, ideally linked to behavior observed, or if that is not possible, through supervisee report. Direct observation is highly desirable to address the question of metacompetence, or whether the supervisee knows what he/she does not know or observe.

### ***International Guidelines for Clinical Supervision and the Ethics of Clinical Supervision***

Multiple countries and jurisdictions have developed guidelines for clinical supervision and/or the ethics of clinical supervision. Among those are: the American Psychological Association's Guidelines for Clinical Supervision of Health Service Psychologists (2014, 2015); the European Federation of Psychologists' Associations' (EFPA) Ethical Guidelines for Psychologists in the Role of Trainers, Supervisors and Teachers of Psychologists (2019); the Association of State and Provincial Psychology Boards Supervision Guidelines for Education and Training leading to Licensure as a Health Service Provider (2015); the Psychology Board of Australia Guidelines for Supervisors and Supervision Training Providers (2013); and the New Zealand Psychologists Board Guidelines on Supervision (2007). The Universal Declaration of Ethical Principles for Psychologists also provides a common moral framework and ethical principles for psychologists (International Union of Psychological Science, 2008).

There is a confluence of competencies (knowledge, skills, and attitudes) across many international venues, which share the following themes: 1) knowledge of the profession and areas under supervision; 2) competence assessment; 3) multicultural diversity; 4) reflective practice; 5) evaluation; 6) ethical and legal standards and professionalism; 7) supervisory relationship processes, including reactivity, strains, and ruptures; 8) supervision competence assessment, feedback, and evaluation; 9) infusion of diversity and a worldwide perspective of all participants; and 10) modeling reflective process and self-awareness (adapted from Falender & Shafranske, 2004; Watkins, 2013).

An analysis of the ethics codes from 24 countries revealed significant agreement on many ethical principles and codes critical to clinical supervision. Sixty-eight percent of nations included guidance about multiple relationships in their code; 68%, the aspirational principle of competence; 79%, informed consent for therapy; and 95%, maintaining confidentiality. Overall, ten specific standards were presented in common, occurring in more than 75% of the codes (Leach and Hardin, 1997). At least 11 more countries have substantial ethical standards relating to supervision in their general code, including the Russian Psychological Society Code of Ethics (2012). Significant cultural issues arise internationally concerning the overlap between professional and nonprofessional relationships, the normative values of interdependence of community and family, and individualistic versus collectivist values.

### **Specific Ethical Standards and Their Importance in Supervision Internationally**

To frame the ethical issues in the training process and supervision, the following section considers several ethical aspects through an international lens, with a specific focus on their application to the supervisory process.

#### ***Boundaries and Dual and Multiple Relationships***

There has been increasing attention directed to multiple relationships, including the inevitability of some, and the significant impact of culture upon the ethical standards. Some ethical codes state that not all multiple relationships are unethical, specifically in cases when they would not “reasonably be expected to cause impairment or risk exploitation or harm” (APA, 2017, 3.05 (a)). In some cultural contexts, avoiding dual relationships is actually considered disrespectful and insensitive. In the United States, Zur (2017) advocates a loosening of the standard, suggesting that multiple relationships may be an asset and enhance therapeutic acuity and outcome. Generally, autonomy and self-determination, community and family interdependence, and connections between persons are highly valued in non-Western societies (Pettifor & Ferrero, 2012).

In clinical supervision, the power differential is significant, since the supervisor serves as a gatekeeper, determining whether the supervisee may move into independent practice. The potential for strain and rupture in the supervisory relationship is great when the supervisor and supervisee slide into a quasi-friendship relationship that reverts, by necessity, to an evaluative one. Furthermore, due to the power differential, the supervisee generally cannot refuse a supervisor’s request,

even if the request is something that the supervisee is not comfortable with. Many ethics codes suggest the multiple relationships of supervision by a spouse or other family members are inherently problematic, and thus prohibited.

Attentiveness to the potential for abuse of power, exploitation, and conflicts of interest are a supervisory responsibility. However, high value may be attached to seeking out therapy and supervision with someone known personally and respected due to the interdependence of community and family. Avoidance of dual relationships is sometimes actually viewed as disrespectful and insensitive (Deng et al., 2016). These issues may introduce ethical and worldview conflicts among supervisors, supervisees, and clients. Thomas (2014) concluded that it is difficult, and even undesirable, to have no connections or multiple relationships with supervisees, and that a thoughtful process is required in supervisor-supervisee relationships as well as in therapist-client ones. Ethical problem-solving is an effective tool (Gottlieb, Robinson, & Younggren, 2007).

### **Competence**

Clinical supervision is broadly viewed as a means for establishing and ensuring the competence of the supervisee. Supervisors in many countries are required to receive supervision competency training. In several jurisdictions, receiving supervision is a requirement throughout the professional trajectory (*i.e.*, U.K. and Australia), and in Australia, the competence of supervisors is formally evaluated at intervals.

An essential aspect of enhancing and ensuring a psychologist's competence is feedback from the supervisor to the supervisee. That is, when supervisors perceive problems in the knowledge, skills, and/or attitudes of their supervisees, it is imperative they provide feedback, monitor the supervisee's practice, and ensure the protection of the client. Furthermore, supervisors bear responsibility for competence in all the areas they supervise. Particular aspects of supervisory practice such as feedback may not be culturally syntonic: For example, feedback is essential to the Western style of supervision and competency tracking—but the feedback may result in a loss of face and be viewed as disrespectful, and thus be difficult to give in some non-Western cultures. However, there is universal agreement on the necessity for competence, as shown, for example, by interest in the document *Competencies Benchmarks* (Fouad et al., 2009), which has been translated in Taiwan and China.

However, the ability of the supervisee to give feedback and collaborate with the supervisor is also very important. This requires a trusting relationship. A relevant concept for achieving this is enlightened globalization (Kim & Park, 2007), as contrasted with unilateral globalization. Under enlightened globalization, supervisory practice and guidelines should strive to serve the interests of all peoples and persons, whereas unilateral globalization is a modern form of oppressive colonialism that results in promoting the advantage of some over others.

In supervision, one end of the spectrum is the unilateral imposition of behavioral expectations ("rules") as equally valid to persons of all cultures. Ostensibly a supervisor using this method would not be open to feedback or perspectives from the supervisee. At the other end of this spectrum is an enlightened approach that, first and foremost, considers the ideals and ethical principles of the profession, and responds to cultural differences with an openness and welcoming of cultural dis-

cussion and framing (Pettifor, Sinclair, & Falender, 2014). One result of unilateral globalization in supervision is the potential for alliance ruptures and client harm, when supervisees do not feel they have the power to address perceived ethical or practice infractions and multicultural aspects. Multicultural discussions generally don't occur in clinical supervision. Multicultural competence requires consideration and discussion of the intersectional identities of the client, supervisee/therapist, and supervisor, their resultant worldviews, and the impact of all of those on the therapeutic relationship, assessment, and treatment (Falender, Shafranske, & Falicov, 2014). There are resources which provide multicultural guidelines, such as *An Ecological Approach to Context, Identity, and Intersectionality* (APA, 2017).

These factors are of critical importance, and even more so in light of the half-life of psychological knowledge, *i.e.*, the time it would take, in the absence of new learning, to master approximately half the knowledge necessary for the profession, which is generally a function of the development of new knowledge (Neimeyer, Taylor, Rozensky, & Cox, 2014). Average half-lives of knowledge in professional psychology are projected to decrease within the next decade from nearly nine years to just over seven years. The range of half-lives is currently from 19 years (psychoanalytic psychology) to 4.36 (clinical neuropsychology) to 3.63 (psychopharmacology).

Supervisory competence has been assumed, but may not be the case, especially when the supervisor has received no formal training in supervision *per se*. Supervisory self-assessment is an important tool for the supervisor, so that he or she can model and identify areas where additional training is necessary (Falender et al., 2016; derived from the American Psychological Association Guidelines for Clinical Supervision, APA, 2014, 2015).

### ***Confidentiality***

Since the time of Hippocrates, confidentiality has been considered a cornerstone of ethics in patient care. However, concepts of autonomy and individuality, collectivism, and family interdependence are relevant to such considerations. Clarity about the confidentiality of personal disclosures by supervisees is limited. Supervisees often assume confidentiality, but the supervisory responsibilities of protection for the client, and abiding by institutional, ethical, and legal regulations, as well as duty to educational institutions, actually limit confidentiality (Falender & Shafranske, *in press*).

Confidentiality issues in therapy may create ethical dilemmas in some countries. Exceptions to confidentiality – mandatory reporting laws for child abuse, for example – exist in some jurisdictions, although some are voluntary (Liu & Vaughn, 2019). Issues of privacy, family responsibility and loyalty, worldviews, and cultural factors all intersect with confidentiality exceptions and may be additional elephants in the supervision and therapy rooms (Pettifor et al., 2014).

### ***Informed Consent***

Articulated in many ethics codes and supervisory guidelines is the necessity for informed consent and clarity of expectations for clinical supervision. There is also the ethical imperative that clients have informed consent that their therapist is a



supervisee under supervision, and that all client sessions and data will be disclosed to and directed by the supervisor who holds responsibility for the clinical work. If audio or video recording is to occur (an increasingly common practice), informed consent from the client must also be obtained, with clarity about the use, storage, confidentiality, and process for erasure of the recordings.

Use of a written supervision contract such as the one outlined in the American Psychological Association Guidelines (2014) is useful. It may include:

- a. Content, method, and context of supervision—logistics, roles, and processes.
- b. Clarity about the highest duties of the supervisor: protection of the client(s) and gatekeeping for the profession, while enhancing supervisee development and competence.
- c. Roles and expectations of the supervisee and the supervisor, supervisee goals and tasks.
- d. Criteria for successful completion and processes of evaluation.
- e. Processes and procedures when the supervisee does not meet performance criteria, or reference to such if they exist in other documents.
- f. Expectations for supervisee preparation for supervision sessions (*e.g.*, video review, case notes, agenda preparation) and informing the supervisor of clinical work and risk situations.
- g. Limits of confidentiality of supervisee disclosures, behavior necessary to meet ethical and legal requirements for client/patient protection, and methods of communicating with training programs regarding supervisee performance.
- h. Expectations for supervisee disclosures, including personal factors and emotional reactivity, or countertransference and worldviews.
- i. Legal and ethical parameters and compliance, such as informed consent, multiple relationships, limits of confidentiality, duty to protect and warn, and procedures for emergency situations.
- j. Processes for ethical problem-solving in the case of ethical dilemmas (*e.g.*, boundaries, multiple relationships) (Adapted from APA, 2014, p. 24-25).

### **Supervisee Development and Ethical Acculturation**

Understanding supervisee socialization and acculturation into ethical practice is essential. In some ethics acculturation models (Handelsman et al., 2005; Knapp, Vandecreek, & Fingerhut, 2017)), supervisors are cognizant of how supervisees integrate their own personal ethics with professional ones. The four resultant quadrants of ethical behavior are: 1) marginalized, which is characterized by low personal and professional standards, and therefore potentially exploitative; 2) separated, which involves having adopted professional standards but lacking compassion, which makes the standards potentially rigid or legalistic; 3) assimilated, *i.e.*, personal compassion is not restrained by professional ethics so there exists potential for overinvolvement; and 4) integrated with professionally informed practice and modulated by personal compassion. One supervisory task is to move the su-

pervisee towards integrated ethical behavior, the highest level of development, and to monitor supervisee maintenance of objectivity in their clinical work.

Another supervisory responsibility for ethical practice is to be aware of meta-competence, both personally and for the supervisee. Metacompetence refers to awareness of what one knows and what one does not know. The latter is challenging to define, as we do not know what we do not know (Falender & Shafranske, 2007). A possible consequence of problems with a supervisee's metacompetence is he or she not recognizing their own behavior as deviating from their usual patterns, which may result in nondisclosure to their supervisor of their own countertransference or of clinical errors (although there are other reasons for nondisclosure, including an insecure supervisory relationship) (Ladany, Hill, Corbett, & Nutt, 1996; Wall, 2009).

A supervisor's total reliance on supervisee reporting or self-disclosure of what transpired in a clinical session is a significant problem. Supervisees may not identify clinically significant aspects of the client session or process, the ethical issues that arise, or general facilitators or impediments to treatment. New regulations for accreditation (APA CoA, 2018) in the United States directly address this by requiring each supervisor to conduct direct observation – live, video, or audio – to more effectively provide training and guide client care.

## Discussion

### *Ethical and Effective Supervision*

Recognition that supervision is a distinct professional competence that requires training is an essential first step. Supervisors hold responsibility for both client care and for their supervisees, and for understanding and integrating the worldviews and belief structures of the client(s), supervisees, and themselves. The supervisor models ethical behavior, thus providing a hidden curriculum that is supported by multiculturally competent ethical practice. Supervisors should self-assess their own supervisory competence. Generally, the supervisor should be competent in the areas under his/her supervision, including understanding multicultural factors, modeling metacompetence, or considering what one does not know, and creating an environment in which communication and the supervisory and therapeutic relationships are facilitated. Acknowledging the limits of a supervisor's own competence and requisite the ethical steps to address those limits is critical.

The supervisor provides informed consent to the supervisee regarding the multiple aspects of the supervisory relationship, expectations, and evaluation; this is codified in a supervision contract. Establishment of the supervisory relationship requires a respectful process and collaboration in the competence assessment of the supervisee, as well as in the setting of goals and tasks. An emotional bond is developed, inviting trust, supervisee self-reflection and self-assessment, and reinforcing metacompetence. Developing an environment that enhances communication supports a supervisory working alliance, while establishing and supporting clear boundaries that are articulated for the specific setting.

The supervisor's reflective process allows for monitoring and addressing the impact of relational dynamics and parallel processes, as well as the supervisee's emotional responses, reactivity, and countertransference, thus ensuring that the focus remains on the impact on the client and does not cross a line into personal

psychotherapy with the supervisee. Ethical problem solving is an effective tool for assisting supervisees in identifying and determining action when supervisory and clinical dilemmas arise. Supervisors will find that supervisees' ethics training is focused primarily on risk avoidance and knowledge, sometimes rote knowledge, of the ethics code, but does not necessarily identify ethical dilemmas within the expanse of the clinical presentation and setting. Supervisors must model positive ethics, ensuring that supervisees understand and promote the highest ethical conduct and aspirational principles.

The supervisors' ethical knowledge, skills, attitudes, and competence should be strong, modeling adherence to ethical principles and codes, and reflective practice. Supervisors are also challenged to identify ethical aspects of clinical presentations and supervisee-client interactions, and to provide a respectful process that attends to the various requisite competencies needed to ensure that supervisees learn and provide the best care, protecting and enhancing the outcome for the clients they serve.

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## **An Ethics of Inclusion: Recommendations for LGBTQI Research, Practice, and Training**

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**Background.** Throughout the last forty years, an emerging set of global norms addressing the rights and treatment of lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI) people have emerged and are continuing to evolve. This article will outline the trajectory of LGBTI concerns in the context of international human rights, and make a case for psychological ethics that are inclusive of concerns specific to sexual orientation, gender identity, and gender expression (SOGIE). These discussions will be framed in the context of the historical stigma and pathologization associated with SOGIE concerns, as well as the increasing global visibility and political and social organizing of LGBTQI communities.

**Discussion.** First, the rise of international and regional ethics codes pertaining to SOGIE concerns, including the role of the United Nations, will be reviewed. Second, recommendations for an ethical approach to psychological research, practice, training, and advocacy inclusive of SOGIE concerns will be discussed. These recommendations will be informed by the existing ethical framework of the European Federation of Psychologists' Associations (EFPA), and will address the unique concerns of sexual orientation minority populations; transgender, non-binary, and gender-expansive (TNG) people; and intersex populations. Finally, the International Psychology Network for LGBTI Issues (IPsyNet) will be introduced as a model for networking in support of SOGIE interests within LGBTQI-affirming national psychological organizations.

**Conclusion.** As European ethical practices respond to calls from human rights stakeholders for increased inclusion of SOGIE concerns, this paper proposes that it is the responsibility of international psychological practice to support the human rights of *all* global citizens.

**Keywords:**

Ethics; sexual orientation; gender identity; LGBTQI; human rights; sexual minority; gender minority; SOGIE; TNG

## **Introduction**

A recent review of international human rights law shows that throughout the last four decades, a set of global norms pertaining to the rights and treatment of lesbian, gay, bisexual, transgender, queer, and intersex (LGBTQI) people has emerged and continues to evolve (Baisley, 2016). These norms are the result of efforts across international governing bodies (particularly, the United Nations' Commission on Human Rights), civil society organizations (such as the International Lesbian, Gay, Bisexual, Trans and Intersex Association [ILGA]), and political advocacy groups within various countries that have taken strides toward increasing LGBTQI equality across the globe. These human rights defenders articulate the application of the agreed-upon human rights principles of universality, nondiscrimination, and equality to sexual orientation, gender identity, and gender expression (SOGIE) minority populations (Baisley, 2016; United Nations, 2016). These SOGIE-inclusive stances call for decriminalization of same-sex sexual behavior, and suggest that prohibitions against violence towards SOGIE minority populations have a basis in international law. They also maintain that the international community has a responsibility to address such violence and discrimination (Horne & Manalastas, 2019).

The current landscape of proposed human rights standards, as they apply to SOGIE concerns and are related to mental health, is built upon the decisions by the World Psychiatric Association (WPA; Bhugra, Eckstrand, Levounis, Kar, & Javate, 2016), the American Psychological Association (APA, 2012, 2015), and both the World Health Organization (WHO) and the American Psychiatric Association, to remove same-sex attraction from their lists of pathologies (American Psychiatric Association, 1980; WHO, 1992). Subsequently, they moved to destigmatize the distress experienced by transgender, non-binary, and gender expansive (TNG) people (American Psychiatric Association, 2013; WHO, 2018) in the two major psychiatric diagnostic and classification systems (ICD-11 and DSM-5). These expansions of international human rights so as to apply to SOGIE minority populations, highlight the important role which mental health practitioners and psychological organizations have played, and continue to play, in international efforts to achieve equity and safety for LGBTQI people.

However, in addition to these broad shifts within the European-Western psychological community from pathologization to an affirming and human rights-inclusive stance for SOGIE concerns, a multitude of national-level psychological organizations across the globe have made significant contributions to the rise of affirmative practice with SOGIE minority populations. Currently, psychological organizations on all continents (with the exception of Antarctica) have professional psychological organizations or committees with the explicit mission of addressing SOGIE concerns, and transnational collaboration on psychological approaches to LGBTQI populations continues to grow (Horne, Maroney, Nel, Chaparro, & Manalastas, 2019).

This article will trace the development of LGBTI concerns as reflected in human rights platforms, and make a case for a SOGIE-inclusive ethics for psychology within the context of the historical pathologization of LGBTQI populations. First, the rise of international and regional ethics codes pertaining to SOGIE concerns, including the role of the United Nations, will be reviewed. Second, an ethical approach to psychological research, practice, training, and advocacy inclusive of

SOGIE and LGBTQI concerns will be discussed, especially as informed by the ethical framework of the European Federation of Psychologists' Associations (EFPA). Finally, the International Psychology Network for LGBTI Issues (IPsyNet) will be introduced as a model, unique to the discipline of psychology, for networking in support of SOGIE interests within LGBTQI-affirming national psychological organizations.

### ***LGBTQI+ Visibility and Vulnerability***

Throughout the past five decades, the influence of globalization has sparked the rise of organized movements in support of SOGIE concerns across the globe, and led to increased demands for equality, inclusion, and safety for LGBTQI people (Horne, Maroney, Wheeler & Peters, 2019). SOGIE concerns as such have often been characterized as distinctively Euro-Western (Horne & White, 2019; Thoreson, 2014), and summarily rejected by non-Euro-Western governments (also referred to as majority countries), as Western imports (Judge, 2018; Nel, 2014). Such characterization of SOGIE concerns as exclusive to Euro-Western contexts has been proposed as a justification for harmful practices such as sexual orientation and gender identity change efforts (SOCE/GICE) within global anti-LGBTQI movements, spurred on by the argument that such practices will counterbalance undue Western influences (Horne & McGinley, 2020).

However, this tension between the rise of LGBTQI activism and increased cultural scrutiny regarding the acceptance and inclusion of LGBTI rights, is not unique to the global expansion of SOGIE concerns. In effect, a standard of “normality” has historically been imposed as a criterion by which to measure and discipline forms of social deviance (Foucault, trans. 1977/1995; Warner, 2000). Therefore, an understanding of the mutual relationship between power and visibility shows that “abnormal” populations – in this case the LGBTQI population – are only vulnerable to cultural discipline when they become visible; indeed, the culture imposes a “compulsory visibility” (p. 187) in an effort to maintain disciplinary power (Foucault, 1977/1995).

With respect to SOGIE concerns, the manifestation of this striving toward normality has been increasingly differentially applied to LGBTI people and communities. Specifically, White, Western-European and North American, middle and upper income LGB – identified people have been granted greater approximations to “normality” through marriage equality, access to positions providing upward mobility, and other legal protections. In contrast, LGBTI people residing in nations where SOGIE identities and expressions are criminalized, marginalized, or tightly controlled, and “normality” is harder to achieve, particularly for ethnic and racial minorities, LB women and transgender/non-binary people, as well as low income individuals (Horne et al, 2019; Weber, 2018).

In the field of psychological practice, this process of re-pathologization can be observed in the expansion of sexual orientation change efforts and gender identity change efforts in the United States; took the form of organizations such as Exodus International, which emerged in response to the removal of homosexuality from the Diagnostic Statistical Manual in 1973 (Horne & McGinley, 2020), and more recently, in the emergence of celibate identities, in which people identify as LGB but make clear that this identity does not include same-sex sexual relationships



(Freeman-Coppadge & Horne, 2019), and by mental health professionals offering treatment for mock diagnoses focused on obsessions about one's sexual orientation. Thus, the resistance to providing human rights has extended so far as to claim that identities intrinsic to SOGIE diversity can be forcibly altered via external psychological and behavioral change efforts (Horne & Manalastas, 2019; Horne & McGinley, 2020).

The pressures to conform to social norms have been influenced by Euro-Western medical and psychological science that historically has pathologized non-cisgender and non-heterosexual SOGIE, and placed increased pressure on SOGIE minority populations to assimilate to an imposed standard of normality as they become more visible in the culture at large (Warner, 2000). This pressure has contributed to the emergence of "post-gay" rhetoric, by which the most easily assimilable members of the LGBTQI community (typically cisgender, white gay and lesbian people of middle and upper income levels) are apt to abandon the queer liberation movement and pursue goals that approximate normalcy (e.g., marriage). Thus, they leave behind the less "normal" members of the community, such as TNG people, intersex populations, queer people of color, low income LGBTQI people, and people who live in countries where SOGIE concerns are strongly regulated (Horne & White, 2019; Warner, 2000; Weber, 2018). In the global context, this tendency has contributed to a greater distinction between those who are "gay patriots" and those who become further marginalized (Weber, 2018), usually SOGIE minority members of non-Western cultures.

Within the United States, the contributions of major mental health organizations, including the American Psychological Association, in advocating for affirmative practices and inclusive treatment for LGBTI individuals has been pivotal in increasing mental health supports (APA, 2009, 2012, 2015; Horne & McGinley, 2020; Gray, Haldeman & Brinton, 2019). As organizing around SOGIE concerns continues to grow internationally, the role of psychological organizations in promoting the well-being of LGBTQI people must then be framed in the context of advocacy, and draw from human rights frameworks to increase attention toward minority groups within SOGIE communities. Western-based organizations in minority countries have historically dominated through prizing Euro-Western psychological teachings over indigenous approaches and forms of knowledge (Horne et al., 2019; Horne & White, 2019; Thoreson, 2014), including national psychology organizations. Thus, these historically dominant organizations will need to engage in intentional power-sharing when collaborating with psychology organizations in majority countries in order to engage in advocacy and activism on behalf of LGBTI people and SOGIE concerns (Norsworthy & Kaschak, 2013).

### ***An Overview of International and Regional Ethics Codes***

The inclusion of SOGIE concerns in international human rights discourse is relatively recent, as the push for the inclusion of sexual orientation and gender identity as protected identities has only gained traction since the mid-1990s (Horne & Manalastas, 2019). Within the discipline of psychology, it is only since the 1970s that homosexuality ceased to be considered a mental disorder in dominant diagnostic frameworks (Drescher, 2015), and only since 2013 that gender diversity has

begun to be de-pathologized in major diagnostic systems (Horne & Manalastas, 2019). It is no surprise then that international human rights codes have similarly been slow to include SOGIE concerns.

### *The United Nations*

The first time that sexual orientation was formally addressed at the United Nations was in 1982, in a case brought against Finland for censorship of media pertaining to homosexuality; the decision went in favor of Finland (Baisley, 2016). In 1993, a proposal to add sexual orientation to a United Nations resolution on the Prevention of Discrimination and Protection of Minorities failed to pass. Then in 1995, a move was made to add homosexual men to the list of protected categories under a United Nations resolution regarding non-discrimination based on HIV status (Sanders, 1996). When this proposal passed, it represented the first formal mention of homosexual people in a United Nations resolution.

Over the next several years, sexual orientation continued to garner more attention at the United Nations, including with an attempt by the International Gay and Lesbian Human Rights Commission (IGLHRC) to have sexual orientation declared as grounds for protection from discrimination at the 1995 Fourth World Conference on Women in Beijing (Girard, 2008). This measure was ultimately not included in the final draft (Horne & Manalastas, 2019). However, the visible activism of lesbian and bisexual women at the conference was credited with maintaining a focus on sexual orientation concerns at the United Nations (Horne, 1996).

Despite the fact that SOGIE concerns lagged in recognition within the United Nations, the global community appears to have reached “a tipping point” in recognizing the validity of claims that SOGIE minorities need to be included in universal rulings on human rights law (Baisley, p. 137). Despite the inconsistent history of United Nations rulings on SOGIE concerns, Baisley (2016) emphasizes the importance of the legal foundation provided by United Nations decisions in generating new norms regarding the protection of LGBTQI populations across the globe.

This international shift in norms was evident in the passing of the first United Nations resolution explicitly addressing SOGIE concerns in 2011 by the Office of the United Nations High Commissioner for Human Rights (OHCHR; 2011), and the 2016 resolution on the “Protection against violence and discrimination based on sexual orientation, and gender identity.” The latter represented the first time the United Nations mandated the appointment of an Independent Expert on SOGIE concerns, and included specific reference to intersex concerns (United Nations, 2016). Most recently, the United Nations Human Rights Council issued the first resolution pertaining to intersex populations, calling for the protection of human rights for women with “differences of sex development” (OHCHR, 2019). This development was in response to the international attention to the debate over naturally occurring testosterone levels in the case of female athlete Caster Semenya (“Caster Semenya,” 2019).

Within the last decade, the United Nations has acknowledged the pervasive violence experienced by LGBT people internationally and issued a series of mandates which nation states are expected to uphold with regard to SOGIE concerns (OHCHR, 2012). These include a joint statement endorsed by 11 other United Na-

tions agencies expressing concern about human rights violations faced by LGBTI people and their families (International Labour Organization [ILO] et al., 2015). These actions represented the culmination of many years of activism by and on behalf of the global LGBTQI community (Horne & Manalastas, 2019). Over 190 countries have pledged to participate in the UN's Sustainable Development Goals for 2030, which emphasize a commitment to give priority to the most marginalized global citizens through non-discrimination and universal inclusion (Stuart & Samman, 2017). Many countries are interpreting this goal as inclusive of SOGIE minorities (Horne & Manalastas, 2019; O'Malley & Holzinger, 2018).

### ***The Yogyakarta Principles***

Due to the historical irregularity of United Nations rulings on SOGIE concerns, an independent committee of transnational human rights experts, including academics, judges, United Nations experts, and NGO representatives, convened in Yogyakarta, Indonesia in November 2006 (Sanders, 2008). This meeting, co-organized by the International Service for Human Rights and the International Commission of Jurists (Sanders, 2008), produced an outline of how existing international legal principles could and should be applied to SOGIE concerns, a document now known as the Yogyakarta Principles (Horne & Manalastas, 2019; International Service for Human Rights [ISHR] & International Commission of Jurists [ICJ], 2007). These 29 principles were intended to move beyond an aspirational approach to human rights for SOGIE populations (Sanders, 2008), and clearly define State obligations under existing international human rights law to protect SOGIE minority populations. Thus the Principles represented an effort to affirm compulsory global legal standards for member States (ISHR & ICJ, 2007).

