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Morality Predicts Empathy in the Relationship of Medical Staff with Patients

Carmen Gabriela LIŞMAN[1], **Andrei Corneliu HOLMAN**[2]

[1] Department of Psychology, Faculty of Psychology and Education Sciences, Alexandru Ioan Cuza University of Iaşi, Romania, lismancarmen@gmail.com; carmen.lisman@uaic.ro
[2] Department of Psychology, Faculty of Psychology and Education Sciences, Alexandru Ioan Cuza University of Iaşi, Romania, andrei.holman@uaic.ro

Abstract: This study aimed to investigate the relationships between medical professionals' empathy and two moral coordinates, moral foundations and moral identity. A sample of 157 physicians and nurses completed an adapted version of the Jefferson Scale of Empathy, addressing three dimensions of empathy: compassionate care, perspective taking, and the cognitive dimension of empathy; the Moral Identity Questionnaire, addressing two facets of the importance of moral standards, Moral Self and Moral Integrity; and the Moral Foundations Questionnaire.
We found specific patterns of associations between the three dimensions of empathy, moral identity, and moral foundations. Moral self was a significant predictor of all the dimensions of empathy while moral integrity was also significantly related to compassionate care and purity to perspective taking. Health professionals with more than five years of work experience also emerged as lower in compassionate care. Their adherence to moral standards and the importance of moral values should be further enhanced in education as their moral identity can contribute to more empathic behaviors toward patients.

Keywords: *medical staff, empathy, morality, moral foundations theory, moral identity.*

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1. Introduction

The doctor–patient relationship is frequently considered in medical studies. Research on the factors that contribute to the professional success of a medical professional has highlighted empathy as an important determinant of the quality of this relationship. Empathy is the most common attribute to describe a "human" physician (Linn et al., 1987). Doctors who are emotionally oriented toward their patients have a significant positive therapeutic effect on their health and also receive positive feedback that will later be translated into an increased sense of professional satisfaction (Halpern, 2003). Consequently, empathy improves the results of therapeutic approaches (Hojat et al., 2011), makes an important contribution to the accuracy of diagnoses (Halpern, 2003), can reduce the burnout syndrome found among nurses (Thirioux et al.,2016) and the risk of malpractice (Levinson et al., 1997), and improves recovery in people suffering from diabetes or cancer (Hojat et al., 2011).

Therefore, it is important to understand the mechanisms that can support health professionals' empathy also in light of the results indicating that this skill tends to decrease with the increase of the professional experience (Hojat et al., 2009; Neumann et al., 2011). This study aims to examine one factor that may be important in supporting empathy in the medical staff, namely their moral characteristics, by investigating the link between empathy and two dimensions of morality in physicians and nurses, i.e., moral principles and moral identity.

1.1. Morality and empathy in the medical act

The relationship between empathy and morality in general is often debated in the literature as extremely complex (Decety & Cowell, 2014; Hoffman, 2001; Oxley, 2011), but never empirically addressed in the medical professional category. Regarding this relationship, Gianakos (1996) describes empathy as having four dimensions: affective, cognitive, moral, and behavioral. From this point of view, the moral side of empathy is defined as the internal motivation of physicians to empathize (Duarte et al., 2016).

Empathy is defined as the ability to understand the emotions, thoughts, behaviors, and actions of others, and to respond in a proper manner to people placed in vulnerable situations (Lawrence et al., 2004). Empathy has been considered as a cause for care and concern for others (Slote, 2007) and a motivation for prosocial behavior (Hoffman, 2001). There is widespread agreement that empathy is a construct with two dimensions: affective and cognitive (Neumann et al., 2011). The distinction

between the two is that affective empathy relates to the emotional arousal that one person feels when he or she is exposed to someone else's distress, while cognitive empathy refers to the understanding of someone else's vulnerability (Bernhardt & Singer, 2012; Decety & Jackson, 2004; Hoffman, 2001; Preston & De Waal, 2002). In the medical context, past research suggests that the emotional side of empathy has low utility, acting to the detriment of medical staff and depriving them of objectivity (Han & Pappas, 2018) or affecting them emotionally by taking over the patient's pain, thus leading to burnout (Zenasni et al., 2012). In contrast, health professionals' cognitive empathy is the ability to understand and communicate this understanding of patients' concerns and fears without necessarily sharing their suffering. Emotional neutrality can be maintained while displaying concern for the patient's condition and proper communication (Halpern, 2014). Moreover, Hojat and colleagues (2014) pointed out that the affective side of empathy fluctuates, whereas cognitive empathy can be much more stable and, most importantly, can be educated.

Morality refers to a universal code of ethical practices that applies to all rational persons and that any rational human being respects. The Moral Foundations Theory (Graham et al., 2011) identifies five universally moral fundamentals: harm avoidance, fairness, loyalty, authority, and purity. Minkoff et al. (2016) evaluate the role of these moral foundations in how obstetricians address the various professional dilemmas they face in their field. The results of their study showed variety in counseling, reflecting the differences in moral priorities. For example, the need to intervene and save the life of the unborn fetus before a cesarean section is recommended was associated with holding principles of autonomy and fairness while respecting the parents' desire to prolong fetal resuscitation despite the evidence of risks was associated with loyalty and respect for authority. Although this study did not analyze empathy, this factor may be influential in the way physicians respond to such life and death dilemmas. The Self-Model theory (Blasi, 1983) puts forth the existence of a conscious deliberator who first determines what is morally right to be done and then decides whether to do so is necessary. The moral self, i.e., the configuration of values to which the individual adheres, can give motivational force to moral behavior, but the presence of moral values does not necessarily constitute in themselves a guarantee that a person will act in accordance with these principles. Black and Reynolds (2016) propose a scale for measuring moral identity based on Blasi's model and that includes two factors: i.e., the moral self, comprising the set of values that guides a person, and moral integrity, or the importance that the person grants to acting in accordance with moral principles.

1.2. Morality, empathy and the ethics of care in the medical act

The topic of the relationships between medical professionals' empathy and their moral profile is highly relevant for several facets of bioethics and public health. First, as highlighted above, empathy is an important factor of the care and concern people show for others (Slote, 2007), motivating prosocial behavior (Hoffman, 2001). The ethical commitment undertook by health professionals requires that the medical act should be carried out under a set of fundamental principles, such as the primacy of patient welfare, patient autonomy, social justice, honesty or patient confidentiality (Stoff et al., 2016). Of all these principles, one of the most important is the welfare of the patient, who should prevail over other interests, such as those of the health care provider or health care managers (Stoff et al., 2016). At the same time, it is important to gain knowledge on the real-life relevance of these ethical coordinates, by highlighting the personal factors that may foster or hinder the practical guidance that they impose on health professionals' actual work behaviors.

In this respect, empathy is one of the psychological coordinates that may contribute to their commitment to the ethical principle of patient welfare. For instance, in their study of moral stress among nurses, Haddad and Bigger (2020) highlight the importance of relational ethics, which emphasizes emotions, specifically the empathic relationship between caregivers and patients. The authors suggest that health care providers need to take into account relational ethics, which involves connecting with the patient, listening to their life story, and taking into account their background (including family and community), thus highlighting the relevance of empathy for the medical act.

Putting the patient's welfare above all other interests, in line with the deontological perspective that requires providing care to people with the greatest need (Stoff et al., 2016), often creates ethical dilemmas. From a utilitarian perspective, there are situations in which certain patients should receive more care or a faster intervention, while other patients remain on the waiting list. These choices could be conditioned by the efficiency of medical resources, by the higher chances of survival in the case of some people, by patient's insurance or the cost of services to be provided.

Other ethical principles such as nonmaleficence, justice, and autonomy, are the ethical principles that need to be considered in this type of medical dilemma (Campbell, 2017). As such, these complex situations require careful moral deliberation, highlighting the importance of people's moral coordinates for the practical ways in which general professional ethics are transposed into personal behaviors. This supports the relevance of the

research on health professionals' moral profile for bioethics and public health, both as a distinct factor of their adherence to ethical standards in their medical practice and in relation to empathy.

The present study aims to evaluate the relationship between two moral coordinates, i.e., moral foundations and moral identity, and the empathy of medical staff in relation to patients. We also expect medical professionals to vary on the empathy coordinates in accordance with their professional experience.

2. Method

2.1. Participants

The sample consisted of 157 people (49 doctors, 108 nurses, 117 women) working in northeastern part of Romania (Iași, Neamț, Vaslui), in state (N = 104) or private (N = 53) hospitals and clinics, aged between 23 and 72 years. (M = 38.49, SD = 9.60). The participants have different specializations: general medicine (56.4%), neurology (9%), ophthalmology (3.2%), pediatrics (3.8%), cardiology (4.5%), nephrology (3.8%), dermatology (1.9%), neurosurgery (4.5%), surgery (1.9%), obstetrics-gynecology (5.8%) and dentistry (5.1%). According to their professional experience, 50 participants had less than five years of experience, 35 participants had between 5 and 10 years, and 72 had over 10 years of experience. All volunteer participants in this study were assured of the confidentiality of their responses. The Ethics Committee of the Faculty granted ethical approval for the research. The data was collected in 2021.