This document argued that the standards set out by the United Nations Human Rights Commission and the Universal Declaration of Human Rights (United Nations General Assembly, 1948) applied to SOGIE concerns as to all human beings; thus, humans of any sexual orientation or gender identity are entitled to equal rights and dignity, including safety, privacy, and humane treatment. The document proposed as a directive that all United Nations bodies engaged in human rights decisions apply the stated principles in all future resolutions pertaining to SOGIE concerns (Horne & Manalastas, 2019). In 2017, 10 additional principles were added (the revised Yogyakarta Principles Plus 10) to reflect and respond to developments in the field of international human rights law, and to better encapsulate the unique types of violations that may affect people due to "gender expression" and "sex characteristics" (ISHR & ARC International, 2017, p.4).

### ***European Regional Psychology Ethics***

Although various national standards exist, the only regional code of psychological ethics at the time of this writing is that of the EFPA. The EFPA is an umbrella group comprised of 37 European psychological organizations; it represents approximately 300,000 psychologists in the European region (EFPA, 2017). The stated goals of the EFPA include promoting the psychological profession and improving clinical psychological practice. The EFPA sets the standards of education and professional training in psychology, as well as the ethical codes of conduct for inclusion in the

Register of European Psychologists (EuroPsy, n.d.). It is explicitly dedicated to outlining psychologists' responsibilities to raise awareness of, prevention of, and response to global human rights violations (EFPA, n.d.-a).

The EFPA ethics codes highlight concerns pertaining to sexual orientation minorities, stating that sexual orientation should be included as a category under individual differences that warrant protection from discriminatory practice (EFPA, 2005). Despite the provision of a major addendum to its ethical codes in 2015, the EFPA has not expanded these classifications specifically to include transgender, gender diverse, and/or intersex populations; the term "gender" has not been elaborated upon since the original codes were drafted in 1995 (EFPA, 2005; 2015). Recommendations for the inclusion of TNG people in the field of psychology have highlighted the importance of differentiating gender identity from sexual orientation (Sandil & Henise, 2017; Singh & dickey, 2017), and of reflecting the "specialized language" endorsed by TNG people to describe their own experience (APA, 2015, p. 862). It is suggested that regional and psychological ethics codes reflect the particular mental health needs of these populations, and that ethics codes articulate the particular dimensions of experience (*i.e.*, gender expression, sexual orientation, gender identity) and individuals and communities (*i.e.*, LGBTQI) they intend their codes to inform treatment and inclusion of in psychological practice and research.

National psychological organizations have endorsed practice guidelines respecting sexual orientation and gender identity in several European countries (*i.e.*, the British Psychological Society [BPS, 2012a; 2012b; 2019], the German Association of LGBTIQ People in Psychology [Wolf, Fünfgeld, Oehler, & Andrae, 2015], the Hungarian Psychological Society [HPS, 2016], and the Psychological Society of Ireland [2015]). The absence of reference to broader gender and sexual diversity in the EFPA ethics code may also reflect a trend in which Euro-Western psychological organizations have historically been less focused upon inclusion of intersex concerns relative to LGBT issues than those in the Global South (Horne et al., 2019).

The perpetuation of a "homointernationalism," which symbolically extends human rights to those within LGBT populations who have greater privileges and access due to class, race, and/or nationality (*i.e.*, those who can be assumed to fit expectations of normativity), can reinforce the "othering" of those who don't fit the narrative of the "gay rights holder." This category would include TNG and intersex people, as well as those with intersecting marginalized identities along racial, socio-economic, or citizenship lines (Horne et al., 2019; Weber, 2018). It is recommended then that Euro-Western models of psychological ethical standards and advocacy ensure broad rights and supports pertaining to SOGIE and intersex concerns, in order to create an inclusive global LGBTQI citizenship (Horne et al., 2019; Horne & Manalastas, 2020).

### ***A Framework for Psychological Advocacy: An Ethics of SOGIE Concerns within Psychology***

The EFPA Model Code of Ethics (2015) was designed with the intention that it be applied, along with the principles of the Meta Code of Ethics (2005), to guide psy-

chological training and practice, including research, so as to ensure that European psychologists act appropriately and ethically. As these codes instruct psychologists to adhere to principles outlined by international human rights conventions (EFPA, 2015), it can be inferred that they should also be applied to the concerns of TNG and intersex populations, since these groups have been specifically highlighted in recent United Nations resolutions (UN, 2016; OHCHR, 2019).

The EFPA (2015) ethics code prescribes that psychologists respect the expertise of their clients and other relevant groups on the unique experiences of the cultural differences pertaining to client identities, with special attention to the protection of vulnerable populations and the clients' rights to self-determination. Thus, the EFPA ethics code, as well as the specific recommendations for best practices with LGBTQI populations, should consider the following recommendations to SOGIE concerns.

### ***Research Ethics***

A SOGIE/LGBTQI-inclusive approach to research would value the experiences of sexual and gender minorities and put a focus on their psychological experiences in the course of psychological exploration. For example, psychological survey research that collects age, ethnicity, and regional data would include categories for sexual orientation, gender identity, gender expression, and biological characteristics, which would validate the experiences of LGBTQI people, and could be used to test for similarities and differences with heterosexual and cisgender participants.

This approach coheres with what the Model Code of the EFPA describes in Point 2.i:

The practice of psychologists is based on science and reliable experience. Psychology and the psychological profession are in a continuous process of development, producing new and more complex knowledge and methods. Since social change continuously brings forth new problematic situations, it is important that psychologists pay attention to their own limitations and are able to turn to their colleagues and other professionals for additional knowledge and competence. (EFPA, 2015, p. 4)

A SOGIE-inclusive approach to applying this ethics code might include instituting guidelines for reviewing scientific articles that are inclusive of SOGIE classifications, or offering training on how to integrate SOGIE concerns into scientific research (*e.g.*, researchers who expanded marital communication research to long-term same-sex partners revealed many new dimensions of relational experience in couples and important distinctions differing by gender and between other-sex and same-sex couples; *e.g.*, Garanzini et al., 2017; Martell, Safren, & Prince, 2004). A SOGIE-inclusive research ethics might offer perspectives on identity and shifts in terminology. Furthermore, it would demonstrate the importance of SOGIE-related evidence in psychological research. For example, over the past few decades, awareness the importance of SOGIE-related concerns in other psychological experiences has increased (*e.g.*, parenting research; neurodiversity scholarship; career-related outcomes), whereas in the past the intersectionality of psychological experiences with SOGIE concerns may not have been apparent.

Tremendous strides have been made in SOGIE measurement, and an LGBTQI-inclusive research ethics would include contemporary assessment tools; numerous metrics are now available for measuring common constructs such as internalized stigma (e.g., Herek, Gillis, & Cogan, 2009; Syzmanski & Chung, & Balsam, 2001, among many others); attitudes toward LGBT people (e.g., Herek, 1998; Nagoshi et al., 2008; Worthington, Dillon, Becker-Schutte, 2005); and other constructs. Tebbe and Budge (2016) generated a set of recommendations for researchers planning and conducting research with TNG populations, including the need for new metrics and further psychometric validation of existing ones that are designed specifically to capture TNG experiences. Intersex advocacy groups have highlighted the need for community-based participatory research (CBPR) involving intersex advocates, clinicians, and researchers in collaborating to produce intersex-affirming research (interAct, 2016).

Competent intersex research demands practices that maximize inclusion of a range of intersex identities, would use measures and research designs that accurately reflect the unique experiences of intersex people, and would pose research questions regarding intersex quality of life (Liao, & Simmonds, 2014). In addition, most of the measurements are created for English speakers, and have been developed through work with LGBTQI participants in the context of the United States. Creating a shared site for measures developed within Europe would be a useful addition to the resources available for European psychologists. One other way to put a focus on SOGIE-related research is to provide awards in the areas of LGBTQI-research.

### ***Practice Ethics***

A SOGIE-inclusive practice ethics would incorporate the need for interventions and clinical awareness for the particular needs of LGBTQI clients, including their experiences of sexual and gender diversity. This includes consideration of specific stressors which LGBTQI individuals experience as a result of their identities, and the ways in which these stressors impact mental health, as well as attention to identity-specific resiliencies that can be fostered in the therapeutic relationship (Meyer, 2003). Emerging evidence-based treatments that incorporate a minority stress framework (Meyer, 2003) in addressing mental health concerns for LGB people may provide an avenue for clinical adaptation of LGB-affirming treatment guidelines (Pachankis, Hatzenbuehler, Rendina, Safren, & Parsons, 2015). These SOGIE-inclusive practices would develop appropriate clinical interventions not only for LGBTQI individuals, but for couples and families, particularly, in areas of the world where LGBTI concerns remain invisible.

Recent recommendations for increasing mental health practitioners' competence in working with TNG clients include the following practices: 1) developing increased awareness of gender identities and personal gender biases; 2) seeking training and advanced coursework specifically designed to increase TNG-competence; 3) creating an environment that maintains safety and supportiveness for TNG people; 4) acknowledging the impact of systemic transphobia and cisnormativity; 5) moving beyond gatekeeping and acknowledging TNG clients as the experts on their own experience; and 6) engaging in advocacy and consultation

work to advance TNG rights outside the counseling space (Sandil & Henise, 2017; Singh & dickey, 2017).

Scholars have called for the development of interventions designed to increase resilience for TNG people at both the group and individual level, highlighting the ways in which resilience can counteract the negative impact of TNG-specific minority stressors (Levitt, Collins, Roberts, Maroney, Wadler, 2020; Matsuno & Israel, 2018; Maroney, 2020; Puckett & Levitt, 2015). Clinicians are advised to consider how TNG-specific experiences, such as the desire for gender affirmation, impact health and risk behavior in the context of social oppression and intersecting marginalized identities (Sevelius, 2013).

Historically, intersex concerns have been overlooked in identity-affirming clinical approaches within the field of psychology. Intersex advocacy groups recommend that intersex children and adults be provided honest and accurate information about intersex identities and concerns, and have access to intersex-affirming psychological counseling (e.g., Intersex Society of North America, 2008; Organisation Intersex International Europe 2013; 2014; 2017).

Within the field of psychology, researchers have suggested that psychologists utilize findings from emerging evidence-based practices from values-based medicine, as well as from professional ethics codes, in treating intersex people, including the mandate to pursue interventions that generate increased well-being and promote agency along lines of diversity and equality (Liao, & Simmonds, 2014). An LGBTQI-inclusive practice ethics would acknowledge decades of research suggesting that for many LGBT people, sexual orientation and gender identity awareness often occurs at an early age, and therefore, limiting the information, as well as psychological resources, available to youth runs counter to ethical and effective practice.

### ***Training Ethics***

Ongoing training in the evolving needs of LGBTQI populations is crucial to the continued expansion of the aforementioned ethical research and practice standards. Since supervision is a key component of a psychologist's training, mental health professionals acting in a clinical supervisory role with graduate students are recommended to provide ongoing assessment of trainees' competency in working with LGBT clients (Walker & Prince, 2010). Supervisors are encouraged to support students in increasing awareness of SOGIE concerns by directing them to appropriate guidelines for practice with LGBT populations; and to prevent trainees from causing potential harm to LGBT clients by assessing the appropriateness of the client/trainee therapeutic match (Walker & Prince, 2010).

Although many psychology graduate students and practicing psychologists report providing therapy services to TNG people, a much lower percentage of professionals self-report that they are competent in working with TNG clients (APA, 2009). Training recommendations (Walker & Prince, 2010) for increasing competence in working with TNG clients include the following: a commitment to ongoing education regarding gender identity concerns, including issues of power in the counseling relationship; consideration of other contextual factors, in addition

to gender identity, that contribute to the client's distress; and familiarity with the World Professional Association for Transgender Health Standards of Care (Coleman et al., 2011).

Training remains an area for growth in generating increased competence for practitioners working with intersex populations. The goal of training psychologists in intersex-affirming practices has been identified by intersex activist groups as a necessary component in securing human rights for these populations (Astraea Foundation, n.d.). Although the EFPA provides a holistic set of standards for psychological training (EFPA, n.d.-b), these standards would be strengthened by highlighting the need for competence in, and awareness of, diverse identities and the concerns specific to minority groups, such as the LGBTIQ communities.

### ***The International Psychology Network for LGBTI Issues***

Launched in 2005 following an international meeting of LGBT psychologists in San Francisco in 2001 (International Meeting on Lesbian, Gay, and Bisexual Concerns in Psychology, 2003), the International Psychology Network for LGBTI Issues (IPsyNet) is unique within the discipline of psychology. The membership of IPsyNet currently includes 23 national psychological organizations that collaborate to promote psychological knowledge about LGBTI concerns, and advocate for the human rights and well-being of sexual and gender minority people transnationally. Current European members include the British Psychological Society, the German Association of LGBTIQ in Psychology, the Hungarian Psychological Society, the Psychological Society of Ireland, the Russian Psychological Society, the Spanish Psychological Association, and the Turkish Psychological Association.

IPsyNet members have collaborated on advocacy efforts (e.g., the 2014 joint letter to President Museveni of Uganda in protest of a proposed draconian anti-homosexuality bill); supported the development of indigenous LGBTI statements and guidelines; and promoted the dissemination of LGBTI research and knowledge. In 2018 IPsyNet members, drawing from extant transnational international human rights frameworks, drafted and endorsed the IPsyNet Statement and Commitment on LGBTI Issues—a psychology-based human rights position paper which affirmed sexual orientation, gender identity, and intersex concerns (<https://www.apa.org/ipsynet/advocacy/policy/statement-commitment>). Thus far, the Statement and Commitment on LGBTI Issues has been endorsed by 31 national psychological organizations from all areas of the world, and has been translated into 10 languages (IPsyNet, 2018).

Specifying mutual transnational values of organized psychology, as well as an emerging global consensus on inclusion of LGBTI concerns within human rights as grounded in psychological science concerning sexual and gender minority people, the IPsyNet statement seeks to inform practice, training, and policy in psychology. Given the lack of specification on LGBTI concerns in psychology ethics codes, the IPsyNet Statement can serve as a complementary guide to considering LGBTI concerns as they relate to research, practice, training, and advocacy. IPsyNet (<https://www.apa.org/ipsynet/index>) also provides a resource for emerging interest in LGBTI concerns in psychological organizations around the world.



## Conclusion

As the evolution of European ethical practices moves toward increasing inclusion of SOGIE concerns, in accordance with the emerging global human rights discourse, these recommendations and the proposed frameworks may serve as valuable resources to that end. The EFPA expects that all practicing psychologists in Europe, regardless of EFPA membership or country of practice, adhere to the Meta and Model codes of ethics, with the goal of a unified ethical practice across the continent by 2030 (EFPA, 2015). This mandate suggests that all European psychologists should work towards greater inclusion of SOGIE concerns across the areas of research, practice, and training, including engaging in advocacy work to such ends.

As the field of psychology continues to depathologize LGBTQI identities and progresses toward an ethos of universality, nondiscrimination, and equality (Baisley, 2016), it is the responsibility of international and regional psychological organizations to support the human rights of *all* global citizens (Horne et al., 2019).

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## A Little Lie Never Hurt Anyone: Attitudes toward Various Types of Lies over the Lifespan

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**Background.** A growing body of evidence shows that people's attitudes toward lies could be predictive of their actual deceptive behavior. However, few studies have examined both attitudes and deceptive behavior, and none have related attitudes toward the likelihood of self-reported deception as it develops over people's lifespans.

**Objective.** Our study addresses attitudes toward lies and the likelihood of deceptive behavior in a variety of contexts, relating them to self-reported frequency of lying. We were also interested in whether individual differences in social desirability and social anxiety predict self-reported frequency of lying across lifespans.

**Design.** Using a cross-sectional design that included children as well as young adults, we assessed a total of 177 participants with the same questionnaire about deception, adapted from Lundquist et al. (2009).

**Results.** The age differences in the frequency of self-reported lying followed an inverted U-shape trend over time. Children's lower social desirability and more lenient attitudes toward white lies predicted higher lying frequency, whereas for adults, a greater likelihood of telling prosocial lies predicted higher lying frequency. Children with decreased anxiety were less likely to tell prosocial lies, implying that anxiety might be a key factor in children's development of deception.

**Conclusion.** Our work offers an integrative view into people's attitudes towards deception and their self-reported lying as they mature. Attitudes toward white lies and the self-reported likelihood of telling prosocial lies were the most relevant predictors involved in self-reported lie-telling. Individual differences in anxiety and social desirability also played a relevant role in children's and young adults' attitudes toward deception.

**Keywords:**  
attitudes;  
deception;  
lying  
frequency;  
anxiety; social  
desirability;  
prosocial lies;  
white lies

## **Introduction**

Lying is viewed as reprehensible and undesirable; yet it is acknowledged as necessary and acceptable under certain circumstances. Recent findings associated people's higher acceptance of lying with increases in their deceptive behavior (Halevy, Shalvi & Verschuere, 2014; McLeod & Genereaux, 2008). Deceptive behavior emerges during preschool years, as children tell simple lies to avoid punishment or gain benefits. As they grow, children show more advanced self-interested lying skills, but they also begin to produce prosocial lies, a process complementary to their being socialized to tell the truth (Popliger, Talwar, & Crossman, 2011).

Young children view all false statements as lies and rate them negatively. But during middle childhood, false statements told to help others are no longer viewed as lies (Bussey, 1999), with older children consistently rating prosocial lies more positively than antisocial ones (Bussey, 1999; Lavoie, Nagar, & Talwar, 2017; Popliger et al., 2011; Talwar, Williams, Renaud, Arruda, & Saykaly, 2016). Moreover, adolescents accept prosocial lies more than lies related to self-gain or revenge (Jensen, Arnett, Feldman, & Cauffman, 2004).

Significant information about the acceptance of lying among adults comes from studies on economic behavior. Lundquist et al. (2009) were interested in people's aversion to lying. They examined attitudes about white lies (defined as small lies that benefit the sender and receiver), and whether or not people believed there are degrees of lying (as opposed to believing that a statement is either a lie or a truth, with no middle ground). They also investigated whether the self-reported likelihood of lying varied across various types of lies, (*i.e.*, prosocial and self-interested lies). Lundquist and his collaborators showed that individuals are less inclined to lie when they risk discovery, or when they had promised to tell the truth, and that aversion to lying increases with the strength of their truth promise.

As far as lying frequency was concerned, several studies indicated the people lie once or twice a day; however, their data was skewed by a very high number of lies being told by a very small number of prolific liars in the sample (Serota, Levine, & Boster, 2010; Serota, Levine, & Burns, 2012). The development of lying across the lifespan follows an inverted U-shape (Debey et al., 2015; Lavoie et al., 2017; Maggian & Villeval, 2013). Children show a gradually increasing propensity to lie as they grow older (Lavoie et al., 2017; Talwar et al., 2007). Adolescents report a higher lying frequency than undergraduates or adults (Levine et al., 2013), and young adults lie more often than older adults (DePaulo et al., 1996), suggesting that lying develops in childhood, reaches a maximum in adolescence, and then declines into adulthood. However, other studies showed that lying decreases as children grow (Glätzle-Rützler & Lergetporer, 2015; Maggian & Villeval, 2013). These studies used experimental tasks that resemble economic games, which differ from the common everyday deception scenarios that children encounter.

Most studies examined attitudes toward deception and lying frequency separately, therefore yielding little about their relationship. Children's moral evaluations and understanding of hypothetical deceptive scenarios are related to their lying behavior (Popliger et al., 2011; Talwar & Lee, 2008). Adults who lie frequently tend to view deception less negatively, their attitudes toward lies being linked to the frequency of deceptive behavior (Brasher, Lee, Shather, & Mou, 2014; Halevy et

al., 2014). The evidence indicates a connection between attitudes and behavior; yet little is known about the direction of this link and how it may change as people advance in age.

Regarding gender differences: among children, boys appear to tell more lies and be more accepting of deception (Goosie, 2014; Jensen, et al., 2004). In adulthood, gender effects are less straightforward. Ning and Crossman (2007) showed that women rated lies more positively than men did, whereas Levine et al. (1992) found that men displayed greater acceptance of lying than women. More recently, however, Oliveira and Levine (2008) failed to reproduce these results, and found no reliable gender differences in lie acceptance.

Anxiety also plays a role in deception. Low anxiety was linked with high lying scores (Eswara & Suryarekha, 1974), and individuals often report anxiety, guilt, and an increased cognitive load when telling a lie (Caso, Gnisci, Vrij, & Mann, 2005; Gozna, Vrij, & Bull, 2001).

Since lying is essentially a social interaction process, we would expect people who are more concerned with their impression and public appearance to be more likely to lie, in order to maintain a socially desirable image. Kashy and DePaulo's (1996) diary study revealed that social desirability was linked to lying frequency. Visu-Petra, Miclea, Buş, and Visu-Petra (2014) also found that young adults with high impression management were more efficient in their deception (faster deceptive responses). By contrast, Gozna et al. (2001) did not find a significant relationship between lying and impression management.

Our study aimed to 1) track age differences in attitudes toward deception, and 2) investigate the relationship between attitudes, self-reported likelihood of lying, and the frequency of deception across a variety of hypothetical contexts. We were interested how individual differences in 3) anxiety and 4) social desirability are involved in the complex interplay between views toward deception and lying frequency as people age.

We painted an in-depth picture of attitudes toward deception by assessing perceptions of various types of lies: attitudes toward lies (white lies and degrees of lying) and the likelihood of approaching (prosocial and self-interested lies) or avoiding (risk of discovery or breaking a promise) different types of lies. We used the categories described by Lundquist et al. (2009) and administered Lundquist's questionnaire to subjects from four age groups, ranging from primary school to emerging adulthood. To our knowledge, few studies have examined both attitudes and deceptive behavior (Popliger et al., 2011; Talwar & Lee, 2008), and none have related attitudes toward the likelihood of self-reported deceptive behavior across the maturation process.

We hypothesized that, across all age groups, more lenient attitudes toward deception would be associated with higher self-reported lying frequency.

To our knowledge, our work is the first to study a direct link between anxiety and people's view toward deception. We expected children and young adults with higher social anxiety to display less lenient views about deception, and a lower self-reported lying frequency. Additionally, we aimed to relate social desirability to attitudes toward deception and lying frequency, examining possible effects as people mature. We predicted that higher levels of self-reported social desirability would be linked to lower lie acceptability, and to a decreased frequency of self-reported lying.



## Methods

### *Participants*

We included 177 Romanian participants from four different age groups: 46 *primary school* children, ages 7–11 (Grades 1 to 4; mean age = 8.86 years,  $SD = 1.09$ ; 30 boys); 41 *middle school* children, ages 11–15 (Grades 5 to 8; mean age = 12.85 years,  $SD = 1.39$ ; 19 boys); 49 *high-school* children, ages 15–19 (Grades 9 to 12; mean age = 17 years,  $SD = 1.35$ ; 17 boys); and 41 *young adults* (2<sup>nd</sup> and 3<sup>rd</sup> year students, mean age = 23.32 years,  $SD = 5.62$ ; 8 men).

### *Procedure*

First, we obtained formal consent from the children's parents or the participants themselves. A trained psychology student individually assessed participants during a single session.

### *Questionnaires*

To measure participants' views about various types of lies, we adapted the questionnaire about attitudes toward deception developed by Lundquist et al. (2009). All items were expressed on a 4-point Likert scale (from strong disagreement to strong agreement). Two items measured attitudes toward white lies and degrees of lying. The other two items measured the self-reported likelihood of engaging in certain types of lies: prosocial or self-interested lies. Two items measured the likelihood of avoiding a certain type of deceptive behavior: related to risk of discovery, or having promised to tell the truth. Lastly, we assessed each participant's self-reported actual frequency of lying with one item on a 4-point Likert scale (never, once, sometimes, often).

We created two shorter versions of the questionnaire for the younger children in our sample. For lying frequency, we provided age-appropriate examples (see Appendix).

Next, the adults completed the impression management subscale of the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991). To assess the children's social desirability, we administered the Children's Social Desirability Scale (CSD; Crandall, Crandall, & Katkovsky, 1965). The children also completed the social anxiety subscale of the Revised Children's Anxiety and Depression Scale (Chorpita et al., 2000).

## Results

Our first preliminary step was to test for gender differences on all outcomes, with an independent sample *t*-test. For middle school children, boys were more likely to avoid lying when they risked discovery ( $M = 2.89$ ,  $SD = 0.94$ ) than girls ( $M = 2.19$ ,  $SD = 0.98$ ):  $t(38) = -2.32$ ,  $p < .05$ . High-school girls reported greater social anxiety ( $M = 11.44$ ,  $SD = 4.63$ ) than boys ( $M = 7.30$ ,  $SD = 3.29$ ):  $t(47) = -3.27$ ,  $p < .01$ . Young adult women were more permissive toward white lies ( $M = 2.63$ ,  $SD = .70$ ) than men their age ( $M = 2.00$ ,  $SD = .76$ ):  $t(39) = -2.28$ ,  $p < .05$ ), and also showed lower impression management ( $M = 6.33$ ,  $SD = 3.26$ ) than men ( $M = 9.13$ ,  $SD = 3.64$ ):  $t(39) = 2.08$ ,  $p < .05$ , although for the adult group, these results might have been influenced by

the disproportionately large number of women in our sample. Considering that its influence was limited to these variables, gender was omitted from the following analyses.

We performed a multivariate analysis of variance (MANOVA) to test for age differences in 1) attitudes toward white lies and 2) degrees of lying; in 3) engaging in prosocial and 4) self-interested lies; in 5) avoiding lies when risking discovery; and 6) in avoiding breaking a promise, as well as age differences in 7) self-reported lying frequency.

Across various types of lies, there was a significant multivariate effect of age:  $F(3, 172) = 6.07, p = .001$ , partial  $\eta^2 = .203$ . Univariate tests with Bonferroni corrections showed a significant age effect for attitudes toward white lies ( $F(3, 172) = 12.08, p = .001$ , partial  $\eta^2 = .180$ ), but not toward degrees of lying ( $F(3, 172) = .33, ns$ ). Bonferroni post hoc tests revealed that younger children in primary ( $M = 1.67; SD = .79$ ) and middle school ( $M = 1.70; SD = .72$ ) were less accepting of white lies than high-school children ( $M = 2.24; SD = .78$ ) and young adults ( $M = 2.51; SD = .75$ ).

There was also a univariate age effect for the likelihood of telling self-interested lies ( $F(3, 172) = 4.17, p = .007$ , partial  $\eta^2 = .068$ ), but not for *prosocial lies*, ( $F(3, 172) = 1.52, ns$ ). Bonferroni post hoc tests showed that primary school children reported a lower tendency to tell self-interested lies ( $M = 1.48; SD = .89$ ) than adults ( $M = 2.20; SD = .98$ )

Univariate tests also revealed an age main effect on risk of discovery ( $F(3, 172) = 6.33, p = .001$ , partial  $\eta^2 = .099$ ) and on promises to tell the truth ( $F(3, 173) = 4.21, p = .007$ , partial  $\eta^2 = .069$ ). According to Bonferroni post hoc tests, middle school children ( $M = 2.53; SD = 1.01$ ) were less likely to avoid telling lies when they risked discovery, compared to primary school children ( $M = 3.24; SD = .97$ ) and adults ( $M = 3.37; SD = .86$ ). Middle school children also reported a lower tendency to *avoid breaking a promise* ( $M = 2.98; SD = .86$ ) than adults ( $M = 3.61; SD = .63$ ).

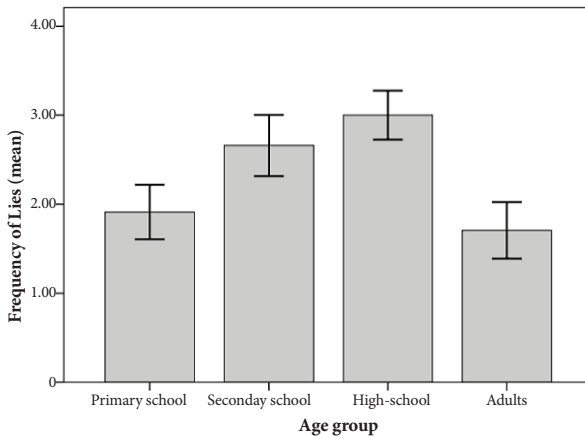


Figure 1. Self-reported frequency of lying according to age groups.

Note: Error bars:  $\pm 1$  Standard errors

Lastly, we found a univariate age effect for self-reported frequency of lying:  $F(3, 172) = 16.23; p = .001$ , partial  $\eta^2 = .221$ . Bonferroni post hoc tests showed that

primary school children ( $M = 1.91$ ;  $SD = 1.03$ ) and adults ( $M = 1.71$ ;  $SD = 1.01$ ) reported lower frequencies than middle-school children ( $M = 2.68$ ;  $SD = 1.10$ ) and high-school children ( $M = 3.00$ ;  $SD = .96$ ) (see *Figure 1*).

For the bivariate correlation results on the frequency of lying, attitudes toward deception, likelihood of deceit, social desirability (impression management in the adult sample), and social anxiety, see *Table 1*.

**Table 1**  
*Correlations between Attitudes, Likelihood of Lying, Frequency of Lying, Social Desirability, Impression Management & Social Anxiety*

	Primary school			Middle school			High-school			Young adults	
	FL	SD	SA	FL	SD	SA	FL	SD	SA	FL	IM
1. White lies	.13	-.15	.03	.32*	-.24	-.05	.39**	-.20	-.01	.28	-.39*
2. Degrees of lying	-.12	.10	-.17	.15	-.15	.09	-.24	-.15	-.15	-.09	.27
3. Prosocial lies	-.06	-.20	.06	.10	-.28	.46**	.06	.02	.07	.04	-.12
4. Self-interested lies	.29	-.08	-.02	.29	-.24	-.23	.28*	-.27	-.06	.31**	-.36*
5. Risk of discovery	-.09	-.25	.35*	.20	-.28	-.07	.00	-.02	.38**	.30	-.26
6. Truth promise	-.30*	.12	-.04	.20	.09	-.07	-.28*	.16	.15	-.11	.24
7. Frequency of lying-typical lies		-.52**	.27		-.56**	-.06		-.19	-.16		-.50**

Note: \* $p < .05$ ; \*\* $p < .01$   
FL = Frequency of lying; SD = Social Desirability; SA = Social Anxiety; IM = Impression Management.

**Table 2**  
*Regression results predicting frequency of lying from age, social desirability, and deceptive attitudes measurements*

Predictors	Frequency of telling typical lies – all children (N=136)				
	B	SE B	$\beta$	$\Delta R^2$	Cumul. $R^2$
Step 1 (enter method)					
Age group	.01	.09	.01	.00	
Step 2 (enter method)					
Age group	-.33	.08	-.32***	.38***	.37***
Social Desirability	-.08	.01	-.69***		
Step 3 (stepwise method)					
Age group	-.38	.08	-.37***	.02*	.39**
Social Desirability	-.08	.01	-.67**		
Attitudes toward white lies	.22	.10	.16*		
Likelihood of telling prosocial lies	-	-	ns		
Likelihood of telling self-interested lies	-	-	ns		

Note: \*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ .

Next, we performed two multiple regression analyses predicting self-reported lying frequency, one for children and adolescents ( $N=136$ ), and one for adults ( $N=41$ ). Two were necessary because the questions regarding lying frequency and the measurement for social desirability differed for children and adults. See Tables 2 and 3 for the regression results.

Table 3

*Regression results predicting lying frequency from impression management and deceptive attitudes measurements*

Predictors	Frequency of telling typical lies – adults (N=41)				
	B	SE B	$\beta$	$\Delta R^2$	Cumul. $R^2$
Step 1 (enter method)					
Impression management	-.14	.16	-.14	.02	.02
Step 2 (stepwise method)					
Impression management	-.09	.15	-.09	.12*	.33**
Likelihood of telling prosocial lies	.38	.17	.35**		
Attitudes toward white lies	–	–	ns		
Likelihood of telling self-interested lies	–	–	ns		

Note: \*\*  $p < .01$ ; \*  $p < .05$ .

## Discussion

Our main findings revealed that perceptions about deception change with age: younger children have more negative attitudes toward white lies and a decreased likelihood of telling self-interested lies than older children and adults. Regarding self-reported lying frequency, we found an inverted U-shape trend: primary-school children and adults display a lower frequency than middle-school children and high-schoolers. Additionally, we found gender variations for contextualized views about deception. From the perspective of individual differences, low anxiety was associated with a lower likelihood of telling prosocial lies and a lower likelihood of avoiding the risk of discovery. Reduced social desirability predicted a higher self-reported lying frequency.

Our investigation into specific views on deception uncovered a gradually nuanced acceptance of white lies, as adolescents and young adults became more accepting of *white lies* than younger children. This result is in line with previous studies (Talwar & Crossman, 2011). Although young children can understand white lies and view them less negatively than self-interested lies (Bussey, 1999), the primary school children in our sample generally disagreed with white lies being a positive behavior (84.8% of the sample,  $n=39$ ). Adolescents and young adults might have had more direct positive experiences with white lies, reinforcing their more lenient attitudes toward them.

Primary school children were less likely to tell self-interested lies compared to young adults. Although people become more averse to selfish lies with age (Jensen et al., 2004; Popliger et al., 2011), the self-interested lies expressed in our questionnaire involved increased personal gain for the liar at no cost for the receiver (as opposed to antisocial lies, for instance), which offers a plausible explanation for our

results. The propensity to lie increases with personal gain, and decreases the more others stand to lose (Gneezy, 2005; Lundquist et al., 2009), which is why this type of lie appears more acceptable to adults. Young primary school children might have not gained enough social experience to understand this distinction.

We found no age differences in the likelihood of prosocial lies. In fact, participants from all age groups were unlikely to tell this type of lie. This might be because the prosocial lies included in our questionnaire involved helping others at a personal cost. Talwar et al. (2016) showed that older primary school children gave a positive rating to prosocial lies which involved costs to themselves and were less likely to condemn them than younger children.

Middle school children showed less aversion to lies with a risk of discovery than primary school children, or adults. Increases in reward-seeking behavior, coupled with greater impulsivity, might make younger school-age children more prone to risk-taking than older children and adults (Steinberg, 2010). At the same time, middle-school children had a lower aversion to breaking a promise than adults; however, they were still unlikely to break the promise. Consistently, Talwar, Lee, Bala, and Lindsay (2004) found that children who promised to tell the truth were less likely to lie afterwards. Our study suggests that an explicit promise of honesty leads to a strong aversion to lying, even in the case of younger children. This has implied applications, such as confirming that legal procedures should involve asking children to promise to tell the truth before testifying in court, in order to minimize the risk of deceptive behavior.

We found a significant age effect on self-reported frequency of lying; primary school children and adults reported fewer lies than middle-school and high-schoolers. Lying increased from young childhood, reached a peak in adolescence, and then decreased for young adults, which supports the developmental trajectory from other studies (Debey et al., 2015; Lavoie et al., 2017; Talwar & Crossman, 2011).

Furthermore, our findings suggest a connection between perceptions of deception and self-reported frequency of lying, confirming previous literature on adults (Brasher et al., 2014; Halevy et al., 2014; Serota et al., 2012). Children and adolescents displayed more lenient attitudes toward white lies, and this predicted higher self-reported lie-telling, independent of age effects. For adults, a greater likelihood of telling prosocial lies predicted higher self-reported lying frequency. It is plausible that, with age, attitudes toward lies become more lenient, and this increase in acceptance leads to a higher propensity toward lying. Our results suggest that the acceptability and the context of deception might be involved in determining a person's lie-telling behavior, a deeper knowledge of this phenomenon could aid educational and parental practices for promoting honest behavior.

Our results also revealed limited evidence of gender differences for attitudes toward deception. Middle school girls were more likely to tell lies despite the risk of discovery, and young adult women were more permissive of white lies. Our findings were consistent with other self-report studies (Ning & Crossman, 2007). Also, these gender differences might have appeared because the young women in our sample displayed lower social desirability, thus being more likely to report permissive attitudes toward deception.

From the perspective of individual differences, we found that reduced *social anxiety* was related to a decreased likelihood of engaging in prosocial lies, as well as with a lower likelihood of avoiding lies with a risk of discovery. These results

are the first to suggest that anxiety plays a role in children's attitude toward deception; this is congruent with studies linking adults' anxiety with deceptive behavior (Caso et al., 2005; Eswara & Suryarekha, 1974). Children with low social anxiety might be less likely to avoid discovery when lying because of their lower behavioral inhibition (Gest, 1997; Muris, & Meesters, 2002), and being more inclined to take risks (Steinberg, 2010). Then again, lower anxiety might mean individuals are more comfortable with lying, feeling less fear and guilt.

Regarding social desirability, lower impression management in young adults was related to their higher acceptance of white lies and the increased likelihood of telling self-interested lies. Children's lower social desirability predicted higher self-reported lying frequency. Our results showed that socially desirable responses are related to attitudes toward deception and lying frequency; this expands the results of previous research (Kashy & DePaulo, 1996; Visu-Petra et al., 2014). Children and adolescents who are less concerned with the impression they make on others might be more likely to admit to lying. Impression management did not predict lying frequency in young adults; but this may have been because of the different measurement used.

## **Conclusion**

Our work extends previous designs by offering an integrative view into people's attitudes toward deception and their self-reported lying throughout their maturation process. Attitudes toward white lies (by children and adolescents) and the self-reported likelihood of prosocial lies (by young adults) were the most relevant predictors of self-reported lie-telling. Children with decreased anxiety were less likely to tell prosocial lies, implying that anxiety might be a key factor in children's development of deception. Individual differences in social desirability were also relevant; although they might resort to lie-telling, children with increased social desirability might under-report their behavior to manage their social image and impression on others.

## **Limitations**

Our study has several limitations. For example, self-report measures might not be the best avenue to discovering people's implicit attitudes and lie-telling, and yet we relied on previous studies that correlated self-reported frequency of lying and real-life deception (Brasher et al., 2014; Halevy et al, 2014; Oliveira & Levine, 2008). Perhaps younger children found it difficult to report their deceptive behavior and beliefs. However, young children are able to admit to telling lies (Talwar & Lee, 2008), and all participants were evaluated by a trained psychology student. Additionally, to assess all participants in an age-appropriate manner, we used different measures of social desirability for children and adults.

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**APPENDIX. Questionnaire about attitudes toward deception adapted from Lundquist et al. (2009)**

Measure	Questions		Agreement (Agree %)				
	Primary school children	Middle school and high-school children	Young Adults	A.	B.	C.	D.
<b>Attitudes toward white lies</b>	A small lie that makes someone feel good is always a good thing.	A small lie that makes someone feel good is always a good thing.	A small lie that makes someone feel good is always a positive thing.	15.2%	12.2%	32.7%	56.1%
<b>Attitudes toward degrees of lying</b>	Any small lie is still a lie.	Any small lie is still a lie.	Any small lie is still a lie.	67.4%	61%	53.1%	53.7%
<b>Likelihood of engaging in lie-telling</b>							
<b>Prosocial lies</b>	I would not mind lying for a friend, even if this would hurt me.	I would be capable of lying to help someone, even if this would negatively affect me.	I would be willing to lie in order to help someone, even if this would negatively affect me.	38.4%	19.5%	32.7%	41.5%
<b>Self-interested lies</b>	The more I can gain from lying, the more I will lie.	The more I have to gain from telling a lie, the more likely I am to lie.	The more I am to gain from telling a lie, the more likely I am to lie.	13%	31.7%	24.5%	34.1%
<b>Likelihood of avoiding lie-telling</b>							
<b>Risk of discovery</b>	If I can be caught, I would rather not lie.	The greater the risk of discovery, the less likely I am to lie	The greater the risk of discovery, the less likely I am to lie.	80.4%	60%	73.5%	85.4%
<b>Promise of truth</b>	If I promise someone to tell the truth, it is very difficult to lie to that person afterwards.	If I promise someone to tell the truth, it is very difficult to lie afterwards.	If I promise someone to tell the truth, then I find it very difficult to lie to that person.	93.5%	90.2%	85.7%	92.7%
<b>Frequency of lying</b>	Have you ever lied, e.g., when you did something you did not want your parents to know, when the teacher asked you if you did your homework, when you said no to a friend who asked you out to play?	Have you ever lied, e.g., to justify skipping school, when you said no to a friend who asked you out, when you had to explain yourself to your parent when the teacher asked you why you did not do your homework, etc.?	Have you ever lied in order to justify skipping classes?	34.8%	63.4%	75.5%	78%

Note: Percentages represent the number of participants who agreed with each statement (answered slightly or strongly agree) or who sometimes lied (answered sometimes or often). A. - Primary school; B. - middle school; C. - High-school; D. - Young adults.

## Ethical Issues of Psychological Expert Testimony in Child Custody Cases: A Comparison of Ethical Approaches

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**Background.** Both authors are working on the Board of Ethics of the Czech-Moravian Psychological Society. They face a recurring pattern of complaints, where one parent in the multilateral contractual field of the child custody domain complains about the psychological report in their case, including the psychologist's procedure, conduct, partiality, etc. The child custody domain is under Civil Law jurisdiction, where psychologists serving as expert witnesses report their evaluations at the request of the court.

**Objective.** To point out some of societal and professional challenges confronting psychologists as expert witnesses in child custody cases. To improve ethical awareness in this area of psychological expert witness practice.

**Design.** We compiled an overview of the complaints obtained by the Board of Ethics of the Czech-Moravian Psychological Society from 2013 to 2019, against psychologists who served as expert witnesses in child custody cases in the Czech Republic. We then compared these complaints with the ethical norms established by the Czech Code of Ethics of the Psychological Profession; the recommendations of the European Federation of Psychologists' Associations (EFPA) (*c.f.*, The European psychologist in forensic work and as expert witness); and the guidelines of the American Psychological Association (APA) (*c.f.*, Guidelines for Child Custody Evaluations in Family Law Proceedings).

**Results and Conclusions.** Testimony by psychological experts in child custody cases is occurring in the context of societal changes and political decisions concerning child custody arrangements, and the best interests of the child in the context of gender neutral laws. Several ethical concerns seem to be of special importance: 1) the "psychological best interest of the child" in the multilateral contractual field; 2) the purpose and contribution of psychological expert testimony in child custody cases; 3) the role, task, and responsibility of the expert witness, including establishing working alliances and parallel processes; 4) the appropriate allocation of responsibilities in the multilateral contractual field; and 5) the ethics of reflexivity, responsibility, and courage.

The "complaint bias" is discussed.

**Key words:** psychologist as an expert witness; child custody cases; psychological best interest of the child; ethics of virtues; psychological and personal ethics of reflexivity, responsibility, and courage

## **Introduction**

During our work on the Board of Ethics of the Czech-Moravian Psychological Society, we noticed a pattern of complaints in the child custody domain. Usually one parent complained about the psychologist's report, including the psychologist's procedure, conduct, partiality, etc. Some of these reports were done by psychologists in their roles as expert witnesses. One of the authors (HB) is engaged in expert witness practice. We took these complaints about expert witnessing in the child custody domain as teaching material, in order to point out some of the societal and professional challenges psychologists confront as expert witnesses in child custody cases. We would like to improve ethical awareness in this part of psychological expert witness practice, *i.e.*, in the child custody domain under Civil Law jurisdiction, where psychologists as expert witnesses report their evaluations at the request of the court.

We compiled an overview of the complaints against the psychologists who served as expert witnesses in the child custody domain in the Czech Republic. Then we compared the recurring patterns with the ethical norms established by the Czech Code of Ethics of the Psychological Profession; the recommendations of the EFPA (*c.f.*, The European psychologist in forensic work and as expert witness); and the APA guidelines (*c.f.*, Guidelines for Child Custody Evaluations in Family Law Proceedings).

## **Method: Analysis of the Complaints and Final Statements of the Board of Ethics**

The overall number of final reports issued by the Board of Ethics over the years 2013-2019 is 40.

We divided the complaints and statements into three groups. The first group (13 reports) was comprised of complaints against psychologists operating outside the custody situation. They were mainly complaints about the psychologists' approach in therapy and diagnostics in various areas, ranging from clinical diagnostics to work diagnostics. Among these complaints we also found complaints about expert witness testimony outside the custody field, specifically with adults in criminal cases.

The second group included 19 complaints dealing with custody cases where psychologists did not play the role of court expert.

The third group (8) of complaints was comprised of cases of child custody expert testimonies.

## **Results**

### ***Complaints Against the Psychologist in Child Custody Domain in a Role other than Expert Witness***

In child custody cases where the psychologist is not in a role of a court expert witness, we frequently see the psychologist sending a report to the Department of Social and Legal Protection of Children, which sends it to the court that is deciding about the proportion and form of parental care by each parent. Alternatively, the psychologist provides a certain report (on anything from diagnostics to recommended therapy for the child) to one of the parents, and this parent uses the report in the custody court proceeding.

The recurring patterns in the complaints within this group were:

- One of the parents was not informed about the therapy or diagnostics of the child.
- Only one of the parents was given the report diagnosing the child; it is usually the one who contacted the psychologist. The psychologist refused to give his/her report assessing the child to the other parent.
- One of the parents was in a previous therapeutic relationship with the psychologist, but the psychologist later evaluated both parents and their relationship with their children. In a similar case, the report about the family situation and the father was created on the basis of the psychologist's therapeutic contact solely with the mother or child.
- The psychologist issued a report about sexual abuse of the child by the father to the Department of Social and Legal Protection of Children, or directly issued a criminal accusation against the father to the police. These reports were based on information from the therapy with the mother and child.
- One of the parents was not involved in an assessment of a child and his/her relationships with the parents. The relationships with the missing parent, and sometimes also his/her personality traits, mental health problems, and violent behavior are mentioned in the psychologist's report based only on information from the second parent and/or the child.
- The psychologist expressed an opinion about the mother based on information from the father and an expert witness psychological assessment report created by another psychologist, which focused on the whole family.
- The child's father complained about the methods used by the psychologist in assessing the child; the place where the evaluation was done; and the recommendations that were the result of using those methods.

The fields of ethical interest evaluated in these cases were:

- The psychologist is consistently doing his/her psychological work within a complex field (or "multilateral contractual field") with several different parties involved. These are the parents, the child, the court, the Department of Social and Legal Protection of Child, and sometimes also the organization which employs the psychologist. It is important to be aware of this and to carefully and transparently communicate those relationships.
- In cases where suspicion about abuse by one parent is communicated to the psychologist by the other parent, the psychologist is recommended not to substitute him or herself but rather, for example, empower the parent to file a criminal complaint.
- When reported facts affect parental rights, it is appropriate for the psychologist to maintain impartiality and distance from all parties involved. The short-term and long-term consequences of the actual procedure must be considered.
- The psychologist should not comment, even anonymously, on the psychological state of any person without relevant evidence, which comes from a proper psychological examination of that person, including providing the subject with the clearly stated purpose of the examination.

- It is inadmissible to assess someone without direct contact with the person. Expressing a professional opinion under such conditions may not only harm the assessed person, but also violates the principles of professional responsibility.
- The psychologist is allowed to use methods based on his /her choice, but should be able to explain the use, specify the results, and infer the outcomes correctly. Methods used should be relevant and based on current scientific knowledge or supported by good practice.
- The psychologist should act within his/her field of particular specialization and qualification.
- The psychologist should be aware of his/her own role and the power connected with this role.
- The psychologist should make clear his or her involvement with one of the parents and the role of his/her professional commitment with the particular person.

### ***Complaints Against Psychologists in the Role of Expert Witness in the Child Custody Domain***

In child custody cases, when the psychologist is in the role of court expert witness, we see a recurring pattern of complaints focused on:

- Methods used by the psychologist expert: are they relevant, scientific, and sufficient for the conclusion drawn?
- The field of expertise: is the psychologist operating within the area of his/her own expertise, or is the psychologist expressing his or her opinion within a specialization certified by the court?
- According to the complainant, the psychologist seems to be biased against him/her.
- Formal mistakes in the report.

The fields of ethical interest (except for the fields mentioned above) evaluated in these cases were:

- The psychologist should behave with respect and ethically toward his/her colleagues. She or he should not accept the task of evaluating a colleague's work without contacting him/her first with the feedback toward his/her work.
- The results and findings should be consistent and supported by the current state of the art and concise psychological theory.

### ***Examples of Complaints***

Below are some examples of the complaints in the child custody domain, followed by an identification of the ethical principles applicable in these situations:

- A parent complains about the opinion given by an expert from the field (specialization) of education and culture. The expert opinion also contained an evaluation of the origin of the child's celiac disease and atopic eczema.
  - ▶ The expert psychologist should perceive the limitations of his/her own expertise and involve a consultant from a different field, if necessary.

- A complaint about the methods used by the expert. The psychologist used methods of observation and projective methods (drawing) to evaluate the mental development of a child in a custody case.
  - ▶ The psychologist decides on the methods to be used, but these must be relevant to the evaluation of particular area. There are standardized methods to assess a child's mental development that represent the current state of the art in psychology.
- The psychologist failed to mention the specific methods used during the custody evaluation, as well as the particular results, in his/her report.
  - ▶ Specific methods, their names, and optimally, in some form, also the results, should be included and should correspond to the purpose of the examination. They assure the verifiability of the results and represent part of expert opinion making. It should also be clear what role the results played in the expert's opinion.
- During the evaluation, the psychologist visited one of the parents at home, and the observation part of the assessment was made under these conditions. The other parent agreed with the visit, but this parent subsequently had withdrawn his/her agreement.
  - ▶ In cases of special procedures it is best to have written consent.
- The psychologist wrote a report to support the child's mother's request to accompany the child during a longer medical stay at a rehabilitation center. In this report the psychologist highlighted the importance of the close relationship and contact of the child with a mother. On the basis of this report, the mother was allowed to stay with a child, paid for by medical insurance. After that, the mother used the report in a custody proceeding.
  - ▶ Misuse of the psychologist's report in custody proceedings occurred, because the purpose of the report, which would clearly identify to the court the circumstances of its origin and its objective, was omitted.
- The complainant feels his rights were harmed because he was not informed about, and invited to, his daughter's psychological examination. He was only informed about the conclusions of the examination and recommendations at a later meeting with the mother in a case conference at the Department of Social and Legal Protection of Children. Part of the psychologist's conclusion was a recommendation to immediately end joint care. This recommendation was then referred to a judge of the District Court in her Resolution on the regulation of daughter-to-father contact. The psychologist confirmed that she did not allow the child's father to participate in the daughter's psychological examination, because the mother did not wish it. At the same time, she confirmed that her task was not to analyze and recommend contact between father and daughter.
  - ▶ The psychologist should pay attention to the rights of both parents in child custody evaluations.

***Specific Ethical Problems According to the Code of Ethics of the Psychological Profession of the Czech-Moravian Psychological Society***

The above-mentioned ethical principles and breaches are reflected in following paragraphs of Code of Ethics of the Psychological Profession (2017):

§ I. 4. Relationship with clients, other parties, colleagues and other stakeholders (the public)

... Psychologists recognize a multilateral contractual field and make it understandable by using written contracts and informed consents, while primarily keeping in mind and clearly identifying the client's interest or several interests (in research, for instance).

§ II. 1. Diversity competence

A psychologist ...

- c) does not see own opinions as universally shared beliefs and makes them understandable to others;
- d) understands and actively considers his/her possible bias in a multilateral contractual field; strives for impartiality or, as the case may be (in circumstances when the promoted values and principles are at risk), for clear and reasoned explanation of partiality ...

§ II. 2. Professional competence

A psychologist ...

- f) follows the principles of evidence-based practice and practice-based evidence and understands the benefits and limitations of both procedures by relying on methodological knowledge and critical thinking; ...
- h) is aware of own abilities and limitations, actively seeks feedback from clients, colleagues, supervisors and subordinates, and when professionally in doubt requests support through methodological guidance or consultations with colleagues within a professional association.

§ III. 1. Field of interests

A psychologist

- a) knows whose interest guides the undertaken action and clearly identifies this interest; protects the rights and legitimate interests of a client;
- b) is aware of the various interests involved and knows when it is appropriate to negotiate a multilateral written contract;
- c) clearly identifies a situation when his/her position or engagement within a multilateral contractual field changes and negotiates contract modification, *i.e.*, even possible termination of cooperation ...

§ III. 2. Responsibility for using power

A psychologist

- a) actively reflects the various forms of his/her power and influence in his/her relationship with clients, other parties, colleagues, and the public;
- c) recognizes the nature of the relationship with the client and its level of asymmetry and establishes an adequate distribution of responsibility. This

also applies to the risks inherent to the psychologist's or the client's conduct or situation; ...

- f) does not make any statements about an individual that he/she did not have the possibility to observe or assess, even if under pressure to do so;
- g) protects clients from inappropriate or wrong usage of psychological methods and from the consequences of such usage.

#### § IV. 1. Contracts and informed consent

A psychologist ...

- c) establishes the purpose of the cooperation within the boundaries set by the values promoted by this Code of Ethics, with primary focus on the client's interest. In case of a multilateral contract, considers also other interests, implied or agreed; ...
- d) negotiates the terms and conditions of cooperation and puts them in writing, especially in the case of a multilateral contractual field. Informed consent consisting of an information sheet and a consenting declaration is an example of such a contract. A consenting declaration without an information sheet is invalid...

#### § IV. 2. Formulating the objectives of cooperation and the corresponding use of psychological methods

A psychologist ...

- b) is fully responsible for using verified and quality psychological (research, teaching, diagnostic, intervention) methods, and for respecting the applicable standards and recommended procedures in research, teaching, assessment, and intervention ...

### **Analysis of the Findings and Discussion Concerning the Ethics of Psychological Expert Testimony in Child Custody Cases**

We adopt a global perspective concerning both societal contexts and ethical norms in psychology.

We discuss the Czech legal and ethical context in relation to foreign perspectives, including child custody arrangements, the concept of the best interest of the child, and the role, task, and responsibility of the psychologist as an expert witness in child custody matters.

### ***Societal Changes and Political Decisions Concerning Child Custody Arrangements and the Best Interest of the Child in the Context of Gender-Neutral Laws***

The child custody domain in the context of Family (Civil) Laws usually means that two persons are divorced/separated while remaining as parents. They would like to arrange their caretaking in the child or children's best interest.

We see three periods and concepts of child custody arrangements in western societies: 1) paternal preference under the patriarchal legal system (dating from Roman law); 2) maternal preference from approximately 1920 on (for the U.S. situation, see Kelly, 1994); and 3) the contemporary gender-neutral laws.



It is worth noticing how influential psychological theories can be, even though they change into totally opposite ideas after a few years of societal development. Psychological assertions seem to serve societal moods by conserving and “blessing” societal changes. The considerable body of theory and research on the development of infant attachment to the mother, for example, has been replaced by equally influential research results indicating attachments to both parents or other “primary caregivers”.

People, including psychologists and children, actually seem to accommodate to more “hardwired” societal changes: “The maternal presumption for custody remained firm for many decades, challenged only after the divorce rate began its dramatic rise in the 1960s. ...the entry of large numbers of women into the work force ... weakened the concept of a primary maternal caretaker” (Kelly, 1994, p. 122).

“Gender-neutral laws” appear in the U.S. context by the mid-1970s (Kelly, 1994, p. 122). The development in the Czech Republic (back then the Czechoslovak Socialist Republic) was different, as it addressed the communist ideals of equality: The propaganda image of a socialist woman of the 1950s as a person employed full time, who uses institutional child care services, is politically active, and still manages the household (Koldinska, 2015, p. 8), was in fact real. The Act on the Family Law, in force from 1950 on, emphasized that “Man and woman in marriage have the same rights and duties,” and “Custody and property arrangements are an obligatory part of the legal decision concerning divorce” (Zakon o pravu rodin-nem – Act on the Family Law, 1949, § 15, § 32).