2.2. Measures

1. *Moral Foundations Questionnaire* (MFQ - Graham et al., 2011) consists of 20 items (the short version) measuring five moral foundations: harm avoidance (Cronbach's *a*=.52), fairness (*a*=.51), loyalty (*a*=.35), authority (*a*=.39), and purity (*a*=.46) on a 6- point Likert scale. Half of the items are rated from "not at all relevant" to "extremely relevant," and the other 10 items are rated from "strongly disagree" to "strongly agree."

2. *Moral Identity Questionnaire* (MIQ - Black & Reynolds, 2016) was used to assess the degree to which moral standards are important for participants' view of themselves and of the world. It includes 20 items that address two facets of moral identity, namely, Moral Self (e.g., "Not hurting other people is one of the rules I live by"; *a*=.82) and Moral Integrity (e.g., "Lying and cheating are just things you have to do in this world" – reversed

item; *a*=.73). Respondents are required to express their agreement with each item on a 6-point Likert-scale from "strongly disagree" to "strongly agree."

3. *Jefferson Scale of Empathy* (JSE – Duarte et al., 2016). The adapted version was created to measure the perceptions of medical students on the importance of empathy in the doctor–patient relationship. Hojat et al. (2002; 2014) developed the most widely used instrument for measuring empathy among medical staff—The Jefferson Scale of Physician Empathy—with three variants, each dedicated to a specific category of participants, i.e., physicians, medical students, and students from other professions that provide personal care, respectively. The scale consists of three factors, often confirmed in other studies, namely, "perspective taking", "compassionate care," which corresponds to the affective side of empathy, and "walking in patient's shoes" (Hojat et al., 2014). Although the authors emphasize the importance of the cognitive dimension of empathy, this is underrepresented in the scale structure. However, Duarte et al. (2016) found a different structure of the scale in their research on empathy in medical students in which the cognitive dimension is included in addition to those identified by Hojat et al. (2014). Therefore, we used the form of the empathy measure developed by Duarte et al. (2016), focused on three factors of empathy addressed by this scale, namely, "compassionate care" (e.g., "Physicians' understanding of their patients' feelings and the feeling of their patients' families does not influence medical or surgical treatment" - reversed item; *a*=.76), "perspective taking" (e.g., "Physicians should try to stand in their patients' shoes when providing care to them"; *a*=.34), and "cognitive dimension" (e.g., "Understanding body language is as important as verbal communication in physician–patient relationships"; *a*=.74). Participants answered on 6-point Likert scales to all items (from 1 - "strongly disagree" to 6 - "strongly agree").

3. Results

Table 1 presents the Pearson correlations between study variables, the descriptive statistics, and the scale reliability indices. The results show that compassionate care correlated with the harm avoidance moral foundation and moral integrity; perspective taking, another dimension of empathy, was significantly associated with the same harm avoidance foundation, but also with loyalty and moral identity; the cognitive dimension of empathy was associated with all factors of morality except purity.

Tabel 1. Pearson correlations, means, and standard deviations between variables.

	M	SD	*a*	1	2	3	4	5	6	7	8	9	10
1.Harm avoidance	4.60	.83	.52	-									
2.Fairness	4.54	.88	.51	.55**	-								
3.Loyalty	4.44	.95	.35	.40**	.23**	-							
4.Authority	4.18	.83	.39	.52**	.49**	.51**	-						
5.Purity	4.13	.92	.46	.45**	.72**	.25**	.54**	-					
6.Moral Self	5.09	.79	.82	.58**	.31**	.28**	.37**	.24**	-				
7.Moral Integrity	4.95	.98	.73	.28**	.12	-.01	-.04	.02	.40**	-			
8.Compassionate care	4.09	1.05	.76	.17*	.03	-.00	-.06	-.04	.12	.57**	-		
9.Perspective taking	4.87	1.54	.34	.18*	.04	.16*	.15	-.03	.37**	.17*	.04	-	
10.Cognitive dimension	4.95	.84	.74	.43**	.24**	.30**	.26**	.15	.56**	.26**	.19*	.41**	-

*$p \leq .05$; **$p \leq .001$

To verify whether there are significant differences in empathy based on professional experience, we used the one-way ANOVA method. The results showed significant differences between groups only in the case of the compassionate care subscale, F (2, 154) = 8.504, p ≤ .001 (Cohen's $f = .33$), indicating a medium to large power of effect size (Cohen, 1988). Tukey's post hoc tests (see Table 2) indicated that the group with less than five years of experience had higher empathy levels than the other two groups, suggesting a decrease in affective empathy as professional experience increases.

Table 2. Tukey post hoc test on the variable compassionate care, depending on the professional experience

	Mean	under 5 years	between 5 and 10 years	over 10 years
Under 5 years	4.51	-	4.09**	2.61*
Between 5 and 10 years	3.60		-	2.10
Over 10 years	4.03			-

*$p \leq .05$; **$p \leq .001$

Finally, we used hierarchical regression modeling to examine the effect of moral foundations, moral self and moral integrity on each of the three dimensions of empathy: compassionate care, perspective taking, and the cognitive dimension while controlling for differences in gender, age, professional experience, statute, specialty, and sector. These controlled variables were included in the first block in the regression analysis while the three morality-related predictors were included in the second block. The results reported in Table 3 show that moral self and moral integrity are significant predictors of empathy along with purity moral foundation (Cohen's f^2=.69 for Model 1; 0.42 for Model 2; 0.67 for Model 3), indicating a large effect size (Cohen, 1988). The moral self is a positive predictor for perspective taking (f^2=.05) and for the cognitive dimension of empathy (f^2=.10), and a negative predictor for compassionate care (f^2=.03). Purity moral foundation is a negative predictor for perspective taking (f^2=.02) while moral integrity is a strong positive predictor for compassionate care (f^2=.31).

Table 3. The predictive model for the three dimensions of empathy, the standardized coefficients, R^2 and ΔR^2

	Compassionate care	**Perspective taking**	**Cognitive dimension**
	Model 1	Model 2	Model 3
		β	
Step 1			
Gender	-.05	.12	.08
Age	.02	.06	.14
Professional exp.	-.21*	.08	-.18
Statute	-.20*	.22*	.09
Specialty	.04	.35**	.07
Section	-.18*	-.15	-.03
R^2	.109	.140	.043
Step 2			
Gender	-.07	.14	.09
Age	-.02	.03	.09
Professional exp.	-.14	.11	-.17
Statute	-.07	.20*	.07
Specialty	.06	.34**	.05
Section	-.07	-.11	.02
Harm avoidance	.16	.01	.18
Fairness	-.02	.01	.09
Loyalty	.00	.06	.09
Authority	.00	.11	-.04

Purity	-.07	-.22*	-.11
Moral Self	-.22*	.31**	.41**
Moral Integrity	.58**	.07	.04
R^2	.409	.298	.400
ΔR^2	.300	.158	.358

*$p \leq .05$; **$p \leq .00$

4. Discussion and Conclusion

4.1. Discussion

The present research aimed to empirically analyze the connection between morality and empathy in the case of medical staff as previously suggested on theoretical grounds (Decety & Cowell, 2014; Hoffman, 2001; Oxley, 2011; Royzman & Kumar, 2001). The two concepts have often been addressed separately in studies on physicians or medical students. The results of these past investigations showed, on the one hand, the importance of empathy in the doctor–patient relationship that leads to faster recovery and improved medical care or patient well-being (Beauvais et al., 2017; Lelorain et al., 2018; McGuire et al., 2016), but also the need for moral principles in the medical act by promoting fairness, equal opportunities for access to medical services, and respect for patients (Minkoff et al., 2016; Salminen et al., 2016).

Our study found significant associations between the morality and the empathy dimensions. First, empathy emerged as positively related to health professionals' adherence to several moral principles: compassionate care correlates with harm avoidance moral foundation and moral integrity, perspective taking is positively associated with harm avoidance and loyalty moral foundations and moral identity (both moral self and moral integrity), and the cognitive dimension of empathy correlates positively with all moral subfactors except purity. As previously shown, empathy-related processes motivate prosocial behavior (e.g., sharing and helping) and caring for others; it can also inhibit aggression and provide the foundation of care-based morality. Moral principles complete the image, correcting the limits of empathy by increasing the personal relevance of ethical concepts such as justice, fairness, and respect for human rights (Decety & Cowell, 2014; Hoffman, 2001; Slote, 2007). Harm avoidance and moral integrity are the moral dimensions that correlate with all three subscales of empathy, and the cognitive dimension of empathy was associated with all the factors of morality except purity. These associations correspond to the essence of moral behavior: a behavior that can affect others, namely, one that forbids hurting someone and encourages conduct that helps others (Gert, 2005).