Twenty years later, family politics changed. Men and women were still equal, but mothers were superior to fathers. By the seventies, women were entitled to maternity allowances and child subsidies, and their job was guaranteed for up to three years after their child was born (Koldinska, 2015, p. 8-9). Up until 1989, divorces resulted in entrusting care of the child to the mother 97 % of the time.

There are many similarities between the Czech Republic and western countries in the developments over the last 20 years. Gender-neutral court practice brought both the concept of joint custody and the growth of painful child custody disputes. The concept of children’s rights, including the notion of the “best interest of the child,” is decisive in these matters, but it itself also evolves.

The “best interest of the child” appears in several articles of The United Nation Convention on the Rights of the Child (see <https://www.unicef.org/child-rights-convention>) which came into force in 1990. The concept is not new (Silva, 2014). The “interest of the child” is also traditionally strong in Czech family law. The Act on the Family Law (in force from 1950 to 1964) stated: “If a married couple has minors, their marriage cannot be divorced if it would be in conflict with the interest of their children” (Zakon o pravu rodinnem - Act on the Family Law, 1949, § 30[3]). Article 3 of the UNCRC states that: “In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interest of the child shall be a primary consideration.” That means, among other things, that the child will not be separated from parents. If he or she will be separated, then he or she has right to maintain relations and direct contact with both parents, “except if it is contrary to the child’s best interest” (Article 9, section 3). Both parents have common responsibility for the child’s upbringing.

We observe emerging criticism against the concept of the child's best interest from the perspective of child autonomy (Porter, 2018; Hofschneiderova, 2017). This is not surprising since we saw the concurrent development in the field of rights of persons with (mental) disabilities (Convention on the Rights of Persons with Disabilities, Article 12), emphasizing their "rights, will, and preferences". The participatory right of minors in court proceedings – the right to be heard by the court – is now widely discussed, sometimes with tension between it and the "best interest" point of view (Hoblikova & Kropackova, 2019, p. 951).

### ***Ethics of Psychological Expert Testimony in Child Custody Cases***

Our method is the analysis of complaints about psychologists' (especially expert witnesses') reports concerning child custody matters. We assess the complaints according to the Czech Code of Ethics of the Psychological Profession that came into force in 2017 after the reference from wide psychological auditorium. Previous complaints were assessed according to the Code that was in force from 1995 till 2017. At the same time we are looking for inspiration from three international ethical Codes and their principles: the EFPA Meta-Code of Ethics<sup>1</sup>, the APA Ethical Principles of Psychologists and Code of Conduct,<sup>2</sup> and the Universal Declaration of Ethical Principles for Psychologists<sup>3</sup>.

In this article we are following the ethical recommendations and guidelines concerning expert testimony as defined by European psychologist in forensic work and as expert witness (EFPA – see <http://ethics.efpa.eu/guidelines/>) and the Guidelines for Child Custody Evaluations in Family Law Proceedings (APA, 2010).

For our purposes it is important to mention that three years later, the APA produced Guidelines for Psychological Evaluations in Child Protection Matters (2013). We consider the difference between the contexts of child custody and child protection matters to be of utmost importance, although there is no strict interface.

While discerning the different contexts of ethical resources (Czech, European, American, global – codes, guidelines, recommendations), we could follow the ethical moments important for our "child custody complaints patterns."

### ***The "Psychological Best Interest of the Child" in the Context of Multilateral Contractual Field***

"The systems that psychologists serve in forensic work attempt to balance the interests of the individual against collective interests or against the interest of other individuals." (The European psychologist in forensic work and as expert witness, p. 1.)

"Psychologists render a valuable service when they provide competent and impartial opinions with direct relevance to the 'psychological best interests' of the

<sup>1</sup> Meta-Code of Ethics (2005). Principles: Respect for person's rights and dignity, Competence, Responsibility, Integrity.

<sup>2</sup> Ethical Principles of Psychologists and Code of Conduct (2017). Principles: Beneficence and Nonmaleficence, Fidelity and Responsibility, Integrity, Respect for People's Rights and Dignity.

<sup>3</sup> Universal declaration of ethical principles for psychologists (2008). Principles: Respect for the Dignity of Persons and Peoples, Competent Caring for the Well-Being of Persons and Peoples, Integrity, Professional and Scientific Responsibilities to Society.

child.” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 863)

The notion of “the child’s best interests” is the main reason for psychologists’ (and other professionals’) forensic engagement in the child custody domain.

We offer several points worthy of notice:

- The child and his/her interest is the central focus of child custody matters, but the achievement of his/her best interest is imposed by the state – in the Czech legal and ethical environment, by applying the Act on Social and Legal Protection of Children (Zakon o socialne-pravni ochrane deti, c. 359/1999 Sb.). The judges are the flesh-and-blood vehicles of the state’s political decision, which prefers joint custody as the manifestation of the gender-neutral laws that arrange responsibilities and rights of both parents.
- There are many responsibilities (and corresponding sources of power) in forensic child custody matters: the responsibility of both parents; the responsibility of the judge and the Agency of Legal and Social Protection of Children; the responsibility of the psychologist as an expert witness; and the responsibility of the child/children themselves. No wonder there are also conflicting interests and correspondingly conflicting emotions.
- The standard of the “child’s best interest” is “simple to state and difficult to apply” (Kelly, 1994, p. 128). “Best interest” itself can be used as an argument by all parties in the context of a child custody court proceeding to justify the opposing solutions proposed by both parents and the child protection body (Code of Ethics of the Psychological Profession, 2017, p. 8).

We<sup>4</sup> are convinced that prior thinking about the best interest which the psychologist is supposed to serve, is that the client<sup>5</sup> is in fact the child or the family, not the court or any other bodies.

In such a situation the psychologist must clarify and define individual responsibilities, and what is expected from the psychological intervention, without assuming that everybody wants the same thing.

Then we can ask: what do we, as expert witness psychologists, know or think about the best interest of the child?

The APA guidelines coined Miller’s concept of *psychological best interest*. “Most authorities agree that best interest is satisfied by an adult who wants the child, who has had a continuous and affectionate relationship with her, and who is capable of raising her. That is, the best interest is focused on the *emotional well-being* of the child” (Miller, 2002, pp. 196–197, emphasis by the authors). Miller equates “psychological” and “emotional” and points out that “what is best

<sup>4</sup> “We” here means the consensus arrived at by the Board of Ethics of the Czech-Moravian Psychological Society.

<sup>5</sup> In full awareness of the usage diversity of the term “client”, the Czech Code of Ethics uses this word “as a generic term for the set of situations of direct cooperation of a psychologist and his/her counterpart. This cooperation may be requested by a third party (a court, the police, etc.) while other parties (the client’s parents, for instance) may intervene” (Code of Ethics of the Psychological Profession, 2017, p. 3).

psychologically for the child is not necessarily the best morally” (Miller, 2002, p. 197). (For discussion concerning morality, hypocrisy and best interest standard, see Ritenhouse, 2011.)

If we follow the definition of parental responsibility in the Czech legal context, we cannot agree. Parental responsibility means (among other things) to care for the child’s health, and “his physical, emotional, intellectual and moral development” (The Civil Code, 2012, section 858). “Psychological best interest” may differ from “moral best interest,” but probably it is not possible for the psychologist to separate them and to judge which is more important. Eight years later, the APA guidelines (2010) still quote the Miller’s term “psychological best interest,” but move from a more feelings-based definition of “emotional well-being” of the child, to a more facts-based “welfare”, encouraging psychologists “to weigh and incorporate” the “child’s educational, physical, and psychological needs” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 864).

Still, there is a “multilateral contractual field,” and psychologists enter the field with their notions of best interest of the child, their responsibility, their power, and their emotions. They comprise just one voice among many in the field of human rights. Children’s “best interest” and “autonomy” are principally children’s rights, not states of mind. Therefore, we can ask whether expert witness psychologists are part of the children’s problem with injustice, or part of its solution. “Provided that the Czech environment really strives to respect a child’s rights approach, then it has to deal with one of the most difficult tasks: to get rid of its doting love for children” (Hofschneiderova, 2017).

### ***The Purpose and Contribution of Psychological Expert Testimony in the Child Custody Domain***

“The questions asked by the legal system will often confront the limits of psychological knowledge and predictive possibility. The use of force and control, e.g. imprisonment, and deciding on the limits of interest, e.g. child custody, come close to violating basic human rights.” (The European psychologist in forensic work and as expert witness, p. 2)

“From the court’s perspective, the most valuable contributions of psychologists are those that reflect a clinically astute and scientifically sound approach to legally relevant issues. Issues that are central to the court’s ultimate decision-making obligations include parenting attributes, the child’s psychological needs, and the resulting fit.” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 864)

Psychological expertise is one concern, and the court’s questions are the other. The purpose of expert testimony (“to assist in determining the psychological best interest of the child” according to the APA guidelines, p. 864) need not be the same as the contribution it makes.

Again, there are further points to consider:

- We can agree that the purpose of the psychologist’s expert testimony in the child custody domain is “to assist in determining the psychological best

interests of the child” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 864), although there is no Czech agreement on what that means. Some Czech authors (e.g., Pavlat & Matousek, 2016) turn to the APA’s guidelines, stating that the main contribution of psychological expert testimony is to assess “parenting attributes, the psychological needs, and the resulting fit”. But what can an expert witness tell, for example, about the parents’ attributes and what does he or she need in order to be able to tell make a real contribution to the court?

- The court’s set of questions in a custody litigation context is rather “standardized” in the Czech situation (Horinova, 2009): “Which family environment is better for the child?”, “What is the relationship of the child towards his/her mother/father?”, etc. Do these questions address the psychological best interest of the child as mentioned above? If yes, how? The court practice varies from one judge to another. Sometimes the court assigns a rather broad task to the expert witness, e.g., “examine the personalities of parents and the child”, although there is no consensus as to what type of parental personality best suits caretaking (Pavlat & Matousek, 2016, p. 86), while at the same time “comparatively little weight is afforded to evaluations that offer a general personality assessment without attempting to place results in the appropriate context” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 864).

The psychologist expert witness is supposed to answer the court’s questions. Sometimes these questions may not fit the *lege artis* beliefs of the psychologist. He or she may realize the ethics of diversity issues: “Given the increasingly larger diversity of family styles, values, and traditions” (Kelly, 1994, p. 136), the assessment of the family may call for psychologist’s reflexivity – ability to reflect his or her stereotypes and their contexts. The psychologist’s judgment may also reflect the fact that workroom testing cannot tell a lot about the family environment. She or he may also know that the APA guidelines urge not testing personality without placing it in context, e.g., within the family’s structure, resources, and processes. But this psychologist was trained in psychopathology and in individualized concepts of personality. He or she also knows that the court, along with advocates of one or the other parent, will ask: Why do you think what you think? Where did you get your evidence? Have you any test results?

And the psychologist decides to follow the expectations of the court and lay public as the easier way, if she or he is afraid of losing losing his or her good reputation as an expert witness.

Still, we believe that a psychologist may refuse such a requirement. Refusal sometimes seems to be the most valuable contribution the expert witness can make. It requires courage. The Czech Code of Ethics expects that psychologists will refuse questions from a third party if by answering, psychologist would challenge “his/her ethical or professional standard or the reputation of psychology” (Code of Ethics of the Psychological Profession, 2017, p. 13). Then, we hope, there will be no more expert witness reporting, as the core of the custody arrangements investigation, that “daddy doesn’t spank me, and also mummy doesn’t spank me”.

***The Role, Task, and Responsibility of the Expert Witness  
in Child Custody Cases: Working Alliances and Parallel Processes***

“As part of power systems the psychologist must accept and expect to be scrutinized both on ethical and other professional dimensions. ... The more openly honest and straight forward the work of the psychologists has been done, the easier it will be to handle both impartial and partial criticisms, without attacking or offending persons, when handling and responding to critics.” (The European psychologist in forensic work and as expert witness, pp. 2–3)

“The most useful and influential evaluations focus upon skills, deficits, values, and tendencies relevant to parenting attributes and a child’s psychological needs.” (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 864)

The role, task, and responsibility of the psychologist-expert witness in the child custody domain seem to be closely connected to the characteristics of the process and resulting working alliance. The “impartiality” of the psychologist in the child custody context is understandably a formula often repeated, because the psychologist enters a multilateral contractual field containing strong power dynamics of the conflicting interests of the parties involved.

We consider this context to be fertile ground for *parallel processes* that flourish within just such a mixture of vulnerability, power, and powerful emotions. “Every expert was once a child; many are married and parents; some are divorced. The expert is likely to have many feelings in common with participants in a custody battle.” (Miller, 2002, p. 199)

We can see parallels not only between persons and their fates, but primarily between processes – the court’s procedure, the psychologist’s procedure, and the ethical committee’s procedure. All parties are involved in the multilateral contractual field. All can decide the form of their engagement: either they have their role in the power games of collecting evidence and proofs, giving judgments and reprimands, or they may search for a way to reflect the process, to see its risks and opportunities, and to strengthen the appropriate responsibilities of the parties involved.

No matter what the reason for the parallels – isomorphism from the systemic point of view, or countertransference and projective identification from psychoanalytic perspective – the result is still the same: the impartiality of all parties, including the psychologist, is threatened. We can see it in the complaints: Sometimes the psychologist is fully engaged in the divorce battle between parents, trying to “save the child” against one of them. What does that mean? Does the psychologist feel alone, with exclusive responsibility?

Let us imagine that the role of psychologist-expert witness is to be partial and consider family relationships (not the family as a structure) to be her/his client. That means also to be fond of the family relationships, looking for their future prosperity and resilience in spite of the parents’ separation.

The psychologist’s task then is to describe the patterns and values of the family relationships, the strengths and deficits of the family processes, and then to recommend the corresponding type of support.

The psychologist’s responsibility then lies in understanding the processes and in clearly communicating them to all parties of the *ad hoc* transdisciplinary group, which could be called “child custody in accordance with the child’s best interest”.

Instead of this dreamy kind of working alliance based on trust, cooperation, and mutual learning, we know and describe the reality, which is full of exhausting power games and temptations for the expert witness to take other than psychological roles – those of advocate, judge, educator, social worker, etc. The psychologists as expert witnesses “may be tempted to opine about matters outside his field of expertise” (Miller, 2002, p. 196); at the same time the debate concerning “the specific nature of psychologists’ involvement and the potential for misuse of their influence” continues (Guidelines for Child Custody Evaluations in Family Law Proceedings, 2010, p. 863).

### ***The Ethics of the Psychologist-Expert Witness in Child Custody Cases: Reflexivity and Courage***

The fact is that parents in the family/civil law context did not violate societal norms; they are not criminals. They divorced/separated. They may not like each other, and they do like their child. That is all. Let us take that as the starting point of our – psychologists’ – expert evaluation.

Let us hope that “the idea that relationships do not end but must be renegotiated” (Emery, Rowen & Dinescu, 2014, p. 502) will change legal procedures, and there will be no need for psychologists-expert witnesses in child custody cases in the future. However, the role of expert evidence is still overestimated in the Czech judicature and can “strongly influence the result of a case” (Horinova, 2009).

One of us asked a lawyer why they needed us – psychologists – as expert witnesses in child custody matters. “Because people tell lies,” the lawyer answered, “and I need you to distinguish it.” But the psychologist’s “integrity is based on honesty, and on truthful, open and accurate communications” (Universal declaration of ethical principles for psychologists, 2008, p. 3), and if the psychologist is trained with a systemic perspective, he or she does not presume that people are lying; she or he takes into account their “versions”. No wonder that family therapists point out the risk of adversary practice undermining the “needed parental cooperation in custody disputes by increasing parent conflict” (Emery, Rowen & Dinescu, 2014, p. 502).

Nowadays we can see, not only in the Czech Republic, the trend toward returning parental responsibility back to the parents. The Cochem practice (looking for amicable agreement) is one of possible strategies for doing it. There are other promising dispute resolution procedures, *e.g.*, parenting coordination that follows a mediation–arbitration model (Emery, Rowen & Dinescu, 2014, p. 505; see Kelly, 1994 for another review). The role of psychologists in these models differs from that of the expert witness looking for the “better parent”.

We have hope for the future. If we take the complaints perspective and stay in the present mode, we can see several areas of ethical awareness that need improvement in psychologists’ ethical expert witness practice:

- To reflect societal changes and corresponding political decisions (Code of Ethics of the Psychological Profession, 2017, p. 1) and to realize that, due to societal changes, our “evidence-based” formula does not work, and our predictive power is really diminished. To take diversity issues seriously.

- To stabilize ourselves by formulating our appropriate role, task, and responsibility in establishing a working alliance with our client, *i.e.*, the family relationship.
- To cooperate and collaborate with the *ad hoc* teams (transdisciplinary approach, family-centered approach).
- To preserve our integrity, *e.g.*, to refuse procedures that compromise it.

In the U.S. context, it is estimated that only a small group of divorcing parents (less than 15%) remain in high conflict after a divorce (Kelly, 1994, p. 135). If we take an example of one District Court in the Czech Republic (town Hodonín, year 2018), we have comparable data: this Court has 600 child custody cases per year. 135 cases of the total number of 600 were handled by Cochem practice procedures, 5% unsuccessfully (Horakova, 2019).

This ratio also reminds us that there is a limited number of psychological expert witnesses reporting in the child custody domain, and a much more limited number of complaints addressing psychological expert witness reports. We realize that the “complaint bias” influences our perspective. Still, the story of psychological expert testimony in the child custody domain is a great source of learning for us.

## Conclusion

Testimony by psychological experts in child custody cases occurs in the context of societal changes and political decisions concerning child custody arrangements, and the best interest of the child in the context of gender neutral family laws. Several ethical concerns seem to be of special importance: 1) the “psychological best interest of the child” in the multilateral contractual field; 2) the purpose and contribution of psychological expert testimony in child custody cases; 3) the role, task, and responsibility of the expert witness, including establishing working alliances and resulting parallel processes in three interconnected systems (parent – parent; parents – expert witness; expert witness – judge); 4) the appropriate allocation of responsibilities in the multilateral contractual field; and 5) the ethics of reflexivity, responsibility, and courage in the work of psychologist as an expert witness.

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## Representations of Medical Risks and Their Connection to Different Personal Characteristics of Doctors and Medical Students

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**Background.** There is no generally accepted psychological understanding of how a doctor's representation of risk and uncertainty affects professional medical decision-making. The concept of a Unified Intellectual and Personal Potential can serve as a framework to explain its multiple and multilevel regulation. Our objective was to research the connections between medics' perceptions of risk and related personal factors.

**Design.** Medical doctors were compared to different control groups to identify their personal and motivational characteristics in three studies. *Study 1* assessed the motivational profile of doctors (using Edwards Personal Preference Schedule) in connection with their risk-readiness and rationality (measured by the Personal Factors of Decision-making questionnaire, also known as LFR) in a sample of 33 doctors, as compared to 35 paramedics and 33 detectives. *Study 2* compared 125 medical students and 182 non-medical students to 65 doctors as to the levels of their risk perception (measured by Implicit Theories of Risk questionnaire, the LFR, and their direct self-esteem of riskiness<sup>®</sup>), tolerance for uncertainty (measured by Budner's questionnaire), and rating on the Big-Five personality traits (TIPI). *Study 3* presented two new methods of risk perception assessment and investigated the connection between personality traits, risk reduction strategies, and cognitive representations of risk in 66 doctors, as compared to 44 realtors.

**Results.** Study 1 found differences between the doctors', paramedics', and investigators' motivational profiles. The doctors' motivations were not associated with conscious self-regulation. In Study 2, risk-readiness was positively related to tolerance for uncertainty (TU) and the self-esteem of riskiness. The latter was significantly lower in doctors compared to the student groups and had different relationships with personality variables. In Study 3, doctors differed from realtors not only in their traits (*i.e.*, being less willing to take risks), but also in their choices and greater integration of their risk representations.

**Conclusions.** The three studies demonstrated the multilevel processes behind the willingness to take risks and risk acceptance, as well as the relationship between the multilevel personality traits and doctors' assessments of medical risks and their preferences in risky decision-making.

**Keywords:** decision-making (DM); risk representation; risk-readiness; implicit theories (IT); Implicit Theories of Risk (ITR); self-esteem of riskiness; tolerance for uncertainty (TU); Big Five

## Introduction

In various professions, decision-making (DM) under conditions of uncertainty involves not only subjective risk for the decision-maker him/herself, but also might be a source of risk and danger for someone else. Medicine is an example of such a profession (Heller, Saltzstein, & Caspe, 2017). This profession is essential in one's life, but there's no generally accepted psychological understanding of how a doctor's representation of risk and uncertainty affects his/her professional decision-making.

The medical professional has to utilize decision-making and basic knowledge in his/her analysis of any specific individual case. Risk perception and implicit theories of risk (ITR) constitute cognitive components of DM, and they interact with different strategies for using professional knowledge (Kahneman, Slovic, & Tversky, 1982). Personal characteristics are also part of DM regulation, as has been shown in the research on the framing effect (Kahneman, 2011; Kornilova, Kerimova, 2018) and on the connection between DM and personal and motivational characteristics of medical professionals (e.g., Kamenev, Kornilova, & Razvalyaeva, 2018).

Despite the active development of various risk assessment scales in medical practice, designed to simplify and increase the objectivity of medical DM (e.g., Diadichkina, Radetckaia, 2016; Suriadi, Sanada, & Sugama, 2008), practicing doctors tend to rely more on their clinical experience. At the same time, "mechanized" DM (that based on statistics, risk scales, and other algorithms) shows an advantage in comparison with "clinical" forms of assessment (when one bases their decisions on experience and knowledge without relying on third-party assessment tools). As shown in the literature, "mechanized" decisions are 10% more accurate than traditional (subjective) risk assessments (Grove, Zald, Lebow, Snitz, & Nelson, 2000). At the same time, medics do not always base their decisions on rational grounds (Perneger & Agoritsas, 2011). As the literature shows, doctors tend to test hypotheses during diagnosis in only 39% of their cases, but in general, tend to search for additional information using inductive methods (Donner-Banzhoff et al., 2017).

One of the principal sources of risk in medical DM is the prognostic aspect of any DM. This aspect is inseparably linked to uncertainty, not only in terms of the results and the probabilistic nature of a patient's symptomatology, but also in terms of the general prognostic character of a professional's world image. This image necessarily includes a dynamic attitude towards uncertainty and risk (Kornilova, 1994; Smirnov, Chumakova, & Kornilova, 2016).

Perception of risk can function on different levels, ranging from reflections on risk conditions and factors, up to the deeper level of *implicit theories (IT)*. The latter can be part of the existential level of consciousness as defined by V. Zinchenko (2006). They consist of social representations as well as professional systems of knowledge, strategies, and tacit assumptions (Gigerenzer, 2008; Sternberg et al., 2000).

The concept of *risk representation* implies a cognitive representation of a situation or a task, its outcomes, and possible alternatives. D. Kahneman's and A. Tver-

<sup>□</sup> The "self-esteem of riskiness" refers to an individual's self-esteem in light of their willingness to take risks. This formulation will be used throughout this article, as to constantly elaborate its meaning would be too unwieldy.

sky's work has shown the role of cognitive representations of uncertain conditions in judgment, and how heuristics condition the situation image (Kahneman, 2011). At the same time, they didn't look into the actual genesis of DM, or its interaction with cognitive, stylistic, and personal variables. In the medical profession, the connection between the perception of medical risks and non-specific ones is also essential.

However, risk perception and personal risk-readiness connect with the personal and cognitive sphere of a person to varying degrees. Normative models of DM under conditions of uncertainty and risk suggest that a person seeks to maximize utility as a result of their DM, but research shows deviations from the "optimal" strategies (Gigerenzer, 2015; Kozeletskii, 1979). The particular characteristics of risk-readiness differ from both impulsivity and sensation seeking (see Lauriola & Weller, 2018). At the same time, risk readiness, tolerance for uncertainty (TU), and intuition form the latent variable of Acceptance of Uncertainty and Risk (Kornilova, Chumakova, Kornilov, & Novikova, 2010), which, in turn, links to intelligence through the integrative Self-concept (Novikova & Kornilova, 2013).

We must distinguish risk readiness as a personal characteristic from *implicit theories of risk* (ITRs). Implicit theories (ITs) manifest themselves in DM, but are not necessarily recognized by a person. Different aspects of ITRs are actualized in different situations, and that might explain lower correlations between personal factors, self-reports, and real behavior in various professional and everyday situations (Figner & Weber, 2011).

We assume that cognitive representations of risk are components of the image of the situation; they can act on both the level of ITs and the conscious level of risk-readiness in the assessment of the consequences of a decision. At the same time, they indicate how a hypothesis opens up the situation under the influence of a person's world image (Leontiev, 2003; Smirnov, 2003), an image that varies for representatives of different specialties (it includes both professional knowledge and professional values). DM by a professional is based on his/her world image and an attitude towards uncertainty and risk. It contributes to the specific choice in a given practical situation.

Personal characteristics that contribute to and inhibit risk acceptance have been studied previously (Kornilova, 2016), but the role of the direct self-assessment of one's willingness to take risks has just begun to be considered (Krasavtseva, 2018). At the same time, Acceptance of Risk and Uncertainty can be understood as "trying on" alternatives to a potential decision (Kornilova, 2003), and the individual's self-esteem of riskiness plays an essential role in this process. Studies of DM have shown that people tend to take higher risks for themselves, in contrast to their advice to others (Kamenev et al., 2018).

According to the concept of a person's *Unified Intellectual and Personal Potential*, an individual's regulation of DM and activity under uncertainty is multiple and multi-level. This notion allows us to study the interaction between the cognitive and personal (and situational and dispositional) aspects of risk representations and medical decision-making. At the same time, such a study can take into account not only cognitive representations of risk in everyday situations, or subjective cognitive representations of a medic's willingness to take risks, but also their interaction, and their connection to the medical risk perception.

The goal of this paper was to study the connections between a medic's risk perception (from ITRs to the direct self-esteem of riskiness) and the different levels of their personal traits; we used different personal characteristics, ranging from a deep motivation toward the self-esteem of riskiness and stable personal features (such as the Big-Five personality traits), to ones that reflect a person's attitude towards uncertainty. We did not set as a separate goal the investigation of the role of a doctor's ethics in their decision-making process. However, we can assume that ethical principles and following the Hippocratic oath are one of the factors determining the results of this study. In particular, awareness and understanding of the moral aspects of medical decisions are fundamentally different between doctors and medical students (along with other elements of professionalization). Perhaps that is why the idea of risk as something harmful or undesirable (in comparison with a hedonistic interpretation) manifests itself in many aspects of our research.

We believe that the study of risk-readiness and motivational tendencies (diagnosed with Edwards Personal Preference Schedule, Kornilova, 1997a, b) would benefit from the analysis of personal characteristics of professional medics. We have previously outlined the specifics of medics' motivational profiles (Kamenev et al., 2018), but didn't compare them with those of emergency doctors and non-medical professions. This paper expands our research in this direction. The multi-level structure of an individual's dynamic regulative systems assumes there is a deep level of motivational hierarchies; their relationships with risk-readiness can help establish how closely different kinds of motivation lead toward risk acceptance processes.

## **Study 1. The Connection between Personal Aspects of Self-Regulation (Risk-Readiness and Rationality)**

### ***Study 1. Overview***

The *goal* of this study was to compare the personal and motivational profiles of three groups of participants: doctors, paramedics, and detectives of the Investigative Committee of Russia.

We dedicated some of our previous work to the problem of risk perception and risk reduction during DM in doctors (see Bogacheva, Kornilova, & Krasavtseva, 2017; Kornilova et al., 2010; Pavlova, Kornilova, Krasavtseva, & Bogacheva, 2019). A. Sakharova compared the prognostic effectiveness of paramedics and doctors; she showed that general anticipation, personality-situational prognostic competence, and the DM in the process of self-control are significantly higher among emergency doctors (Sakharova, 2012).

In our previous research on the connection between kinds of motivation and DM in verbal tasks, a group of paramedics made up about a third of the sample (13 people out of 33, Kamenev et al., 2018). The differences between the doctors and the paramedics in DM were shown to be insignificant. At the same time, in that study, deep motivation was related to the acceptance of risk, and the style of self-regulation was connected to decision confidence but not its orientation.

However, we did not compare the motivational profiles of the doctors and the paramedics. We decided to include more doctors of different specialties in our research to study this problem further. We believe that the differences in work condi-

tions (a scheduled appointment versus an ambulance) can't be more decisive than the professionalization factor (doctors have more intensive training than paramedics). Therefore, we studied the specifics of personal self-regulation and the deep motivation of the participants as determined by the whole situation, including the unity of the intellectual and personal components of professionalization.

We chose detectives as a control group for this study. There is no current information about detectives' motivational profiles (their latest professionograms were created in 1925 and 1967 – Shadrikov, 1994). However, like doctors, their activity involves following certain norms, detailed intellectual strategies, multi-stage decisions, and taking responsibility for others.

### ***Study 1. Method***

#### ***Participants***

The sample consisted of 101 people:

- 33 doctors (13 men, 20 women); ages ranged from 26 to 68 years ( $M = 45.79$ ,  $SD = 12.58$ );
- 35 paramedics (5 men, 30 women); ages ranged from 25 to 63 years old ( $M = 44.11$ ,  $SD = 8.47$ ); and
- 33 detectives (15 men, 18 women); ages ranged from 26 to 56 years old ( $M = 39.09$ ,  $SD = 7.78$ ).

The detectives were selected from a larger group of 90 in order to obtain a group equivalent to the medical workers in terms of gender and age. The comparison between doctors and paramedics allows us to take into account the professionalization factor, and with detectives, the factor of the profession itself. At the same time, all of the participants are representatives of the so-called “person-to-person” kind of profession.

The participation in all three studies was anonymous, and all participants signed informed consent.

Work experience was normally distributed (according to Pearson's chi-square crosstab test), but age was not: the doctors turned out to be older than the other groups ( $F = 4.173$ ,  $df = 2$ ,  $98$ ,  $p = .018$ ).

#### ***Procedure***

##### ***Questionnaires***

1. *Edwards Personal Preference Schedule* (Kornilova, 1997a). This measure evaluates “motivational tendencies” that correspond to G. Murray's types of motivation. The questionnaire has an ipsative format. Motivation tendencies in this questionnaire are shown by the general directions of the person's preferred methods of action and interaction with the social environment. The test has eight scales: achievement; order; autonomy; self-knowledge; dominance; abasement; endurance; and aggression.
2. *Personal Factors in Decision-making Questionnaire* aka LFR (Kornilova et al., 2010). This was used to measure risk readiness (an ability to make decisions under risk) and rationality (readiness to search for additional information).

### Study 1. Results

Using the Mann–Whitney U-test, we examined how *sex* affects motivation and personal factors of DM. According to our results, men tend to be more *dominant* ( $p = .013$ ). Other parameters don't show significant differences.

We used Kruskal–Wallis one-way analysis of variance to establish the differences between the variables in the groups (see *Table 1*).

Table 1

*Significant differences in the variables between groups of doctors, detectives, and paramedics (Kruskal–Wallis one-way analysis of variance)*

Variable	Groups	p	M <sub>doctors</sub>	M <sub>paramedics</sub>	M <sub>detectives</sub>
Risk-readiness	P – Dt, Dc – Dt	.030	1.24	0.91	3.33
Rationality	Dc – P, Dc – Dt	.001	6.06	8.17	7.91
Achievement	Dc – P, P – Dt	.006	7.85	6.51	7.82
Order	Dc – P, P – Dt	.023	6.94	8.4	7.09
Dominance	Dc – P, P – Dt	.001	7.88	5.54	8.97
Abasement	Dc – P, P – Dt, Dc – Dt	.001	5.94	8.74	4.18
Aggression	P – Dt, Dc – Dt	.001	4.94	5.71	3.91

Note. Dc = doctors, P = paramedics, Dt = detectives.

*Risk-readiness* in the detectives is higher in comparison with other groups, and *rationality* is lower in the doctors.

The *motivation for achievement* and *dominance* is significantly lower among paramedics; at the same time, they have significantly higher *aggression*, *abasement*, and love for *order*. Doctors and detectives have higher *dominance* and *achievement*; at the same time, they have lower *abasement* and *aggression*.

Correlation analysis shows that *motivation* is not connected to self-regulatory properties in doctors, and *risk-readiness* tends to be linked to *aggression* ( $p = .078$ ). Among paramedics, *risk-readiness* positively correlates with *autonomy* ( $p = .031$ ) and *dominance* ( $p = .01$ ) and negatively correlates with *abasement* ( $p = .05$ ). Rationality in this group positively correlates with *order* ( $p = .027$ ) and negatively with *aggression* ( $p = .012$ ). Finally, detectives' *motivational* scales do not correlate with *risk-readiness*, but *rationality* was positively associated with *order* ( $p = .01$ ) and negatively with *self-knowledge* ( $p = .016$ ).

### Study 1. Discussion

Correlation analysis established that the components of motivation and personal self-regulation of DM (namely *risk-readiness* and *rationality*) are not integrated among doctors, as compared to paramedics, who also have a stronger desire for *order*, as well as exhibiting *aggression* and *abasement*. This connection is quite convincing: people with a stronger desire for *order* are more rational, and those who are abased (willing to accept blame) are less risk-ready. Thus, there are reasons to



associate paramedics' lower level of basic knowledge and their activity with a more pronounced motivational regulation.

The group of detectives appears intermediate: they don't demonstrate the connection between motivation and risk-readiness that the doctors do, and their rationality correlates with the desire for order like the paramedics. In general, they have less correlation between variables as compared to paramedics.

Doctors and detectives are involved in a more intellectual activity than paramedics. Quasi-experimental comparison results (for the student sample) show that people with lower intelligence tend to manifest more personal-motivational regulation of their cognitive activity (Chumakova, 2010; Shadrikov, 2017). In our study, we found that doctors demonstrated lower rationality, which may be due to their being more critical in the self-assessments the questionnaire is based on. In general, the results of Study 1 allow us to consider the differences between groups in the context of the differences in their professionalization and intellectual activity. These may be the reason there are no significant connections with deeper motivational levels among the doctors and as compared to the paramedics.

### ***Study 1. Conclusion***

The following two studies are dedicated to analyzing actual DM situations and risk perception among doctors, and include analysis of their characteristics on different levels (from personal traits to self-esteem and ITRs).

## **Study 2. Risk Representation Levels of Doctors and Students**

### ***Study 2. Overview***

Personal risk-readiness includes perception of risk, although risk-readiness can't be reduced to it. In Study 2, we identify relationships between the self-esteem of riskiness, ITRs (Implicit Theories of Risk as unrecognized implicit representations of risk perception), and risk-readiness and rationality (as personal properties of self-regulation).

We believe that the acceptance of risk is based on personal experience that crystallizes in the form of 1) implicit perceptions of situations and sources of risk (Slovic, 1984, 2000); and 2) the person's own readiness for action and DM under conditions of uncertainty or danger (Kornilova, 2016).

ITRs include not only common knowledge, but also different forms of tacit assumptions formed in professional activity (Sternberg, 2000). They are related to critical thinking and personal traits of self-regulation. We consider ITs less as perceived parts of risk perception, than as reflecting the self-esteem of riskiness. Self-esteem represents an assessment of one's capabilities for making choices in a risk situation.

In Study 2, we identified the features of direct self-esteem of riskiness, ITs, and personal risk-readiness by comparing 1) medical practitioners and medical students, and 2) students at medical and non-medical universities.

We tested the hypothesis about the role the stage of professionalization plays in determining the interconnections between the processes behind the latent variable Accepting Uncertainty and Risk.

## Study 2. Methods

### Participants

372 people participated in the study:

- 65 doctors (28 men and 37 women); ages ranged from 24 to 73 years old ( $M=41$ ,  $SD=12.5$ ); with professional experience from 1 to 50 years ( $M=15.7$ ,  $SD=11.9$ );
- 125 students from First Moscow State Medical University, Department of Pediatrics and Department of Medicine (36 men and 89 women); ages ranged from 17 to 29 years old ( $M=19$ ,  $SD=1.4$ ); and
- 182 students from Lomonosov Moscow State University, Department of Psychology (18 men and 164 women); ages ranged from 18 to 33 years old ( $M=19.8$ ,  $SD=1.3$ ).

### Procedure

#### Questionnaires

1. *Implicit theories of risk* questionnaire (ITR, Ordinova, 2013). This considers ITRs as stable individual perceptions of risk and risk situations, and has seven scales: 1) *impossibility of prognosis/calculation*; 2) risk as a *conscious choice* (conscious violation of standards, willingness to act without regard to danger); 3) risk as a *challenge*; 4) risk as a *lack of rationality* and control over the situation; 5) risk as *acquisition of value*; 6) risk as a *loss or gain*; and 7) risk as *pleasure* (risk as a search for vivid impressions, a source of positive experiences).
2. *Budner's questionnaire* (Kornilova, Chumakova, 2014). This measures two scales: 1) *tolerance for uncertainty* (TU, as a personal characteristic that reflects one's readiness act in uncertain situations), and 2) *intolerance for uncertainty* (ITU, a pursuit of clarity, simplicity).
3. *Personal Factors of Decision-making Questionnaire* aka LFR (Kornilova, et al., 2010). See description in Study 1.
4. *Ten-Item Personality Measure* (TIPI, Gosling, 2013). This was adapted for a Russian sample by Kornilova and Chumakova (2016) and used to measure extraversion, agreeableness, conscientiousness, emotional stability, and openness.
5. The *self-esteem of riskiness* (Kornilova et al., 2010). This was measured using a procedure analogous to the self-esteem of intelligence proposed by Furnham (2001). In this method, participants are asked to assess their level of willingness to take risks based on the normal distribution graph ( $M=100$ ,  $SD=15$ ).

## Study 2. Results

The significant differences between the groups are shown in *Table 2*.

Medical students have higher *risk-readiness* than psychology students ( $p=.002$ ). Doctors show significantly lower *risk-readiness* in comparison with medical students ( $p=.001$ ), but not psychology students, who also have lower *rationality* ( $p=.031$ ). At the same time, the groups do not differ in their *TU-ITU*.

Next, doctors show a significantly higher level of *conscientiousness* in comparison with both student groups ( $p=.026$ ,  $p=.001$ ). At the same time, they are more *emotionally stable* than the psychology students ( $p=.008$ ).

Table 2

Significant differences in ITR, LFR, Big-Five factors, and self-esteem of riskiness between groups of doctors, medical students, and psychology students (Kruskal–Wallis one-way analysis of variance).

		H	p	M <sub>medics</sub> (SD)	M <sub>medical students</sub> (SD)	M <sub>psychology students</sub> (SD)
ITR	Risk as a challenge	9.125	.010	<b>13.3 (2.7)</b>	<b>14.6 (2.9)</b>	14.2 (2.9)
	Lack of rationality	13.976	.001	<b>22.3 (3.8)</b>	<b>20.9 (3.5)</b>	<b>20.7 (4.1)</b>
	Pleasure	10.622	.005	<b>16.5 (3.7)</b>	<b>18.7 (4.5)</b>	<b>18.1 (3.8)</b>
LFR	Risk-readiness	19.866	.001	<b>0.5 (3.2)</b>	<b>2.4 (4.1)*</b>	.5 (4.6)*
	Rationality	5.991	.050	<b>5 (3)</b>	4.1 (2.8)	<b>3.8 (3.8)</b>
TIPI	Conscientiousness	17.351	.001	<b>11.2 (2.3)</b>	<b>10.1 (2.5)</b>	<b>9.4 (3.2)</b>
	Emotional stability	9.024	.011	<b>8.7 (2.8)</b>	7.8 (2.7)	<b>7.4 (2.8)</b>
	Self-esteem of riskiness	8.179	.017	<b>90.2 (20.4)</b>	<b>99.8 (22.9)</b>	<b>98.6 (21.6)</b>

Note. Bold = significant differences found in pairwise comparison ( $p < .05$ ); \* = significant differences between student groups; only scales with significant differences ( $p < .05$ ) are shown.

The participants from the different groups also show different ITRs. For doctors, it's more common to see risk as a *lack of rationality* ( $p = .009$  with medical students,  $p = .001$  with psychology students), and less as a *challenge* (only in comparison with medical students,  $p = .008$ ). At the same time, they are less susceptible to *hedonistic risk* than the other two groups ( $p = .004$  with medical students,  $p = .037$  with psychology students). Finally, both student groups assess their willingness to take risks higher than the doctors do ( $p = .027$  with medical students,  $p = .028$  with psychology students).

We conducted a correlation analysis to clarify the specific characteristics of groups (the correlations between variables are shown in *Tables 1* and *2* in the Appendix).

All groups demonstrate significant connections between *self-esteem of riskiness* and *risk-readiness*. The latter, in turn, is positively connected to *extraversion* and negatively to *rationality* and ITR *conscious choice*. ITU in all groups relates to the ITR *lack of rationality*. The rest of the correlations are specific to each group.

The connection between the *self-esteem of riskiness* and ITR *acquisition of value* was found only among the doctors. At the same time, the *self-esteem* of the students in both groups positively correlates to ITRs *conscious choice*, *extraversion*, and *openness*, and negatively to ITU. Psychology students' *self-esteem of riskiness* also links to *rationality* and the ITR *impossibility of prognosis*.

In the medical students, TU correlates to ITR *pleasure*, but among psychology students, it relates to ITR *challenge* (positively) and ITR *acquisition of value* (negatively). ITU is connected to ITR *acquisition of value* (in both student groups), and negatively to *conscious choice* and *hedonistic risk* among medical students.

*Risk-readiness* positively connects to ITR *pleasure* in medical students. Psychology students demonstrate a different profile: their *risk-readiness* positively corre-

lates with *risk as a challenge* and negatively correlates with *ITR acquisition of value*. *Rationality* measured with LFR among doctors and psychology students correlates with the *ITR lack of rationality*. Psychology students also show a correlation of *rationality* with *ITR conscious choice* (negative) and *ITR loss or gain* (positive). Medical students also demonstrate the link between *rationality* and risk as a result of an *impossibility of prognosis*.

Finally, there is a difference in the correlations of personal characteristics between the groups. The *rationality* of doctors significantly connects to their *conscientiousness* and *emotional stability*. Medical students demonstrate the relationship between *rationality* and *ITU* (positive) and *extraversion* (negative). Their *risk-readiness* also relates to *openness*. In psychology students, *rationality* correlates with *conscientiousness* (same with doctors) and negatively with *openness*; *risk-readiness* links to all factors of the Big-Five except for *conscientiousness*; *TU* correlates with *risk-readiness*.

## Study 2. Discussion

We established the existence of differences in the *self-esteem of riskiness* between professionals and students (the student groups have no difference between them). The lower *self-esteem of riskiness* of the doctors may be connected to their higher degree of caution, and the fact that the doctors' group is older in general.

The *self-esteem of riskiness* demonstrates the diverse structure of connections among the different groups. A doctor's self-esteem relates only to personal *risk-readiness*, but among students of both professions, it links to intolerance for uncertainty, extraversion, and openness. We can assume that criteria for self-assessment may vary. The lack of connections of *self-esteem* with other variables may indicate that participants base their *self-esteem* on their self-concept, and also have a more differentiated interpretation of willingness to take risks as a trait.

All groups show a correlation between *self-esteem of riskiness* and the *IT conscious choice*. This relationship suggests that this *IT* corresponds with the general criterion of risk: doctors and students see riskiness as an intentional violation of norms. Doctors differentiate themselves from the other groups by their link between *self-esteem of riskiness* and *ITR acquisition of value*, which represent risk as a "trial of fate" and the source of rewards. This representation points to the role of risk-taking in fateful decisions, an essential aspect of medical professional activity, which has to deal with issues of life or death.

We establish the differences in *risk-readiness* (medical students are more risk-ready than two other groups), *rationality* (doctors are more rational in comparison with psychology students), *conscientiousness* (doctors have higher conscientiousness), and *emotional stability* (doctors are more stable than psychology students). These results reflect the path of professionalization that medics take; they have to overcome their risk-readiness. Thereby, we can assume that a medic's professionalization implies the additional differentiation of personality traits that allow them to control their actions better. This control is vital because of the high cost of risk in the medical profession. This assumption also explains the shift from the positive interpretations of risk towards more "serious" ones (like the lack of rationality or the value aspect of risk).

We haven't found any difference between doctors and students in their *TU-ITU*; this confirms the idea that high *TU* is a selection (and self-selection) criterion for the medical profession (Geller, 2013).

Doctors have higher rationality and lower risk-readiness in comparison with students. This shows that we need to differentiate between cognitive assessment processes and risk acceptance in professionalization. Study 1 showed that doctors have higher rationality in comparison with other professional groups. The results of Study 2 indicate that medical students haven't mastered the ability to maximize their search for information in DM. At the same time, the *rationality* of doctors has a tight association with the personal factors of *conscientiousness* and *emotional stability*, and no connection to *TU-ITU*, unlike the student groups.

### **Study 2. Conclusion**

A doctor's *self-esteem of riskiness* associates only with *risk-readiness* and the *ITR acquisition of value*, but student groups demonstrate various connections between different personality traits and ITs. Thus, risk self-awareness in the student group tends to be less differentiated compared to that of the professionals. Various ITRs also correlate with each other in the student groups. Altogether this can be evidence of the greater integration of the multilevel processes associated with cognitive-personal regulation of DM under conditions of risk and uncertainty in this group.

ITs are the result of learning experiences. Therefore, a doctor's development follows the path of differentiation, specification, and the separation of implicit perceptions of risk from each other. At the same time, the *ITR pleasure* is reduced during professionalization and loses its connection with different traits. This suggests a transition from a positive interpretation of risk, to one seeing it as a threat, over the course of doctors' professional development.

## **Study 3. Relationships Between the Personal Characteristics of Doctors and Realtors and their Medical Risk Assessments**

### **Study 3. Overview**

On the one hand, risk perception and readiness to take on tasks have a multi-level structure. On the other hand, we have to take into account the base knowledge that doctors use when making a decision. This requires us to use some special measurements of medical risk: the Medical Risk Scale (MRS) and the Cognitive Representations of Risk (CRR) questionnaire.

The CRR Questionnaire reflects different aspects of professional and non-specific risks, and the MRS consists of verbal tasks (vignettes) based on medical practice. Both specify specific risk sources and alternative ways of reducing risk (the control group makes its decisions as if they were medics).

Study 3 has two goals. The first is to establish the links between the conscious aspects of risk perception (rated in the CRR) and verbal choice preferences (measured by the MRS); and the second is to study the relationships between a direct risk assessment (shown in CRR), and the attitude towards it in verbal tasks, as shown in the MRS and ITRs.

In this study, we tested the following hypothesis: cognitive representations of risk correlate with professional verbal choice preferences; ITRs are also included in the regulation of choice (and correlate with MRS).

Realtors were chosen to be a control group, because they also have to take risks involving other people, although those risks concern their financial state. We have discussed the psychological profile of realtors, their motivation, and personal self-regulation in our previous work (Kulagina & Kornilova, 2005).

### **Study 3. Methods**

#### **Participants**

110 people participated in Study 3:

- 66 doctors (29 men and 37 women); ages ranged from 24 to 73 years old ( $M = 41.0$ ,  $SD = 12.5$ ); and
- 44 realtors (8 men and 36 women); ages ranged from 21 to 71 years old ( $M = 45.6$ ,  $SD = 9.3$ ).

#### **Procedure**

##### *Questionnaires*

1. The Medical Risk Scale (MRS) was developed to assess medical risk representation and methods for risk reduction. This questionnaire includes 10 verbal tasks (vignettes) created based on interviews with doctors; these vignettes describe different risk situations from within medical practice. Each case has to do with one of the following sources of risk: lack of skills; lack of knowledge; the patient's state of health; the patient's psychology; the lack of equipment; the personality and condition of the doctor; actions of the management; actions of colleagues; imperfections of medicine as a science; the risk of incorrect assessment of the situation; and timing. Participants assessed the riskiness of each situation using a 5-point Likert scale and then chose one of the ways to reduce this risk.
2. The Cognitive Representations of Risk questionnaire (CRR, see *Appendix 5*) is a list of 21 risks (identified in the qualitative analysis of interviews with doctors). The list consists of both professional medical risks (*i.e.*, "lose a patient") and non-specific risks (*i.e.*, "ruin relations with superiors"). Participants are asked to assess risks by seven aspects: 1) riskiness of the situation; 2) its predictability; 3) the likelihood of its occurrence in general and 4) in their practice; 5) the intensity of their experience (emotion); and the probability of a 6) positive and 7) negative outcome.

We also used the Personal Factors of Decision-Making Questionnaire (LFR), the S. Budner Questionnaire, ITR, TIPI, and the Self-esteem of Riskiness (see descriptions in Study 1 and 2).

#### **Study 3. Results**

We established the discrepancies between the groups (see *Table 3*). The factors of the Big-Five and the CRR scales showed no significant difference between them.

Table 3  
 Significant differences in Personal Factors of Decision-Making, ITR, and MSR between groups of doctors and realtors (Student's T-test)

		t	p	M <sub>doctors</sub>	M <sub>realtors</sub>
	Risk-readiness (LFR)	-4.653	.001	-.54	2.51
ITR	Lack of rationality	2.655	.009	22.86	20.60
	Acquisition of value	3.468	.001	18.91	16.57
	Gain or loss	1.881	.063	25.91	23.93
MRS	Average risk	3.673	.000	2.84	2.34
	Average riskiness when finding information	-2.996	.004	2.96	3.44
	Average riskiness when delegating decision	-3.414	.001	2.33	3.16
	Average riskiness when following intuition	-2.615	.011	2.41	3.06

Doctors and realtors do not differ in their *TU-ITU* and *rationality*, but doctors have lower *risk-readiness* in comparison with realtors (similar results obtained in Study 1 and 2).

The two groups demonstrate differences in ITR: doctors see risk more as a *lack of rationality*, a way to *acquire value*, and *gain or loss*.

At the same time, doctors tend to perceive the vignettes of MRS as *riskier*, and they also prefer to follow *intuition* and *delegate* decisions in more dangerous situations, and to find additional *information* in safer cases.

Correlation analysis (see Table 3 in Appendix) shows the relationship between variables. Doctors and realtors both show the link between *TU* and *risk-readiness* ( $p = .020$  and  $.014$  respectively), but the realtors' *TU* also relates to *risk-readiness* ( $p = .021$ ). The *ITU* of doctors negatively links to *risk-readiness* and positively to *rationality* ( $p = .027$ ). Therefore, more rational and less risk-ready doctors tend to seek clarity. At the same time, the *self-esteem of riskiness* in both groups correlates with *risk-readiness* ( $p = .003, .005$ ), but only in the case of doctors does it link to *ITU* ( $p = .028$ ); for realtors it negatively connects to *rationality* ( $p = .007$ ). Medics also show a positive connection between *risk-readiness* and *extraversion* ( $p = .010$ ).

*TU-ITU* does not correlate with the Big-Five, but *conscientiousness* positively relates to *rationality* in groups of doctors and realtors ( $p = .001$  and  $.013$  respectively). *Emotional stability* links to *rationality* in doctors ( $p = .003$ ), and negatively to *risk-readiness* in realtors ( $p = .010$ ).

Table 4 in the Appendix shows correlations between the different scales of cognitive representations of risk. According to our results, doctors are characterized as having more integrated risk assessments when choosing to *find information*, *postpone decisions*, *delegate decisions*, *follow standards*, and *use intuition*. The control group does not show correlations between these parameters.

A similar pattern is shown for the Cognitive Representations of Risk questionnaire findings. Doctors' risk characteristics are more related to each other than those of the realtors.

Finally, the ITRs show more correlations in doctors as well.

### **Study 3. Discussion**

The results allow us to support the hypothesis that ITRs and Cognitive Representations both play a role in regulating DM.

Doctors not only show less *risk-readiness*, but also exhibit a diverse representation of risk in the form of *ITRs*. They see risk primarily as a prerequisite for loss or gain, as a lack of rationality, and a way to achieve higher value (the latter is characteristic of doctors with a high self-assessment of riskiness). Realtors with high *self-esteem of riskiness* are the ones who think a negative outcome is unlikely, and have *ITR conscious choice*.

Correlation analysis showed that the doctors who don't attempt to clarify the situation also consider themselves willing to take risks. The willingness of realtors to take risks relates to their lesser *rationality* and *emotional stability*. Doctors also demonstrate the relationship between rationality and such factors of the Big-Five as *conscientiousness* and *emotional stability*.

The results we obtained suggest that doctors have more integrated representations of risk. At the same time, they also demonstrate more links between different cognitive representations of risk, in particular in their assessment of predictability and probability. This shows that doctors tend to distort the probability estimates of medical risks (Kahneman et al., 1982; Operskalski, Barbey, 2016). Cognitive psychologists tend to consider these characteristics of DM as a cognitive distortion, but we showed that they are a part of the doctor's cognitive representation of risk. Earlier, we assumed that a medic's tendency to over-examine patients reflected their pursuit of full orientation in the situation before him/her (Bogacheva et al., 2017).

### **Study 3. Conclusion**

According to our results, doctors differ from realtors not only in their traits (they are less prone to take risks), but also in their choices and greater integration of CRR.

Personal risk-readiness correlates with the self-esteem of riskiness, and it allows us to consider risk readiness as an integral part of self-concept. The relationships between risk-readiness and ITR as a value, and risk as a conscious choice, allow us to consider ITs as part of the "existential" level of self-awareness.

### **General Conclusion**

1. In general, the results of our three studies demonstrate the multilevel processes behind the personality traits of willingness to take risks and risk acceptance, as well as the relationship between these multilevel characteristics and doctors' assessments of medical risks and their preferences in risky DM.
2. The study established the differences in the motivational profile of doctors (in comparison with paramedics and investigators). At the same time, the different types of motivation in doctors were shown not to be associated with conscious self-regulation (by risk and rationality scales).
3. Risk readiness positively relates to TU (for medical groups and control groups) and with the self-esteem of riskiness.



4. Doctors' self-esteem of riskiness is significantly lower than that among medical students and psychology students; their self-esteem of riskiness also differs in relationships with other personality variables.
5. The comparison of two new medical risk measurements showed that doctors who underestimate the likelihood of a positive outcome see risk as a challenge; the risk is seen as a loss or gain by those who tend to assess a situation as risky, and assume higher predictability and probability of risks in general.
6. Components of different levels of risk representation (from conscious direct assessments to implicit ideas) relate to the ways a person chooses to reduce risk in verbal tasks; at the same time, the intra-level connections are more integrated than inter-level ones.

### Limitations

Our samples were not balanced by age and gender, due to the real-life ratio of men and women in different medical specialties; the age differences between students and practitioners were evident as well. These factors can limit our capability of reaching broader conclusions and could have obscured some less noticeable results as well. In the future research, it would be interesting to compare representations of risk in medical professionals of different specialties, and include residents as one of the comparison groups, in order to further understand the dynamics of representations of risk and risk-related personality traits through the process of professionalization of medical doctors.