According to Graham et al. (2011), those who score high on the care/harm avoidance factor have positive reactions to providing care for others, which is specific to professional groups concerned about the people's welfare, such as nurses.

The moral self correlates with perspective taking and with the cognitive dimension and is also a significant predictor for these two dimensions. This result suggests that moral norms and principles are associated with empathy and can function as landmarks, shaping the ability to understand the other's vulnerable situation, without the need for an emotional reaction congruent with that of the patient. Perspective taking and the cognitive dimension do not foster emotional reactions to perceived vulnerabilities or suffering; instead, they contribute to one's understanding and appreciation of others' needs and misfortunes.

We also found compassionate care to be associated with the harm avoidance moral foundation, which corresponds to the helpful tendencies aroused by empathic reactions to someone's suffering/pain in people high in this affective facet of empathy. Compassionate care stimulates fast, automatic relationships between oneself and another in a vulnerable situation (Molnar-Szakacs, 2011) as it is deeply rooted in our biology and in the context of parental care or group living (Decety & Cowell, 2014). Whereas affective empathy seems to be a limited resource, arousing a prosocial behavior only in certain situations — toward our loved ones, toward those similar to us, toward a correctly perceived vulnerability, etc. (Cikara et al., 2014; Decety & Cowell, 2014), the other two dimensions of empathy are less important for the variations of health professionals' compassionate care.

In addition to the affective empathy, the cognitive side of empathy, which correlates with all moral factors except purity, brings objectivity into medical professionals' relation to their patients. Cognitive empathy involves thinking actively or reflecting on the actions and emotions of others, a process based on effort and on taking the other's perspective and that depends on higher cognitive functions and cognitive flexibility (Decety & Jackson, 2004). This form of empathy correlates with moral foundations such as fairness and authority. While affective empathy is reduced only to sharing patients' feelings, the cognitive side, through the developed ability to understand mental states, emotions, intentions, or other beliefs, can be consistent with complex moral principles that go beyond emotional resonance.

Among the moral factors considered in our study, moral identity proved to be a significant predictor of empathy alongside the moral

foundation of purity. The moral self is a positive predictor for perspective taking and cognitive dimension, and moral integrity, which assesses the importance placed on consistency between values and action, is a strong positive predictor for compassionate care. This suggests that health professionals' set of moral values may be a determining factor for their positive behaviors towards patients in terms of understanding the other's perspective and situation, although limiting their emotional reactivity to patients' vulnerabilities state, as indicated by its negative correlation with compassionate care. Thus, medical staff with strong moral identities may feel that they have a moral obligation not to remain indifferent, beyond professional ethical principles. Through empathic abilities, people can be motivated to help someone who is suffering, but in light of the moral principle of avoiding harm and helping those in need, they can intervene even in the absence of an emotional response.

The negative relationship between compassionate care and professional experience that emerged in our results is in line with past findings that highlighted the decline of empathy over the years for both medical students and practitioners (Hojat et al., 2009; Neumann et al., 2011; Quince et al., 2011). There are two explanations of this association: one is that of classical conditioning, which stipulates that repeated exposure to a stimulus of any kind leads to habituation and no longer produces any reaction, and the second refers to the possible consequences of increased empathy with people in distress, that turns into compassion, and consequently victim's pain generates suffering in the observer (Hoffman, 2001; Lombardo & Eyre, 2011). Moreover, excessive emotions can impede the necessary neutrality in making clinical decisions, thus negatively influencing a doctor's performance (Hojat et al., 2014). In order to avoid these effects, experienced staff develop coping strategies that suppress affective empathy towards patience.

There are some limitations of the study. First, the data was collected through self-reported measures and the study used a cross-sectional design. The use of a variant of the empathy measurement scale that was originally designed for students (Duarte et al., 2016) may also be regarded as a limitation of the investigation, although there are no significant differences in the wording of the items. The delicate nature of the topic may have also raised social desirability concerns in our participants, thus partly affecting the validity of their answers.

4.2. Conclusion

Our study highlights the importance of morality as a significant predictor for high empathy of medical staff. Also, affective empathy was negatively related to professional experience. Therefore, developing or appealing to the existing set of moral principles and to moral integrity could be an effective way to enhance medical professionals' empathy. Also, the role of cognitive empathy in the relationship with patients should be highlighted without turning it into excessive compassion that can harmful to themselves and the medical act.

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