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**Appendix 1: Table 1**

Table 1

*Correlations between implicit theories of risk, personal decision-making factors, Big Five factors and self-assessments of riskiness in student samples (Spearman's  $\rho$ )*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Impossibility of prediction		<b>-.257**</b>	<b>.401**</b>	<b>.327**</b>	<b>.297**</b>	<b>.281**</b>	<b>.267**</b>	.053	<b>.224**</b>	-.094	.163	-.056	.097	.091	.083	-.123	<b>-.226*</b>
2. Conscious choice	.106		-.029	<b>-.361**</b>	<b>-.302**</b>	-.080	-.026	.110	-.162	<b>.346**</b>	<b>-.190*</b>	.074	-.024	-.055	.132	<b>.374**</b>	<b>.386**</b>
3. Risk as a challenge	<b>.211*</b>	.177		<b>.354**</b>	<b>.290**</b>	<b>.288**</b>	<b>.431**</b>	<b>.305**</b>	-.084	<b>.247**</b>	.006	<b>.212*</b>	.024	.076	.098	<b>.172*</b>	.136
4. Lack of rationality	<b>.325**</b>	-.197	.187		<b>.375**</b>	<b>.446**</b>	<b>.311**</b>	.065	<b>.191*</b>	-.109	<b>.339**</b>	-.055	.139	<b>.243**</b>	.072	.003	<b>-.210*</b>
5. Acquisition of Values	<b>.398**</b>	.058	<b>.286**</b>	<b>.410**</b>		<b>.440**</b>	<b>.303**</b>	<b>.283**</b>	<b>.236**</b>	<b>-.285**</b>	.074	-.079	<b>.190*</b>	-.034	-.063	<b>-.259**</b>	-.146
6. Loss or gain	.188	.033	.183	<b>.262*</b>	<b>.485**</b>		<b>.250**</b>	<b>.200*</b>	<b>.201*</b>	-.111	<b>.273**</b>	-.087	.070	.034	.013	-.111	-.100
7. Pleasure	<b>.286**</b>	<b>.343**</b>	<b>.450**</b>	.190	<b>.362**</b>	<b>.214*</b>		<b>.243**</b>	.016	.112	.031	.113	-.038	-.015	-.099	.023	.094
8. TU	.032	<b>.275*</b>	.139	.034	-.001	.020	.160		-.086	<b>.250**</b>	-.141	<b>.250**</b>	.128	-.083	.022	.127	<b>.240**</b>
9. ITU	.122	<b>-.363**</b>	<b>-.150</b>	<b>.266*</b>	.146	.143	<b>-.331**</b>	-.104		<b>-.338**</b>	<b>.241**</b>	<b>-.344**</b>	.097	.127	-.081	<b>-.349**</b>	<b>-.269**</b>
10. Risk-readiness	.002	<b>.238*</b>	.168	-.091	.059	.083	<b>.226*</b>	.130	<b>-.390**</b>		<b>-.386**</b>	<b>.471**</b>	<b>.172*</b>	.044	.160	.520*	.545*
11. Rationality	<b>.279**</b>	-.140	.187	.127	.039	.029	-.015	.074	<b>.403**</b>	<b>-.240*</b>		<b>-.183*</b>	-.096	<b>.397**</b>	.092	-.190*	<b>-.408**</b>
12. Extraversion	-.017	.194	<b>.264*</b>	.069	.132	<b>.255*</b>	<b>.342**</b>	.165	<b>-.393**</b>	<b>.503**</b>	<b>-.321**</b>		.143	.094	.003	.353**	.215*
13. Agreeableness	-.008	-.170	.008	-.026	-.066	-.118	-.026	.041	-.002	.069	-.080	-.057		.118	<b>.204**</b>	.116	.084
14. Conscientiousness	-.169	.020	<b>.304**</b>	-.058	-.193	-.054	<b>-.225*</b>	.000	.077	.100	.113	.040	-.014		<b>.303**</b>	.088	.001
15. Emotional stability	.012	-.037	.058	-.061	<b>-.243**</b>	-.157	.024	.078	-.147	.050	.023	-.107	<b>.230*</b>	.083		<b>.191*</b>	.162
16. Openness	.014	.129	.188	-.096	.167	.072	<b>.242*</b>	<b>.273*</b>	<b>-.306**</b>	<b>.264*</b>	-.092	.179	.126	.093	.023		<b>.398**</b>
17. Self-esteem of riskiness	.046	<b>.304**</b>	.161	-.078	.121	.163	.194	.212	<b>-.356**</b>	<b>.289**</b>	-.191	<b>.256*</b>	-.027	-.019	-.009	<b>.283**</b>	

Medical students

Notes. \* -  $p < .05$ ; \*\* -  $p < .01$ . Psychology students are above the diagonal ( $n = 182$ ), medical students are under the diagonal ( $n = 125$ ).

**Appendix 2: Table 2**

Table 2

*Correlations between implicit theories of risk, personal decision-making factors, Big Five factors and self-assessments of riskiness in doctors and medical students (Spearman's  $\rho$ )*

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
1. Impossibility of prediction		-.211	.352**	.241	<b>.266*</b>	.076	.207	.088	.061	-.075	.093	<b>.277*</b>	.073	-.094	.127	.093	-.109
2. Conscious choice	.106		-.083	-.355**	-.109	-.151	-.045	-.076	-.190	<b>.380**</b>	-.200	-.007	-.048	.036	-.155	<b>.303*</b>	.232
3. Risk as a challenge	<b>.211*</b>	.177		.201	<b>.295*</b>	.018	<b>.321**</b>	.062	.055	-.023	.131	.194	.047	.135	-.024	.186	.005
4. Lack of rationality	<b>.325**</b>	-.197	.187		<b>.387**</b>	<b>.511**</b>	.113	.106	<b>.267*</b>	-.121	<b>.363**</b>	.018	-.163	.087	.224	-.016	.067
5. Acquirement of Values	.398**	.058	<b>.286**</b>	<b>.410**</b>		<b>.497**</b>	<b>.284*</b>	<b>.262*</b>	<b>.292*</b>	.230	.205	<b>.321**</b>	-.219	-.109	.064	.116	<b>.292*</b>
6. Loss or gain	.188	.033	.183	<b>.262*</b>	<b>.485**</b>		.177	.138	.154	.147	.023	.134	<b>-.248*</b>	-.079	.007	-.187	.122
7. Pleasure	<b>.286**</b>	<b>.343**</b>	<b>.450**</b>	.190	<b>.362**</b>	<b>.214*</b>		<b>.303*</b>	.152	.200	.146	<b>.334**</b>	.091	-.178	.024	.162	.028
8. TU	.032	<b>.275*</b>	.139	.034	-.001	.020	.160		-.066	.184	.004	.123	-.096	-.222	-.127	.127	.006
9. ITU	.122	<b>-.363**</b>	-.150	<b>.266*</b>	.146	.143	<b>-.331**</b>	-.104		-.219	.220	-.113	-.042	.118	.173	-.157	-.163
10. Risk-readiness	.002	<b>.238*</b>	.168	-.091	.059	.083	<b>.226*</b>	.130	<b>-.390*</b>		<b>-.278*</b>	<b>.316*</b>	-.212	-.221	-.235	.237	<b>.363**</b>
11. Rationality	<b>.279**</b>	-.140	.187	.127	.039	.029	-.015	.074	<b>.403**</b>	<b>-.240*</b>		.027	.022	<b>.415**</b>	<b>.368**</b>	.157	-.013
12. Extraversion	-.017	.194	<b>.264*</b>	.069	.132	<b>.255*</b>	<b>.342**</b>	.165	<b>-.393**</b>	<b>.503**</b>	<b>-.321**</b>		.040	-.113	-.139	.227	.075
13. Agreeableness	-.008	-.170	.008	-.026	-.066	-.118	-.026	.041	-.002	.069	-.080	-.057		.044	.210	-.009	-.185
14. Conscientiousness	-.169	.020	<b>.304**</b>	-.058	-.193	-.054	<b>-.225*</b>	.000	.077	.100	.113	.040	-.014		.136	.215	.127
15. Emotional stability	.012	-.037	.058	-.061	<b>-.243*</b>	-.157	.024	.078	-.147	.050	.023	-.107	<b>.230*</b>	.083		.027	.127
16. Openness	.014	.129	.188	-.096	.167	.072	<b>.242*</b>	<b>.273*</b>	<b>-.306**</b>	<b>.264*</b>	-.092	.179	.126	.093	.023		.163
17. Self-esteem of riskiness	<b>.304**</b>	.161	-.078	.121	.163	.194	.212	.212	<b>-.356**</b>	<b>.289**</b>	-.191	<b>.256*</b>	-.027	-.019	-.009	-.009	<b>.283**</b>

Medical students

Note. \* -  $p < .05$ ; \*\* -  $p < .01$ . Doctors are above the diagonal ( $n = 65$ ), medical students are under the diagonal ( $n = 125$ ).

### Appendix 3: Table 3

Table 3

Correlations between TU-ITU, personal decision-making factors, Big Five factors, and self-assessments of riskiness in doctors and realtors (Spearman's  $\rho$ )

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	
Budner	1. TU	1	-.060	<b>.287*</b>	-.052	.145	-.116	-.186	-.019	.233	.159
	2. ITU	.061	1	<b>-.294*</b>	<b>.274*</b>	-.119	-.014	.082	.089	-.230	<b>-.275*</b>
LFR	3. Risk-readiness	<b>.453*</b>	.052	1	<b>-.278*</b>	<b>.316*</b>	-.212	-.221	-.235	.237	<b>.363**</b>
	4. Rationality	<b>-.401*</b>	-.007	<b>-.387*</b>	1	.027	.022	<b>.415**</b>	<b>.368**</b>	.157	-.013
TIPI	5. Extraversion	.349	.096	.197	-.206	1	.040	-.113	-.139	.227	.075
	6. Agreeableness	.194	.108	.138	-.079	-.089	1	.044	.210	-.009	-.185
	7. Conscientiousness	-.250	-.010	.034	<b>.396*</b>	-.193	.160	1	.136	.215	.127
	8. Emotional stability	-.126	-.093	<b>-.329*</b>	.187	-.121	.043	.151	1	.027	.127
	9. Openness	.176	-.241	.008	.214	.197	-.042	.114	.003	1	.163
	10. Self-esteem of riskiness	.045	-.086	<b>.443**</b>	<b>-.423**</b>	.174	-.252	-.261	<b>-.352*</b>	-.082	1

Realtors

Note. \* $p < .05$ , \*\* $p < .01$ . Doctors are above the diagonal; realtors are under the diagonal.

### Appendix 4: Table 4

Table 4

Correlations of cognitive representations factors (Spearman's  $\rho$ )

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. TU (Budner Questionary)	1	-.060	<b>.287*</b>	-.052	.145	-.116	-.186	-.019	.233	.159
2. ITU (Budner Questionary)	.061	1	<b>-.294*</b>	<b>.274*</b>	-.119	-.014	.082	.089	-.230	<b>-.275*</b>
3. Risk-readiness (LFR)	<b>.453*</b>	.052	1	<b>-.278*</b>	<b>.316*</b>	-.212	-.221	-.235	.237	<b>.363**</b>
4. Rationality (LFR)	<b>-.401*</b>	-.007	<b>-.387*</b>	1	.027	.022	<b>.415**</b>	<b>.368**</b>	.157	-.013
5. Extraversion (TIPI)	.349	.096	.197	-.206	1	.040	-.113	-.139	.227	.075
6. Agreeableness (TIPI)	.194	.108	.138	-.079	-.089	1	.044	.210	-.009	-.185
7. Conscientiousness (TIPI)	-.250	-.010	.034	<b>.396*</b>	-.193	.160	1	.136	.215	.127
8. Emotional stability (TIPI)	-.126	-.093	<b>-.329*</b>	.187	-.121	.043	.151	1	.027	.127
9. Openness (TIPI)	.176	-.241	.008	.214	.197	-.042	.114	.003	1	.163
10. Self-esteem of riskiness	.045	-.086	<b>.443**</b>	<b>-.423**</b>	.174	-.252	-.261	<b>-.352*</b>	-.082	1

Realtors

Note. \* $p < .05$ , \*\* $p < .01$ . Doctors are above the diagonal, realtors are under the diagonal. Avrg – average.

### Appendix 5: Cognitive Risk Representations Questionnaire (CRR)

You are given a list of risks that may occur in your activity. Please read each question carefully and evaluate each risk as a percentage by putting the number in the appropriate box.

- How risky does this situation seem to you?

- |  |  |   |
|--|--|---|
| 1. Get a penalty<br>_____%                     | 2. Misjudge the situation<br>_____%        | 3. Spoil relations with superiors<br>_____% |
| 7. Lose your self-esteem<br>_____%             | 8. Overestimate yourself<br>_____%         | 9. Psychological overload<br>_____%         |
| 13. Spend little time with<br>relatives _____% | 14. Spoil your reputation<br>_____%        | 15. Break your health<br>_____%             |
| 4. Fall from a height<br>_____%                | 5. Become a victim of<br>aggression _____% | 6. Waste time<br>_____%                     |
| 10. Equipment failure<br>_____%                | 11. Make a procedural<br>mistake _____%    | 12. Be sued<br>_____%                       |
| 16. Quarrel with<br>colleagues _____%          | 17. Difficult weather<br>conditions _____% |   |



## CLINICAL PSYCHOLOGY

# Psychological Rehabilitation of Patients with Cardiovascular Diseases by Correction of Cognitive Impairment

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**Background.** This survey article reviews research and academic writings analyzing cognitive features of patients with cardiovascular diseases.

**Objective.** To review the academic literature on the feasibility of psychological rehabilitation of cardiovascular patients by correcting cognitive impairment.

**Method.** Analysis and compilation of academic writings by Russian and foreign researchers.

**Results.** The cognitive dimension of coronary heart disease (CHD) patients has a number of features linked to the effect of their disease, and to their cognitive and psychological status. The article presents diagnostic techniques used to assess the patient's cognitive state. The experimental data demonstrates the effectiveness of cognitive training with cardiovascular patients. The article also describes recommendations for cognitive rehabilitation of coronary heart disease patients, for choosing the right "target" of remedial psychological intervention, and for assessment of the recovery process.

**Conclusion.** Rehabilitation programs are promising for patients with coronary heart disease and other somatic diseases.

**Keywords:** psychological rehabilitation, cognition, remedial psychological training, cardiovascular disease, psychological-pedagogical process, neuropsychology

## Introduction

In order to provide high-quality psychotherapeutic help, scientists have defined key lines of research into the psychological condition of people suffering from somatic diseases. These include: examining personality and emotional-behavioral activity; studying the mechanisms of psychological adaptation and of patients' axiological and semantic sphere; assessing the effect of behavioral features on clinical-chemical and psychological indices; diagnosing individual psychological features of the patient's illness representation and choosing the right behavioral strategy in the advent of the disease; examining reasons for resisting psychotherapy; psychological assessment of the risk of somatic pathology and its connection with the emotional state; remedial psychological work with patients, given their cognitive state, in the clinical dynamics of the disease (Krasnov & Paleev, 2014; Ovchinnikov, 2011; Smetanova & Podoyntsina, 2015).

Cardiovascular diseases occupy the leading position in total incidence and disability among the Russian population. Multiple studies have shown that the risk of psychological disadaptation increases in patients who have suffered from an exacerbation of coronary heart disease (CHD), life-threatening cardiogenic conditions, and cardiac surgery (e.g., Chumakova & Trifonova, 2012; Lazareva & Nikolaev, 2012; Pogosova, 1998; Sumin, 2015). However, despite the abundance of literature on psychological features in patients with a somatic (cardiological) profile, some aspects of the issue still require more thorough research. For instance, the majority of authors link the decrease in the Life Quality Index of cardiology patients with only the clinical features of the disease – such as myocardial infarction, cardiac arrhythmia, and cardiac insufficiency – but they do not consider the cognitive and psychological aspects (Alekhin, 2012; Zvereva & Roshchina, 2017). The cognitive dynamics indices of cardiology patients remain outside the researchers' attention, although these might be important for evaluating both negative effects of the surgery and the quality of the rehabilitation programs provided. Consequently, one of the main goals of psychological assistance is most likely to be to increase the effectiveness of rehabilitation through remedial psychological techniques that form or restore the patients' cognitive functions.

The methods of medical help for patients suffering from various cardiological diseases have improved significantly, which has had a positive impact on quality of life and life expectancy. However, the increasing median age of the Russian population entails several changes in a person's organism, one of which is a steady build-up of cognitive deficiency. Yakhno et al. (2012) reported that 3,210 patients participated in the "Prometheus" all-Russian epidemiological study of the prevalence of cognitive impairment in the elderly (mean age  $69.5 \pm 5.5$ ) by means of the Mini-Mental State Examination (MMSE) and clock-drawing tests. According to the findings, 2,677 participants (83.4%) complained of memory or cognitive impairment. Objective neuropsychological research methods supported these claims among 2,190 patients (68.2% of the total), while 810 (25.2%) scored 24 points or lower on the MMSE scale, which is indicative of pronounced cognitive impairment. These results prove the high prevalence of cognitive impairment among the Russian elderly (Yakhno et al., 2012).

Modern medical psychology regards the cognitive sphere as a complex systemic entity that depends on the brain's organization of higher mental functions

(HMFs) (Smetanova & Podoyntsina, 2015). Diagnosing and correcting cognitive impairment is important because these psychological conditions limit aspects of living and cause social disadaptation. Consequently, in order to provide psychological assistance, it is necessary to study the cognitive characteristics of patients with somatic pathology and those suffering from CHD in particular.

## **Method**

We compiled and analyzed academic writings. The field of neuropsychology, founded by A.R. Luria, devised neuropsychological research methods to study HMFs in local and diffuse brain pathology, in mental disorders, and various types of dysonogenesis in children and adolescents (Alves, 2014; Krasnov & Paleev, 2014; Ryzhova, 2017; Zvereva & Roshchina, 2017). Neuropsychological methods were first used in diagnosis, treatment and, psychological correction of cognitive disorders in children and adults. Luria created the method of syndrome analysis of cognitive function disorders in organic brain disorder, and was the first to introduce the terms “neuropsychological factor” and “neuropsychological syndrome”, which represent a compound of neuropsychological symptoms caused by impairment of cognitive functions (Smetanova & Podoyntsina, 2015). Examination of cognitive parameters started to employ not only quantitative, but also qualitative assessment of HMF disorders (analysis of the patient’s errors, compensatory abilities, and mental activities), as well as identifying primary and secondary symptoms, and the impaired and preserved cognitive parameters. The qualitative method of cognitive analysis, using neuropsychological cards, has enjoyed successful application in the clinical study of endogenous psychological disorders (Ershov, 2011) and was of great help in differentiating types of cognitive impairment in neurodegenerative and vascular atrophy diseases (Smetanova & Podoyntsina, 2015; Zvereva & Roshchina, 2017). This method allowed both the creation of psychologically corrective work models for patients who had various degrees of cognitive impairment, and the optimization of cognitive activities in healthy adults and the elderly.

The Petersburg scientific school of clinical psychologists pays a great deal of attention to cognitive impairment. E.R. Isaeva and G.G. Lebedeva have identified three types of cognitive deficit in paranoid schizophrenia. They have outlined the differences between the Russian and foreign approaches to studying the cognitive sphere: that the Russian approach is based on the principle of qualitative analysis of mental disorders, whereas foreign neuropsychologists are primarily concerned with quantitative measurement of mental functions (Isaeva & Lebedeva, 2017).

To evaluate the level of cognitive restoration, both Russian and foreign researchers use a complex of neuropsychological diagnostic techniques: the Mini-Mental State Examination, the Frontal Assessment Battery (FAB), the Montreal Cognitive Assessment (MoCA), the clock-drawing test, the Schulte Table, association tests (semantic speech activity), The Mattis Dementia Rating Scale, the “10 Words Memorization” test, the Randt Memory Test, the Wechsler Memory Scale, the Digit Symbol Substitution Test (DSST, WAIS-III), the Trail Making Test, Andre Rey’s Test, the Wisconsin Card Sorting Test (WCST), and the Stroop Color and Word Test (SCWT). These techniques make it possible to evaluate the main cognitive

parameters in patients with CHD and other somatic diseases (Blossom et al., 2017; Cassilhas, Lee, & Fernandes, 2012; Chervinskaya & Shchelkova, 2005; Cyarto et al., 2016; Jelcic et al., 2012; Liu-Ambrose, 2010; Nagamatsu et al., 2013; Solodukhin et al., 2016; Tarasova, Trubnikova, Kukhareva, & Barbarash, 2015; Tchakoute, 2017; Trubnikova et al., 2017; Williams, 2013).

Cognitive activity is an integral part of human development. The psychological-pedagogical process is nothing more than an activity mediated by cognitive abilities. According to V.D. Schadrikov's concept of cognition systemogenesis, a person's abilities are a complex structure, mediated by the systemic structure of the brain, interfunctional connections, and activity oriented mental process (Gorbunov & Tkacheva, 2011; Smetanova & Podoyntsina, 2015). The optimal structure of a person's cognitive sphere predetermines successful cognition. Human cognition concerns learning abilities, interaction with the environment, acquisition of practical skills, and how information is processed. The foundation of cognition is linguistic ability, which creates various multi-level schemes and structures in one's mind and underlies specific characteristics of mental development (Smetanova & Podoyntsina, 2015). Thus, "cognition" is a personality feature that allows one to process separate elements of information on different levels of the psychic apparatus, with language as the foundation. "Cognitive process" means processing information on different levels of the psychic apparatus in order to acquire knowledge (Gorbunov & Tkacheva, 2011).

In academic literature, the term is mostly used in the description of cognitive development of a student or a patient in the process of psychological-pedagogical interaction. Here we are dealing with the following characteristics (Akhmetova, 2009; Ryzhova, 2017):

1. cognitive activity of a person as a subject of education;
2. interaction with the learning environment and formation of an individual self-regulatory style;
3. interiorization of knowledge by the subject and its further exteriorization in practice;
4. influence of sociocultural factors on a person's cognitive development;
5. mechanisms of the cognitive education itself;
6. mechanisms of formation of an individual learning style.

## Results

Psychological assistance in the course of rehabilitation is a complex of psychological, pedagogical, and socio-psychological measures, the purpose of which is to restore or compensate for impaired mental functions and allow the return of the patient's social functioning. The rehabilitation of patients with CHD requires the development and maintenance of the optimal level of physical, psychological, and social well-being, and includes a set of medical and social measures aimed at the high-quality and quick restoration of health and social status.

The research that has been conducted on the cognitive state and behavioral characteristics of patients with CHD has found that the "target" psychological effect might be the cognitive sphere, with a view to actualize and restore resource

potential after a planned heart surgery (Tindle, Davis, & Kuller, 2010). The level at which cognition can be preserved is directly linked to the choice of optimal stress-overcoming strategies and the patient's illness representation, as well as effective adaptation in problematic situations. It is therefore necessary to study cognitive characteristics in CHD patients in order to increase their stress-resistance (Solodukhin et al., 2016; Solodukhin, Maleva, Kukhareva, Seryy & Trubnikova, 2017).

The relevance of rehabilitation measures with CHD patients is due to the strong possibility of their social disadaptation and the limited choice of remedial psychological activities (Von der Gablentz, Tempelmann, Münte, & Heldmann, 2015). According to several studies, CHD patients who underwent heart surgery or survived cardiac emergencies experienced the following cognitive disorders: aspontaneity (*syndromum apallicum*), inactiveness, and inertia (Alekhin, Trifonova & Chernoray, 2012; Chumakova, 2012; Shvarts, 2013; Tarasova et al., 2015).

*Aspontaneity* is a patient's inability to involve him or herself independently in the rehabilitation process. Patients with aspontaneity are inert; they find great difficulties in engaging with other people. When given a task, they remain inactive or quickly lose interest. In cases where CHD patients also possess an anxious, hypochondriacal, or sensitive illness representation, aspontaneity manifests itself as an unwillingness to undergo diagnostic or therapeutic measures on their own, adhere to rehabilitation prescriptions, or the patients ignore the chances of complications during outpatient treatment (Alekhin, Sorokin, Trifonova & Chernorai, 2012).

*Inactiveness* is a condition where patients take more time than needed to carry out tasks and react to stimuli, while displaying psychomotor retardation as well. They refuse to cooperate with medical specialists and avoid any activity that might create an impression of an irresponsible attitude toward treatment. In a conversation, the patients respond to a doctor's questions after very long consideration, and their utterances are situational and simplified. While performing a task, the patients find planning troublesome and take more time than necessary.

*Inertia* is a difficulty which can switch between different activities. This is also observed in communication with the patient, when it may become problematic to change the topic of conversation. Inertia manifests itself on the elementary and systemic level, involving the patient's behavior.

These cognitive disorders often coincide with hyperactivity, distractibility, and impulsiveness. Patients become overly active without a clearly defined goal. Additionally, such disorders involve ignoring the disease in an activity that is not connected with the treatment, which leads to failure to observe medical recommendations (Alekhin, Trifonova & Chernoray, 2012).

Such behavior is due to impairment of cognitive functions, particularly a negative change in the attentional process (Selnes, 2008; Trubnikova et al., 2017). Insufficient cerebral circulation leads to a decrease in the degree, stability, and distribution of attention. These cognitive disorders often occur against a background of psycho-emotional disorders, which makes it difficult to perform psychological diagnostics (Barrera, 2016; Katsarou, 2013; Leifheit-Limson, 2010). Various cognitive disorders pose challenges in adhering to prescribed treatment, due to decreased concentration and impaired perception (Chowdhury et al., 2013).

Cognitive impairment caused by cognitive biases and reduced psychophysiological parameters leads to disorders in time perspective, i.e., the connections between

the past, present, and future (Hosseini, 2017). Reduced circulation in the frontal and temporal lobes causes impairment of future planning skills. Thus, there is no full psychological well-being of the patient and an inadequate perception of their own health (Seryy, Yanitskiy, Solodukhin, & Trubnikova, 2017; Solodukhin et al., 2017).

Among numerous competing theories and methods of psychological help, there are a number of general principles, techniques, and basic scientific attitudes (Akhmetova, 2009; Kolb & Whishaw, 2015; Krasnov & Paleev, 2014). The common aim is to help a person find the optimal way to further their development. Psychotherapy helps an individual to reevaluate their personal experience, objective reality, life aims, and to actualize their abilities. Achievement of these aims depends on different psychological methodologies, but at its core, it is based on similar processes of conceptual transformation. A psychoanalyst dealing with the explicit concept that relates to the ideas and aims of his or her client uncovers a latent concept, existing on the boundary of the conscious, and correlates it with the hidden aspect of the symbol, thus restoring the lost meaning of the repressed event that causes neurosis. Psychotherapists of the existential-humanist school strive for immediate realization of the meaning of life and activity by an individual. Personalized psychotherapeutic practices (psychoanalysis, Gestalt therapy, etc.) are aimed at working with the client by elaborating a temporary focus of meaning (experience, reality, aims), and dealing with psychologically traumatic events through the method of reliving them.

CHD patients, due to the high degree of danger from any stressful effect on their health, require a psychological approach that involves not their innermost experiences, but their behavioral patterns. Thus, it is possible to use cognitive training with CHD patients in order to achieve adaptation of and compensation for their cognitive deficit. The search for a way to correct the cognitive impairment has necessitated remedial psychological techniques in medical practice. One of these techniques is cognitive skills training – a special type of psychological work aimed at correcting the disturbed learning functions and restoring the lost ones.

Foreign studies of the impact of cognitive training on restoring cognitive functions were carried out with patients who had mild and moderate cognitive impairment (Al-Thaqib, 2018; Bahar-Fuchs, Clare, & Woods, 2013; Cyarto et al., 2012; Erickson, Voss, & Prakash, 2011; Gigler, Blomeke, Shatil, Weintraub, & Reber, 2013; Koehler, Wilhelm, & Shoulson, 2013). In rare instances, the cognitive training program included patients with mild dementia. The duration of the session was set from 20 minutes to 2.5 hours, depending on the patient's age, degree of cognitive impairment, and comorbid diseases. The duration of the course was from 2 weeks to 2 months, 2–5 sessions per week. Cognitive training took place both in the form of independent work, and in conjunction with physical exercises. The studies showed that cognitive functions improved significantly in patients with mild cognitive impairment, while patients with a moderate cognitive deficit demonstrated insignificant restoration of cognitive functions. Patients with mild dementia displayed little or no restoration of the cognitive sphere, although cognitive training had a positive effect on their psycho-emotional state (Bahar-Fuchs, Clare, & Woods, 2013; Cassilhas, Lee, & Fernandes, 2012; Chervinskaya & Shchelkova, 2005; Cyarto et al., 2012; Erickson et al., 2011; Gigler et al., 2013; Jelcic et al., 2012; Koehler, Wilhelm, & Shoulson, 2013; Ladowsky-Brooks, 2010; Liu-Ambrose et al., 2010; Nagamatsu et al., 2013; Pogosova, 2015; Svendsen & Teasdale, 2006).

## Conclusion

Numerous studies have proven the effectiveness of these measures in restoring cognitive functions. Cognitive training has been accepted and implemented as an essential part of remedial training in patients with different somatic and neurological diseases, such as dementia, Alzheimer's disease, traumatic brain injury, and cardiovascular pathology.

Despite recent improvements in methods to restore cognitive functions, as well as theoretical and empirical data, most discussions revolve around the effectiveness of cognitive training. Many medical institutions create and use measures to help people with various types of cognitive impairment. The following principles for rehabilitation are suggested: teaching the patient to make use of all their compensatory abilities; teaching the patient mnemonics (memorization techniques); explaining the reasoning behind all the measures used; strengthening exercises based on modern theoretical assumptions and empirical data; rehabilitation based on studies with promising results; diagnostic methods to assess change in cognitive functions; cognitive training supervised by a highly qualified specialist or a team of multidisciplinary professionals; taking into account the patient's functional and professional aims; identifying and monitoring problems that require additional medical or psychological intervention; psychological counseling combined with cognitive rehabilitation (Ladowsky-Brooks, 2010).

Cognitive training might be used to prevent and correct the following psychological disorders: behavioral inactivity; attention defect; impaired motivation and intention to act; reduced targeting and control over one's actions; frustration-aggression and anxiety. Cognitive training combined with psychological counseling makes it possible to integrate the physiological and psychological level for a more successful rehabilitation and improvement of the quality of life of cardiac patients.

Researchers are currently faced with numerous issues in understanding cognitive impairment in various pathological conditions and at different ages. The main areas of research are the relationship between cognitive and social functioning, cognitive deficits and the success of adaptation, and the dynamics of cognitive disorders during treatment. Information about the positive effect of training sessions on the recovery of cognitive functions in somatic patients allows us to conclude that cognitive training is very promising for patients who suffer from CHD and other somatic diseases.

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## Pièce Touchée!<sup>□</sup>: The Relationship Between Chess-Playing Experience and Inhibition

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**Background.** Studies have shown that teaching children and youths chess can contribute to their academic achievements and improve their cognitive abilities. Recent studies further indicate the transfer of chess skills to subjects such as mathematics. However, the literature does not address the possible benefits of chess to link between inhibition and ADHD, a disorder in the operational executive functioning system, whenwith chess ias a game that requires various cognitive abilities, and is considered dependent on executive operational functioning abilities and especially inhibition.

**Objective.** To investigate whether chess experience relates to inhibitory control in teenagers with and without ADHD.

**Design.** Participants completed a visual-spatial task designed for the purpose of the study, comprising two conditions: In the “free” condition, participants were allowed to test different solutions before choosing the answer, whereas in the “touch-move” condition they were asked to choose the answer without any physical attempts. Participants also completed “Go/No-go” tasks.

**Results.** The new task was found to be partially effective as only the “touch-move” condition produced group differences, with chess players performing better than non-chess players, regardless of diagnosis. The No-go task performance analysis also showed a significant main effect for chess training, and a significant interaction among chess, ADHD, and medicine use.

**Conclusion.** Although not establishing causality, these results indicate that chess players were less impulsive than non-chess players, regardless of diagnosis.

### **Keywords:**

ADHD; inhibitory control; executive function; impulsivity; education; chess

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<sup>□</sup> The French term for the touch-move rule in chess that specifies that, if a player deliberately touches a piece on the board when it is his/her turn to move, then s/he must move or capture that piece if it is legal to do so

## Introduction

### *Attention Deficit: An Educational “Epidemic”*

Attention-Deficit/Hyperactivity Disorder (ADHD) is a disorder affecting 3% of school-age children world wide (Fayyad et al., 2017). Due to its prevalence, both its symptoms and its causes have a wide range of descriptions. The Diagnostic and Statistical Manual of Mental Disorders (DSM-5, American Psychiatric Association [APA], 2013) is commonly used for diagnostic purposes. The DSM requires a pattern of symptoms related to attention deficiency and concentration, which includes inattention to details, difficulty in focusing on a goal, and disorganization. Characteristics of hyperactivity include agitation, restlessness, and difficulty in participating in calm activities. In order to establish a diagnosis, persistence of these symptoms for at least six months prior is required (Barkley, 2014).

Attention Deficiency Disorder (ADD) first appeared in the diagnostic manual in 1980 (APA, 1980). Whereas in 1978 the estimate was about 5% of the population in the United States (Lambert, Hartsough, Sassone, & Sandoval, 1987), over the years the disorder’s prevalence increased steadily, and today it is estimated at 11%, affecting all areas of life, particularly school (Visser et al., 2014). Although the reasons for the increased frequency of ADHD in particular and child psychopathology in general are not known, some claim that the computer and Internet era is a major contributor (Carr, 2014). A study of Internet users found that a user closes an online video clip if it does not play within two seconds (Krishnan & Sitaraman, 2013). These results provide a glimpse of the future: Internet services are becoming faster, gratification more immediate, and people are becoming less patient and less able to delay gratification and work for long-range returns (Anderson, & Rainie, 2012). The modern lifestyle gives rise to concern that attention-deficit phenomena will increase. It should be asked whether activities that require concentration and patience could help with delaying gratification.

Many scientific papers have focused on the cognitive processes that underlie ADHD, notably deficiencies in executive functions as the main and basic contributor to the development of these symptoms (Doyle, 2006). Despite the many theories that describe executive functions, the literature defines the concept quite broadly as ongoing cognitive processes that contribute to goal-oriented behavior. These processes include many areas such as working memory, future planning, problem solving, attentiveness, and the ability to inhibit. It should be noted that there is no consensus in the literature about the skills included in executive functions (Meltzer, 2007).

### *Impulsivity and Inhibition*

As the name of one of the disorders in DSM-5 – predominantly hyperactive-impulsive presentation – indicates, impulsivity is a key component of ADHD (APA, 2013). Impulsivity is a complex term that involves the inclination to act on a whim, and to behave without (or with little) forethought, reflection, or consideration of the long-term consequences. Reactions such as these are often dangerous, situation-inappropriate, and produce unwanted outcomes. Impulsivity includes a number of independent elements: (a) acting with insufficient discretion; (b) preferring short-term gains over long-term interests; (c) sensation-seeking; and d) difficulty

persevering in a task (Whiteside & Lynam, 2001). In fact, one of the key theories claims that disinhibition disorder is the basis for ADHD impulsivity (Nigg, 2001). Whereas some scholars differentiate between impulsivity and inhibition as distinct elements, for the purpose of the current study we conceptualized them jointly; namely, that a high level of impulsivity means a low level of inhibition.

The many studies that focused on specific deficiencies such as in planning, working memory, and inhibition as the main contributors to the disorder, seem to agree that disinhibition is the main precursor of ADHD (Pennington & Ozonoff, 1996). Inhibition is an important feature that allows one to delay or stop a reaction to a stimulus, with its reverse side being impulsivity (Boonstra, Kooij, Oosterlaan, Sergeant & Buitelaar, 2010). On the other hand, Barkley (1997) argued that it is not enough to discuss inhibition in itself, because this feature divides into three separate yet interlinked processes: inhibition of the immediate reaction (the ability to prevent the initial response to the stimulus); control of disturbances (the ability to ignore distractions, whether internal or external); and inhibition of an ongoing reaction.

These three categories of inhibition are usually tested by means of simple cognitive tests. The stop-signal task, which requires examinees to react to a stimulus (for instance by pressing a button) and to avoid a response when a signal is given, examines immediate response inhibition, often called motor inhibition. A common test that examines ongoing inhibition is the “copying a circle” test, in which examinees are required to copy a circle. They are either instructed to copy the circle as slowly as possible (inhibition), or receive no instruction (without inhibition). The Stroop test is the most appropriate to test control of disturbances. Test participants are presented with names of colors written in another color (for example, the word “blue” is written in red), and are instructed to say the color of the ink in which the word is written (in the above example, “red”). All three tests measure response times and the differences between response times for tasks in which inhibition instructions were given or not given (Boonstra et al., 2010).

The issue of inhibition’s effect on ADHD has been widely researched, and of the various types of inhibition, some claim that motor inhibition is a key factor in ADHD-related functional problems. A meta-analytic study that reviewed over 20 studies found that there is great variance of response times in motor inhibition tests (such as the stop-signal task) among ADHD patients (Lijffijt, Kenemans, Verbaten, & VanEngeland, 2005). Additionally, research has shown differences between children and adults in average response times (MRT) and stop-signal response times (SSRT). Furthermore, a study that examined the development of inhibition of response showed that these abilities improve with age, and it seems that the cause for lack of motor inhibition in younger examinees is attention deficit, which also stems from a limited capacity of working memory (Tamm, Menon, & Reiss, 2002).

### ***Chess and Attention***

The game of chess requires skills such as planning, visual memory, and executive functioning in general (Baddeley, 1992). Consequently, it has been argued that teaching children and youths chess could contribute to academic achievement and improved cognitive abilities (Bart, 2014). The link between chess and attention seems obvious; however, research in this area is almost nonexistent. In a broader

context, it can be said that whereas countless fervent believers claim that it has advantages in education (e.g., McDonald, 2005; Vail, 1995), and a number of recent studies indicate the transfer of chess skills to subjects such as mathematics and other abilities (Rosholm, Mikkelsen, & Gumede, 2017; Trincherro & Sala, 2016), other scholars argue that there is no significant empirical evidence of such a link (Gobet & Campitelli, 2006).

Various studies have successfully used chess to strengthen cognitive abilities in schizophrenics (Demily, Cavezian, Desmurget, Berquand-Merle, Chambon & Franck, 2009), and to prevent dementia (Dowd & Davidhizar, 2003). Working memory in general and visual work memory in particular are important parts of the cognitive activities required when playing chess. Baddeley (1992) examined executive functioning, including memory of the pawns' positions on the board and planning the next play, among experienced and novice chess players; as expected, better performance was found for experienced players. It has already been noted that the executive functioning required in chess parallels the deficiencies of ADHD, thus pointing to the option of using chess to treat the disorder (Blasco-Fontecilla et al., 2016).

The link between inhibition and chess is intuitive. The saying "When you see a good move, see if you can find a better one", attributed to Domenico Lorenzo Ponziani (1719-1796), is well-known in chess history. Siegbert Tarrasch, the second-best chess player of his time, added: "When you see a good move, sit on your hands and see if you can find a better one" – a typical expression of the need for inhibition in chess. Nevertheless, since there is no research on chess and inhibition, one of the goals of this study is to empirically establish this intuitive link.

### ***Giftedness***

Chess is often connected with giftedness, at least in the popular culture, although the empirical evidence is inconclusive (Frydman & Lynn, 1992; Gobet & Campitelli, 2002). The definition of giftedness is not uniform, and the literature presents different definitions according to various outlooks. The variance of definitions affects the policies of locating gifted children and the rationale of teaching and treating these children (Landau, 2001). Dai and Chen (2013) described three paradigms to define giftedness: The "gifted child" paradigm sees giftedness as potential, a quantitative, congenital, and fixed feature represented by intelligence; the "developmental" or "talent development" paradigm views giftedness as a dynamic feature, unique to a preferred field of knowledge that leads to outstanding achievements and leadership in that field, and composed of a variety of cognitive, emotional-social, and environmental features; and the "differential" paradigm, which aspires to individually match learning to each student's personal needs. This approach casts doubt on the effectiveness of "pull-out" programs to supplement regular education, and seeks to create a learning environment suitable for each day, according to the changing educational needs of gifted students.

In Israel, the Department for Gifted and Excellent Students in the Ministry of Education defined "giftedness" according to the decisions of the Steering Committee for the education of gifted students in Israel (Nevo, 2004). The committee decided to use the term "gifted" for both gifted students, who excel in scholastic areas, and for talented students, who excel in arts and sports. The committee defined



gifted students as the top percentile of the population in each year in each of the examined areas of “giftedness”, so that the definition is in fact quantitative and relies on IQ and achievements. However, the committee added aspects of motivation, perseverance, and creativity as additional assessment parameters (Renzulli, 1986). These aspects are not tested today in gifted identification processes, but they are observed and reported during the child’s participation in dedicated programs, and they add qualitative evidence to the definition. Additionally, the department continues to examine the optimal ways to include measures of creativity in the identification battery, and operates to promote identification of talent-oriented giftedness.

One can argue that every serious chess player is gifted, at least in chess. However, the connection between playing chess and the more rigid criteria for giftedness has not been established (e.g., Frydman & Lynn, 1992; Gobet & Campitelli, 2002). Nonetheless, in the present study we examined whether the identification of giftedness is related to inhibition, whether high intelligence is related to higher inhibition, or the same social forces that drive the identification of giftedness also drive children to play chess.

### ***Chess as an Educational Intervention***

Chess is a mandatory subject in many countries, and is part of the school curriculum in certain schools in Israel and other countries (Binev, Attard-Montalto, Deva, Mauro & Takkula, 2011; Garner 2012; Shefer, 2011). Recently, a meta-analysis attempted to quantitatively assess whether skills acquired through learning chess at school were transferred to math, reading, and general cognitive skills. This review of 24 studies with 2,788 participants who had learned chess, and a control group of 2,433 who had not, found a moderate general connection between chess skills and skills in these areas – especially math achievements, more than reading skills (Sala & Gobet, 2016).

A number of attempts have been made over the years to use chess as an intervention in ADHD, including to improve math skills in special education schools (Barret & Fish, 2011). For example, an exploratory study examined the possible effect of routine learning of chess for students diagnosed with ADHD. It tested the effect on ADHD symptoms of routine chess-playing with a professional teacher in addition to practicing at home. After 11 weeks of steady practice of chess, the researchers found improvement in the symptoms, which was even greater among students who had also received medication (Blasco-Fontecilla et al., 2016).

As mentioned, the literature indicates that ADHD is a disorder in the executive functioning system, and specifically in inhibition. Chess is a game that requires various cognitive abilities, and is considered dependent on executive functioning. Therefore, the current study examines whether chess training has an effect on improving ADHD symptoms.

### ***Aim of Research***

Following previous studies on the relationship between chess and learning in general, and math in particular, the present study aimed to examine the possible relationship between learning chess and the difficulties that characterize ADHD (Sala & Gobet, 2016; Scholz et al., 2008). This examination could contribute to the dis-

cussion about including chess in school curricula, as well as to possible educational-therapeutic interventions in ADHD.

The study aimed to find whether there would be a difference between youths with and without ADHD in tasks that require inhibition abilities similar to those learned in chess, which we called “Pièce Touchée” tasks. Therefore, the initial aim was to examine the effectiveness of the new tasks in measuring inhibition ability, and the central research question was whether there would be a difference between youths with ADHD who had not learned chess and those without ADHD who had not learned chess, in inhibition measures in the “Pièce Touchée” tasks and the “Go/No-go” tasks. The hypotheses were that youths with ADHD who had not learned chess would make more mistakes in “Go/No-go” tasks, and would be less successful in “Pièce Touchée” tasks, and that those who had learned chess would be more successful in “Pièce Touchée” tasks, and make fewer mistakes in “Go/No-go” tasks.

## Method

### Participants

107 examinees (all boys, since chess is a male-dominated game [Polgar, 2019]) filled out an online questionnaire. The boys’ average age was 11 years and 11.76 months ( $SD = 3.7$  months). *Table 1* presents the relevant demographic and background data of the sample, divided into “play chess”/ “do not play chess” categories. *Table 1* indicates that over half of the participants (55%) were diagnosed with ADHD, of whom fewer than half (25) were on medication. Also, about 25% of the participants are in some form of gifted program. No significant differences were found between the children as a function of playing chess ( $t(105) = -.64; p = .53$ ).

Table 1

Sample characteristics ( $N = 107$ )

Variable		Entire sample	Played chess	Did not play chess	
Categorical variables $n, (\%)$					
					$\chi^2_{(1)} = 0.18; p = 0.67$
ADHD	Yes	59 (55%)	38 (57%)	21 (52%)	
	No	48 (45%)	29 (43%)	19 (48%)	
					$\chi^2_{(1)} = 0.71; p = 0.48$
Medication	Yes	25 (23%)	10 (25%)	15 (23%)	
	No	81 (76%)	30 (75%)	51 (77%)	
					$\chi^2_{(1)} = 3.23; p = 0.60$
Gifted	Yes	27 (25%)	14 (35%)	13 (19%)	
	No	80 (75%)	26 (65%)	54 (81%)	
Continuous variables $M \pm SD$					
Age (years)		11.8 $\pm$ 3.3	12.2 $\pm$ 3.0	12.0 $\pm$ 3.2	

**Tools**

**“Go/No-go” tasks.** This is a well-known task that has been used in different variations in hundreds of studies. In the present study, the paradigm used by Loman and colleagues was chosen. This is a computerized task, in which the participant must press a button as quickly and accurately as possible when a certain sign (green circle: Go) is presented, and avoid pressing the button when another stimulus (red circle: No-go) is presented. The stimuli were displayed for 600 milliseconds, with a possible response time of 1,600 milliseconds. The gaps between the end of one item and the start of the next item were random (200–400 milliseconds). Following a short practice session (8 Go items and 6 No-go items), 100 stimuli were presented (75 Go items and 25 No-go items).

- (a) This is a fish made out of matches. Move only three matches to reverse the fish’s direction.
- (b) This is a triangle made out of circles. You must reverse the triangle by moving only three circles.

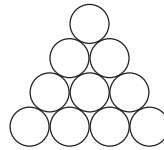


Figure 1. “Pièce Touchée” tasks.

**“Pièce Touchée” tasks.** Participants were tested individually in this task, which includes two items under different conditions. The items (see Figure 1) are equivalent. Two tasks were presented through the website, each under one of two conditions: “touch-move” or “free”. Under the free condition, participants could move the stimuli (circles or matches) as much as they wished until a solution was found. Under the “touch-move” condition, the participants were told that they could move the stimuli three times only, and “touch-move” (“As soon as you have moved the circle/match, you cannot put it back and try again”).

**Validation of new tasks.** The success rates in the “Pièce Touchée” tasks showed that 83% of the participants succeeded in the free condition. Table 2 shows that this task is unable to differentiate among participants (those with or without ADHD, those who had studied or had not studied chess), because most participants usually succeeded in the task; that is to say, the task was too easy – known as the “ceiling effect”. On the other hand, the “touch-move” condition excellently differentiated between the various groups – the success rate was significantly higher among participants without ADHD, participants who did not take medication, gifted participants, and participants who played chess ( $p = .01$  for all comparisons).

Table 3 presents the correlations between “Go/No-go” and “Pièce Touchée” tasks, and shows the ineffectiveness of the free condition for differentiating among the various students. In contrast, the “touch-move” condition reflected moderate yet significant correlations with the “Go/No-go” tasks, which indicate a link with these tasks. However, the fact that the correlations are not high indicates that these are two different types of tasks, and that these tasks require higher thinking skills than “Go/No-go” tasks. A moderate correlation such as this can be found in previous studies (for example, Sonuga-Barke, Dalen, Daley & Remington, 2002), between simple inhibition tasks and planning tasks.

Table 2

Success in "Pièce Touchée" tasks ( $N = 107$ )

Variable	Success – free condition	Statistical significance	Success – "touch-move" condition	Statistical significance
ADHD		$\chi^2(1) = 2.11; p = 0.43$		$\chi^2(1) = 11.64; p = 0.01$
Yes	80%		36%	
No	88%		69%	
Medication		$\chi^2(1) = 2.11; p = 0.43$		$\chi^2(1) = 6.33; p = 0.01$
Yes	80%		28%	
No	88%		57%	
Gifted		$\chi^2(1) = 2.29; p = 0.11$		$\chi^2(1) = 5.72; p = 0.01$
Yes	93%		70%	
No	80%		44%	
Chess		$\chi^2(1) = 2.13; p = 0.12$		$\chi^2(1) = 7.41; p = 0.01$
Yes	90%		68%	
No	79%		40%	

Table 3

Correlation coefficients between the various tasks

	1	2	3	4
1. Precision in "Go" task (%)	–	.75**	–.15	.15
2. Precision in "No-go" task (%)	–	–	–.15	–.21*
3. Free condition (yes/no)	–	–	–	.45**
4. "Touch-move" condition (yes/no)	–	–	–	–

\* $p < 0.05$ , \*\* $p < 0.01$ 

*Parents' questionnaire.* The parents were asked about their child's birth date, whether he had been diagnosed with ADHD (yes/no), whether he had been diagnosed as gifted (yes/no), whether he ever took medication for ADHD (Ritalin, Adderall, Concerta, etc.), whether their child had learned to play chess (yes/no), and if yes – in which setting and for how long.

### Variables

**Dependent variables.** Two dependent variables were examined in this study. First, the inhibition measure in the "Go/No-go" task: The number of mistakes in 75 "Go" items (omission errors) and in 25 "No-go" items (commission errors) is a common measure of inhibition. Weafer, Baggott, and deWit (2013) found moderate to high test-retest reliability ( $r = .65, p < .001$ ) for the inhibition measure (commission errors) in this task. Second, the measure of success in the "Pièce Touchée" tasks: Under both conditions, success in the task was scored 1 and failure was scored 0.

**Independent variables.** The main independent variable was whether the participant had learned or not learned chess. The analysis also controlled for possible intervening variables: age, ADHD (yes/no), ADHD medication (yes/no), gifted (yes/no), learned chess (yes/no), and years of learning chess.

**Procedure**

Following approval by the Chief Scientists of the Ministry of Education, school principals throughout the country were approached, with emphasis on special education schools with ADHD students, and schools in which chess was taught, as well as chess clubs and social media. Participants were directed to a website that included demographic details, the parents’ questionnaire, and the computerized tasks.

**Statistical Processing**

Performance of the “Go/No-go” task was subjected to multiple analyses of variance that included four main effects: learned chess (yes/no), ADHD (yes/no), on medication (yes/no), and gifted (yes/no), together with triple interactions among having learned chess, ADHD status, and medication. In addition, simple effects were analyzed to examine the interaction’s direction and significance. Performance of the “Pièce Touchée” tasks was analyzed by logistic regression, because the dependent variable was dichotomous. The regression model also included the four main effects and the triple interaction described above. All analyses were performed with SPSS software version 21, and results at a  $p \leq .05$  significance level were considered statistically significant.

**Results**

Figures 2a and 2b describe the performance differences of the “Go” task as a function of four independent variables: learned chess (yes/no), ADHD (yes/no), medication (yes/no), and gifted (yes/no). Analysis of the results showed a main effect for having learned chess ( $F(1,99) = 40.06, p < .001$ ), so that boys who played chess made on average fewer mistakes than those who did not play chess, regardless of diagnosis and medication. No main effects were found for ADHD status, medication, and giftedness ( $p = 0.41, 0.13, 0.31$ , respectively).

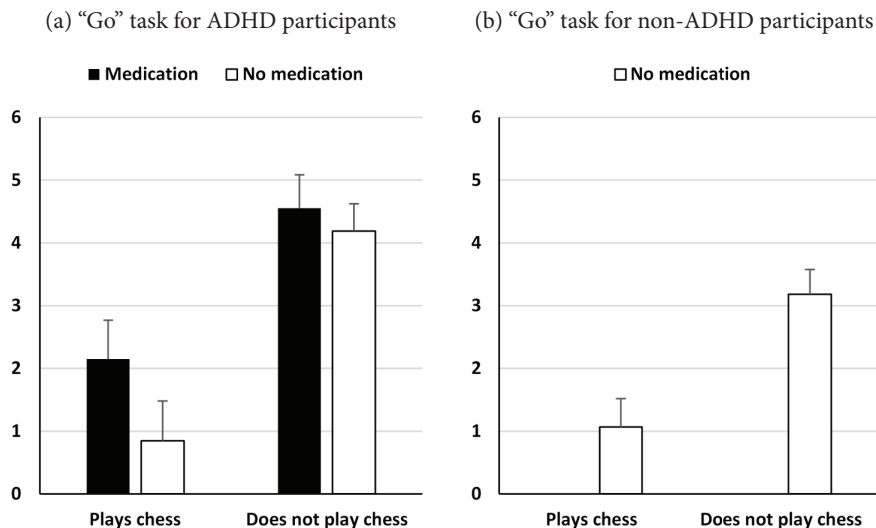


Figure 2. Relationship between playing chess, taking medication and number of mistakes in “Go” tasks

Figures 3a and 3b describe the performance differences of the “No-go” task as a function of the same four independent variables. Analysis of the results showed a main effect for having learned chess ( $F(1,99) = 40.06, p < .001$ ), so that boys who played chess made on average fewer mistakes than those who did not play chess, regardless of diagnosis and medication. Also, a triple interaction was found among chess, ADHD, and medication. Among participants who do not play chess and are not on medication, those who are not diagnosed with ADHD made fewer mistakes. On the other hand, among participants who play chess and are not on medication, no significant difference was found between ADHD and non-ADHD participants ( $F(2,99) = 3.5, p = 0.03$ ). No main effects were found for ADHD status, medication, and giftedness ( $p = 0.65, 0.58, 0.78$ , respectively).

(a) “No-go” task for ADHD participants      (b) “No-go” task for non-ADHD participants

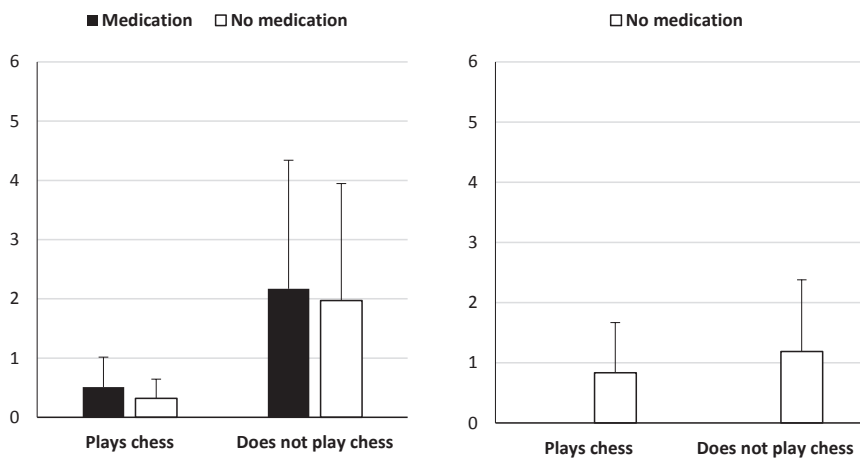


Figure 3. Relationship between playing chess, taking medication and number of mistakes in “No-go” tasks

Analysis of the results for the “touch-move” condition was performed by logistic regression, and the entire model was found to be significant ( $\chi^2_{(5)} = 24.62, p < 0.001$ , Nagelkerke  $R^2 = 0.28$ ). Table 4 shows that learning to play chess and ADHD status significantly predict success in the task ( $p = 0.03, 0.05$ , respectively). The odds ratio indicates that learning chess increases the chance to succeed in the task by 3.08, and ADHD decreases the chance to succeed by 2.70 (1/0.37).

Table 4

Logistic regression to predict success in “touch-move” condition

Variable	B	SE	Wald	p-value	OR	95% CI
Plays chess	1.12	0.53	4.55	*0.03	3.08	1.10–8.63
ADHD	0.99	0.49	4.02	*0.05	0.37	0.14–0.98
Medication	–1.19	0.49	1.87	0.17	0.30	0.05–1.67
Giftedness	1.00	0.87	1.87	0.08	2.71	0.90–8.16

\* $p < 0.05$ , \*\* $p < 0.01$

## **Discussion**

This research had a number of goals. The first was to look at new tasks to examine inhibition. The “Pièce Touchée” tasks examine inhibition at a higher thinking level than tasks such as “Go/No-go”, and is given under two conditions: “touch-move” and “free”. Validity testing of the task revealed that the “free” condition was not challenging enough, and did not differentiate among the various groups of children, whereas the “touch-move” condition differentiated among the groups, and produced moderate correlations with the “Go/No-go” tasks. This finding supports the possibility to use the “touch-move” condition as a test of inhibition at high cognitive levels in future research.

The central aim of the study was to examine the link between learning/playing chess and inhibition abilities as measured in a simple, established task (“Go/No-go”) and a new task (“touch-move” condition). In all three tasks – “Go”, “No-go”, and “touch-move” – a main effect was found for learning chess.

In the “Go” task, the participants made omission errors; namely, they were supposed to press a button when the signal appeared, and for some reason they did not do so. The number of mistakes made by chess players was significantly lower than those made by others who had not learned to play chess. No such effect was found for any of the other variables that were tested – ADHD (yes/no), medication (yes/no), or giftedness (yes/no).

In the “No-go” task, the participants made commission errors; i.e., they were supposed not to press a button when the signal appeared, and for some reason they did so. For mistakes such as these, in addition to the main effect of having learned to play chess (chess players made significantly fewer mistakes than non-chess players did), a triple interaction was found among chess, ADHD, and medication. Among participants who did not play chess and were not on medication – those who were *not* diagnosed with ADHD made fewer mistakes. On the other hand, among participants who played chess and are not on medication, no significant difference was found between those who were diagnosed with ADHD and those who were not. These findings can be interpreted in a number of ways, but it seems that for participants who did not have ADHD, the chess-playing experience was less beneficial. It should be noted that, in this study, the medication-taking population was part of the ADHD population (there were no undiagnosed participants who were on medication). Therefore, in this study, this could be an extreme population regarding their difficulty with inhibition.

## **Limitations**

Since this is a correlational study, causality cannot be inferred, but the findings indicated a difference among chess players, whether due to having learned to play chess or to an existing difference that led them to learn chess in the first place. It is also possible that children whose inhibition skills are better would be more drawn to play chess compared with children who are more impulsive. Future research would benefit from a longitudinal study with pre- and post- comparison of children who are assigned to a chess intervention compared with children who do not attend chess classes.

## Conclusion

This initial study adds to the research literature that indicates the possible contributions of teaching chess to children and youths in general (Rosholm, Mikkelsen, & Gumede, 2017; Trincherro & Sala, 2016) and to those diagnosed with ADHD in particular (Blasco-Fontecilla et al., 2016). In this era of computer games, it is possible that concentration on chess pieces could help students overcome attention-deficiency disorders without resorting to medication.

All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee.

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## The Impact of Family on Children's Attitude Toward Health

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**Background.** Parents have a significant impact on the formation of their children's attitude toward health. A detailed study of this effect will allow us to devise strategies for interaction with children and directions of psychological correction of maladaptive behaviors in health issues.

**Objective.** To study the relationship between attitude toward health in primary-school-age children and their parents and styles of childrearing.

**Design.** The study comprised 69 primary-school-aged children and their parents. The method of "Unfinished Sentences About Health" and the questionnaire "Analysis of Family Relationships" were used. Components of attitude toward health such as health self-esteem, assessment of healthy people, diseases, health promotion actions, health promotion factors (causes), and the value of health were considered.

**Results.** The findings showed that the parents' components of attitude toward health are interrelated with those in children's at all levels (from behavioral to semantic and axiological) and are connected with the style of childrearing.

**Conclusion.** Data analysis showed the impact of the style of childrearing and the interrelation of certain parental attitude toward health components with attitude toward health in primary-school-age children. This problem requires detailed study due to its theoretical significance and the obvious social challenges it presents.

**Keywords:** health psychology; attitude toward health; children's health; family relationships; childrearing

## Introduction

The increase of various chronic somatic diseases that are manifested in childhood is constantly being recorded in Russia, European countries, and the United States (Pashin, 2011). From the point of view of health psychology, one of the main reasons for this is health-related behavior among children: consumption of “unhealthy” food, lack of physical activity, failure to comply with a daily regimen, bad habits, etc. (Bosma, Van de Mheen, & Mackenbach, 1999). According to the ideas of the Russian psychological school, attitude toward health includes not only the content, differentiation, and integration of the entire system of cognitive health representations, but also emotions regarding health and sensations that label well-being as healthy and/or unpainful (Kolesnikova, 2003).

Attitude toward health can be considered as a holistic system that acquires completeness together with a reflective sense of health in the development of the subject (Nikolaeva & Arina, 2009). The formation of children’s attitude toward health and health behavior is connected with different factors, including their experience of disease, stage of age development, and specific social development situation. The cultural-historical approach in psychosomatics maintains that the substantive aspects of the attitude toward health are mostly set by the specificity of the child’s social situation (Arina, Iosifyan, & Nikolaeva, 2018; Arina & Nikolaeva, 2016). This point of view is presented in many studies in Russia, the United States, and European countries (e.g., Anan’ev, 1998; Birch & Davison, 2001; Filatov & Vasilyeva, 2001).

According to numerous studies, some of the leading psychological factors in the development of attitude toward health include the parents’ attitude toward health, which is conveyed to the child, as well as the style of childrearing (Biddle, Gorely, & Stensel, 2004; Lau, Hartman, & Ware, 1986; Patock-Peckham, Cheong, Balhorn, & Nagoshi, 2001; Salkind, 2006; Tinsley, 2002). Empirical studies confirm the significant similarity between parents’ and their children’s ideas about health. Children with physiologically unexplained pain often have family members who are frequently ill and are extremely susceptible to even mild ailments or child complaints (worry about the child’s complaints). Studies suggest a higher probability of smoking habits among children whose parents smoke (Chassin, Presson, & Sherman, 2005). Obese parents are more likely to have obese children (Danielzik, Czerwinski-Mast, Langnäse, Dilba, & Müller, 2004), and children of parents who abuse alcohol and psychoactive substances are more susceptible to alcoholism and drug addiction (Li, Pentz, & Chou, 2002). It also has been shown that parental eating behavior and physical activity affect the behavior of their children in these areas (Leventhal, Prochaska, & Hirschman, 1985). The study by Wilkinson (2002) shows that from the age of eight, a child is aware of how the parent relates to his/her health or illness. Children who spent more time with their parents and close relatives up to the age of 16 are less likely to smoke and try drugs (Tinsley, 2002). We associate these facts with a stronger attachment to the parents on the part of these children. Attachment and mastering of healthy behavior in parental families can be considered as the most powerful protective factors for a number of forms of risky behavior in children and adolescents (Fonagy & Target, 2000). In general, the data point to the need to take into account the parents’ ideas about health and illness and their health-related behavior, especially when attempting to encourage healthy behavior in children and adolescents (Berezovskaya, 2005).

The purpose of this research was to study the relationship between attitude toward health in primary-school-age children and their parents and styles of child-rearing.

## **Methods**

### ***Participants***

The study comprised 69 participants (33 children aged 7–11 years and 36 parents aged 32–54 years). The “infection index” is used as a criterion for frequently ill children in Russia. This index is defined as the ratio of the sum of all cases of acute respiratory infections during the year, to the child's age. An infection index of 0.2–0.3 is found in rarely ill children and 1.1–3.5 in frequently ill children.

Our experimental group included 15 frequently ill children, and the control group – 18 rarely ill children. Four groups of study participants were identified: (1) frequently ill children – 15 participants (mean age  $9 \pm 1.8$ ); (2) rarely ill children – 18 participants (mean age  $9 \pm 1.4$ ); (3) parents of frequently ill children – 15 participants (mean age  $43 \pm 11$ ); (4) parents of rarely ill children – 18 participants (mean age  $43 \pm 11$ ).

Participation was voluntary and the participants were first presented with an informed consent document, which explained the purpose of the study and the confidentiality of the results.

### ***Procedure***

#### ***Questionnaires***

We used the method of “Unfinished Sentences About Health” (Yakovleva, 2014) for both children and parents, constituting 10 open-ended statements on the topic of health, allowing us to identify components of attitude toward health in our study sample (see *Table 1*). The questionnaire “Analysis of Family Relationships” (Eidemiller & Justickis, 1990) consists of 130 statements (containing 20 dimensions), relating to the upbringing of children, allowing us to explore features of childrearing and unharmonious family relations (see *Table 2*).

The results of the method “Unfinished Sentences About Health” were processed using the method of content analysis by two clinical psychologists, including a candidate of psychological sciences. The specialists did the analysis separately and then combined the data. The procedure included the following steps: putting forward analytical units and combining them into categories based on the analyzed material (open answers), then the frequency of responses among the sample groups was calculated. For example, an answer such as “I always knew that my health is good/strong” is related to “positive health assessment”; “To improve my health, I play sports/eat healthy food” – to “readiness for action”, etc.

Counting “yes/no” answers allows us to identify one or more of the 20 dimensions (for example, “hyperprotection”, “hypoprotection”, “indulging”), where the result exceeds the norm (Eidemiller & Yustickis, 1999). There were no parents in our samples whose answers exceeded the norm scores on any of the dimensions except “hyperprotection” (16 parents) and “hypoprotection” (12 parents). Therefore, we chose these parameters for further analysis.

Table 1

*The method of “Unfinished Sentences About Health” (Yakovleva, 2014) and sample responses*

No.	Statement	Sample responses (children)	Sample responses (parents)
1.	I always knew that my health...	“is good”, “is bad”, “is strong”, “is the most important thing”, “is normal”	“is good”, “is bad”, “is strong”, “is the most important thing”, “is normal”
2.	Most healthy people...	“are happy”, “are good”, “play sports”, “take care of their health”, “are strong”	“are happy”, “eat healthy food”, “take care of their health”, “are physically trained”, “are active and energetic”
3.	Disease is...	“bad”, “a punishment”, “a trouble”, “a virus”, “when you feel bad”, “an infection”, “pain”	“bad”, “a punishment”, “pain”
4.	If I knew more about ways to stay healthy...	“I would be constantly healthy”, “I would follow them”, “I would not be sick”	“I would follow them”, “I would do nothing”, “I would be constantly healthy”
5.	The main thing on which human health depends is...	“habits”, “lifestyle”, “nutrition”, “sports”, “environment”, “genetics”	“genetics”, “lifestyle”, “the brain”, “environment”, “positive view of life”
6.	People who are actively engaged in their health, cause me...	“respect”, “admiration”, “joy”, “nothing”, “envy”	“respect”, “interest”, “to smile”
7.	To improve my health, I...	“play sports”, “eat healthy food”, “do nothing”, “run”, “visit doctors”, “everything is already good”	“gave up smoking”, “run”, “visit doctors”, “don’t drink alcohol”
8.	My health won’t let me...	“eat junk food”, “exercise”, “have bad habits”, “walk outside without a hat”, “allows everything”	“work a lot”, “run”, “have bad habits”, “fly into space”
9.	People think that health...	“is important”, “needs to be protected”, “is the most important thing in life”	“is important”, “needs to be protected”, “is the most important thing in life”
10.	... depends on health.	“A person’s whole life”, “Everything”, “A person’s whole destiny”, “Happiness”, “Physical well-being”, “Psychological well-being”	“Quality of life”, “Physical well-being”, “Psychological well-being”, “Everything”, “My whole life”

Table 2

*The questionnaire "Analysis of Family Relationships" (Eidemiller & Justickis, 1990) and sample data*

Dimensions	Sample questions	Cut-off value	Average values of the parents sample
Hyperprotection	Everything I do, I do for my son (daughter).	6	7.13
Hypoprotection	I often do not know what my child is doing at the moment.	7	7.97
Indulging	If my child likes a toy, I will buy it, no matter how much it costs.	7	1.78
Ignoring the needs of the child	I do not like it when my son (daughter) requests something. I know better what he (she) wants.	3	0.50
Excessive duties	My son (daughter) often has to (or previously had to) look after the younger brother (sister).	3	1.21
Insufficient obligations	I often remind my son (daughter) several times about the need to do something, and then I will do it myself.	3	1.73
Excessive requirements/ prohibitions	The main thing parents should teach their children is to obey adults.	3	0.97
Insufficient requirements/ prohibitions	My child decides himself how much, what, and when to eat.	2	0.39
Excessive requirements	The stricter parents are with the child, the better for him.	3	1.15
Minimal requirements	Many shortcomings in my child's behavior will go away by themselves with age.	3	2.55
Instability of parenting style	Members of our family are not equally strict with our son (daughter). Some indulge, others are very strict.	4	0.86
Expanding the sphere of parental feelings	I would like my son (daughter) not to love anyone but me.	5	1.42
Preference for the teenager to have a child's qualities	It upsets me that my son (daughter) is quickly becoming an adult.	3	0.78
Lack of confidence in parenting	If the child is stubborn because he does not feel well, it is better to do everything he wants.	4	2.13
Phobia of losing a child	I am constantly worried about the health of my son (daughter).	5	1.07
Underdevelopment of parental feelings	If I had no children, I would have achieved much more in my life.	6	0.84

Table 2 (continued)

Projection of own qualities on the child	Some very important shortcomings of my son (daughter) persist, despite everything I do.	3	1.34
Bringing marital conflicts into the sphere of childrearing	It often happens that when I punish my son (daughter), my husband (wife) immediately begins to reproach me for excessive severity or indulgence toward him (her).	3	0.21
Dimension of preference of female qualities	A man understands the feelings of another person worse than a woman does.	3	1.13
Dimension of preference of male qualities	A woman understands the feelings of another person worse than a man does.	3	0.26

For statistical processing we used the Fischer criterion of angular conversion ( $f^*$ ), which was used to compare the two samples by frequency of response categories. Calculations were made using SPSS Statistics 17.0.

## Results

The results of the method “Unfinished Sentences About Health” allowed us to categorize the data. The respondents’ answers were divided into the following categories by the content analysis method: *health self-esteem*, *assessment of healthy people*, *diseases*, *health promotion actions*, *health promotion factors (causes)*, and *the value of health*, which are similar in the groups of children and their parents. For example, responses to the first statement correspond with participants’ assessment of their own health (positive, negative, or neutral) and subjective health value, (“My health is the most important thing”) (for both children and parents). Similarly, responses such as “A person’s whole life depends on health” give us an opportunity to distinguish “the value of health” category and mark health as an absolute value (for both children and parents). Only among the parents did we see the answer “Quality of life”. In the category “Diseases”, both children and parents answers fall into the category of “objective definition” or “emotional evaluation”. Answers such as “If I knew more about ways to stay healthy, I would do nothing” or “...I would follow them” are sorted into the category “Health promotion actions” and its variants “Readiness for action” or “Lack of readiness for action” (only in parents). Answers like “I would not be sick” or “I would constantly be healthy” in the category “Abstract plans” are seen in all sample groups.

After defining six response categories, we analyzed the frequency of occurrence of response categories in groups of frequently ill and rarely ill children (see Table 3).

The first ranking of both frequently and rarely ill children is positive self-assessment of health (73.3% and 55.5%, respectively); however, in the group of frequently ill children, this assessment is significantly more frequent ( $p \leq 0.01$ ). However, these children are objectively more often ill and have poor health; we can explain their high health self-esteem by defense mechanisms, for example, repression or denial. Frequently ill children consistently less often emphasize the subjective importance of health than do rarely ill children (33.3% vs. 13.3%,  $p \leq 0.01$ ), and the



Table 3

Frequency analysis of health attitudes in groups of frequently ill and rarely ill children, according to the method "Unfinished Sentences About Health" (%)

Response categories	Frequently ill children, N = 15	Rarely ill children, N = 18	Significance of differences
<b>Health self-esteem</b>			
Positive health assessment	73.3%	55.5%	$p \leq 0.01$
Negative health assessment	13.3%	11.1%	$p > 0.05$
Subjective health value	13.3%	33.3%	$p \leq 0.01$
Neutral health assessment	0%	0%	-
<b>Assessment of healthy people</b>			
Positive assessment	46.6%	11.1%	$p \leq 0.01$
Negative assessment	13.3%	0%	-
Life quality assessment	13.3%	33.3%	$p \leq 0.01$
Action assessment	26.6%	44.4%	$p \leq 0.01$
Other	0%	11.1%	-
<b>Diseases</b>			
Objective definition	46.6%	66.6%	$p \leq 0.01$
Emotional evaluation	53.3%	33.3%	$p \leq 0.01$
<b>Health promotion actions</b>			
Readiness for action	53.3%	61.1%	$p > 0.05$
Abstract plans	46.6%	38.8%	$p > 0.05$
Lack of readiness for action	0%	0%	-
<b>Health promotion factors (causes)</b>			
Action (healthy lifestyle)	60%	38.8%	$p \leq 0.01$
Environment	20%	16.6%	$p > 0.05$
Congenital physical properties	20%	44.4%	$p \leq 0.01$
<b>Value of health</b>			
Absolute value	80%	83.3%	$p > 0.05$
Mental condition	13.3%	5.5%	$p \leq 0.01$
Physical condition	6.6%	11.1%	$p > 0.05$
Quality of life	0%	0%	-

Note. The percentage was calculated as frequency of a response among the sampled group.

child may perceive the disease as a "challenge", so he/she has to overcome difficulties and learn to deal with them. In this case, health may not be perceived by the child as the main value due to the need to build a personal hierarchy of values, putting in the first place indicators that are more accessible for the child. Frequently ill children in 60% of cases emphasize the importance of actions to maintain their own health. The frequency of responses of this type in the group of frequently ill children is significantly higher than in the group of rarely ill children (60% vs. 38.8%,  $p \leq 0.01$ ). Rarely ill children note the congenital physical properties of a person (genetics, immunity) as a major factor in health. Here we can note that

the first category of children is much more often faced with the need to improve their health, which is emphasized by parents and the school environment as a significant value. Frequently ill children reveal their idea of the disease through an emotionally intense assessment (“bad”, “terrible”, “nightmarish”). The frequency of such assessments in the group of frequently ill children significantly exceeds that in the group of rarely ill children (53.3% vs. 33.3,  $p \leq 0.01$ ), whereas for rarely ill children, the description of the disease through its objective definition (66.6%) is typical. This distinction may be related to the discomfort caused by diseases and the personal emotional reaction to them in frequently ill children. Children of both groups with the highest frequencies of answers note the paramount importance of health for a person’s life (83.3% vs. 80%,  $p > 0.05$ ).

Table 4

*Health attitudes in groups of frequently ill children and their parents, according to the data of the “Unfinished Sentences About Health”(%)*

Response categories	Frequently ill children, N = 15	Parents of frequently ill children, N = 15	Significance of differences
<b>Health self-esteem</b>			
Positive health assessment	73.3%	40%	$p \leq 0.01$
Negative health assessment	13.3%	20%	$p > 0.05$
Subjective health value	13.3%	26.6%	$p \leq 0.01$
Neutral health assessment	0%	13.3%	-
<b>Assessment of healthy people</b>			
Positive assessment	46.6%	0%	-
Negative assessment	13.3%	0%	-
Life quality assessment	13.3%	80%	$p \leq 0.01$
Action assessment	26.6%	13.3%	$p \leq 0.01$
Other	0%	6.6%	-
<b>Diseases</b>			
Objective definition	46.6%	86.6%	$p \leq 0.01$
Emotional evaluation	53.3%	13.3%	$p \leq 0.01$
<b>Health promotion actions</b>			
Readiness for action	53.3%	46.6%	$p > 0.05$
Abstract plans	46.6%	26.6%	$p \leq 0.01$
Lack of readiness for action	0 (0%)	26.6%	-
<b>Health promotion factors (causes)</b>			
Action (healthy lifestyle)	60%	33.3%	$p \leq 0.01$
Environment	20%	20%	$p > 0.05$
Congenital physical properties	20%	46.6%	$p \leq 0.01$
<b>Value of health</b>			
Absolute value	80%	80%	$p > 0.05$
Mental condition	13.3%	6.6%	$p \leq 0.01$
Physical condition	6.6%	0%	-
Quality of life	0%	13.3%	-

Another comparative analysis shows the frequency of responses of frequently ill children and their parents (see Table 4).

We observe similarities in the responses of children and their parents in the categories health promotion actions, impact of the environment on health, and recognition of health as the main value ( $p > 0.05$ ). In 80% of cases, children and their parents call health the main value of an individual, and this significantly exceeds the answers of all other types. Comparative analysis shows us the frequency of responses of rarely ill children and their parents (see Table 5).

We can see that the answers of the rarely ill children and their parents and of the frequently ill children and their parents coincide for the same evaluation

Table 5

Health attitudes in groups of rarely ill children and their parents, according to the data of the "Unfinished Sentences About Health" (%)

Response categories	Rarely ill children, N = 18	Parents of rarely ill children, N = 18	Significance of differences
<b>Health self-esteem</b>			
Positive health assessment	55.5%	38.8%	$p \leq 0.01$
Negative health assessment	11.1%	5.5%	$p > 0.05$
Subjective health value	33.3%	33.3%	$p > 0.05$
Neutral health assessment	0%	22.2%	-
<b>Assessment of healthy people</b>			
Positive assessment	11.1%	0%	-
Negative assessment	0%	0%	-
Life quality assessment	33.3%	61.1%	$p \leq 0.01$
Action assessment	44.4%	33.3%	$p > 0.05$
Other	11.1%	0%	-
<b>Diseases</b>			
Objective definition	66.6%	83.3%	$p \leq 0.01$
Emotional evaluation	33.3%	16.6%	$p \leq 0.01$
<b>Health promotion actions</b>			
Readiness for action	61.1%	72.2%	$p > 0.05$
Abstract plans	38.8%	5.5%	$p \leq 0.01$
Lack of readiness for action	0%	22.2%	-
<b>Health promotion factors (causes)</b>			
Action (healthy lifestyle)	38.8%	55.5%	$p \leq 0.01$
Environment	16.6%	16.6%	$p > 0.05$
Congenital physical properties	44.4%	27.7%	$p \leq 0.01$
<b>Value of health</b>			
Absolute value	83.3%	22.2%	$p \leq 0.01$
Mental condition	5.5%	33.3%	$p \leq 0.01$
Physical condition	11.1%	0%	-
Quality of life	0%	44.4%	-

parameters in the case of health promotion actions and the connection between the environment and health. Analysis of the data also showed that in the groups of parents, the parameter “Quality of life” appears in both groups. When describing the significance of health for a person’s life, they indicate health as the main reason for a high quality of life. Answers of this type were not typical for children, which can be explained by their age and cognitive abilities.

The results of the “Analysis of Family Relationships” method showed that parental groups of both children’s groups are characterized by an absolute increase of the “Hyperprotection” (G+) and “Hypoprotection” (G-) dimension in comparison with the values on all other dimensions of the method (for the G+  $p = 0.03$ , for the G-  $p = 0.02$ ). Therefore, we chose these parameters for further analysis.

According to the G+ dimension, the indicators were increased in 16 parents (48%), among whom 8 were parents of frequently ill children and 8 were parents of rarely ill children; on the dimension G- in 12 people (36.3%): 6 parents of frequently ill children and 6 parents of rarely ill children. Parent-child pairs with the G+ and G- styles of childrearing were analyzed by coincidence of their responses in categories of attitude to health: We looked at whether the response categories of the children and their parents matched (see Table 6).

Table 6

*Frequency of coincidence in parents’ and children’s answers in the method of “Unfinished Sentences About Health” (in families with hyper- and hypoprotection)*

Response categories	G+, N=16	G-, N=12	Significance of differences
Health self-esteem	0%	0%	-
Assessment of healthy people	81.2%	58.3%	$p \leq 0.01$
Diseases	75%	75%	$p > 0.05$
Health promotion actions	62.5%	83.3%	$p \leq 0.01$
Health promotion factors (causes)	75%	83.3%	$p > 0.05$
Value of health	100%	0%	-

*Note.* G+ = Hyperprotection. G- = Hypoprotection

For parents displaying hyperprotection to a greater degree than for parents with hypoprotection, the coincidence of evaluation of healthy people with that of their children is typical (81.2% vs. 58.3%,  $p \leq 0.01$ ). Awareness of the value of health coincides in this sample in 100% of cases, while for hypoprotection this component does not correspond with children’s answers (0% matches). This can be explained by the particular features of hyperprotection as a style of childrearing, which involves constant close contact with the child.

We can also see that in these samples the self-assessment of children’s health is not related to the style of childrearing. This may be explained by the fact that the child’s self-assessment in general (and self-assessment of health in particular) may also be significantly connected with his/her personal characteristics, social environment, success in educational or sports activities, and other factors.

## **Discussion**

The aim of our study was to identify the relationship between childrearing and parents' attitude toward health and attitude toward health in primary-school-age children. We found that frequently ill children have a high level of self-esteem regarding their own health, which is inconsistent with the data of Arina and Kovalenko (1995) and Sokolova (2009), who found low self-esteem and a feeling of inferiority. This contradiction can be explained by the action of the defense mechanisms, such as repression or denial, in the groups of children studied. It is also possible that the children strove to show themselves in the best light, which may have influenced their answers. Good health may be considered as socially approved in this group of children. At the same time, a high level of self-esteem regarding their health among frequently ill children was found in the study by Romantsov, Silaev, and Melnikova (2016). The authors explained this by the phenomenon of high stress-resistance in this category of children.

We also obtained evidence that such childrearing styles as hyperprotection and hypoprotection are connected with the attitude to health of primary-school-age children, which substantiates the data of Hartup and Stevens (2002), who argue that the patterns of health and health preserving behavior in children are a manifestation of the health-preserving behavior of their parents.

Frequently ill children note the subjective significance of their health to a much lesser extent than their rarely ill peers do. We can say that in the hierarchy of values of the former group of children other indicators take the first place, and allow the child to adapt to the state of his/her health. We found that both frequently and rarely ill children recognize health as the main value; however, Gokhman (2002), when exploring the motivation of health promotion in childhood, noted that health for children under the age of 9 is not a conscious value and priority. In our study, there were no significant differences in the definition of health value in children aged 7 to 11 years.

However, our finding that the high representation of answers about the importance and value of health is typical only for parents of rarely ill children is more interesting. It may be assumed that, on the one hand, for parents of rarely ill children, health is a significant value and occupies a high rank in the value structure (the category "Quality of life" in this case falls into the category of "Absolute value"). On the other hand, it is possible that the high subjective value of health revealed in the group of rarely ill children (33.3%) is associated with the high value placed on health by their parents. The selection of the "Quality of life" category indicates the high significance of health and the cognitive features of this group of subjects. The diversity of parents' answers indicates a greater differentiation in the structure of values, including the value of health. We can conclude that the structure of values of parents of frequently ill children is less differentiated than that in parents of rarely ill children. This may reflect the subjective experience of frequent illnesses of their children and the high value placed upon health in this regard.

Thus, our data showed that the components of children's attitude toward health are interconnected with those of their parents at all levels (from behavioral to semantic and axiological), which suggests that the parental environment has a significant impact on the formation of attitude toward health of the child. Parental attitudes and behavior become an example and behavioral model for the child.

## Conclusion

We have identified in this study the importance of the style of childrearing and parents' attitude toward health for attitude toward health in primary-school-age children. Many studies support this hypothesis, but we have identified our own categories of attitude toward health: health self-esteem, assessment of healthy people, diseases, health promotion actions, health promotion factors (causes), and the value of health, which are interconnected with those in their parents at all levels – from behavioral to semantic and axiological. This could be helpful in a more detailed study of attitude toward health in children and adults aimed at competent and timely correction of maladaptive behaviors in health issues. This problem requires further detailed study due to its theoretical significance and the obvious social challenges it presents, and the fact that existing studies in the field of health psychology do not currently provide us with sufficient empirical knowledge about the process of shaping attitudes to health and its components. To continue studying children's attitude toward health and the factors connected with their development, we are conducting a study comparing the development of children's and adolescents' attitude toward health. The data obtained in the present study open up prospects for further research in this direction, and could be considered during implementation of preventive measures regarding health issues among children and their parents.

## Limitations

Due to the open-ended questions of the “Unfinished Sentences About Health” method, namely, we can say that other possible study participants might have given different answers, which would have led to the selection of other or different categories of answers in the content analysis. In addition, further studies should include a larger number of subjects to allow a more detailed analysis of the results.

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