ASSOCIATION OF RELIGIOUS ORTHODOXY AND EMOTIONAL EMPATHY IN PAKISTANI MUSLIM MEDICAL STUDENTS

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ABSTRACT

OBJECTIVE
To explore the relationship between religious orthodoxy and emotional empathy in Pakistani medical students.

DESIGN
Cross sectional study

PLACE AND DURATION OF THE STUDY
This cross sectional study was conducted at CMH Lahore Medical College from January 1st to February 1st, 2015.

SUBJECTS AND METHODS
A purposive convenient sample of 190MBBS students was drawn from CMH Lahore Medical College. The questionnaire consisted of three sections: demo-graphics section, multidimensional emotional empathy scale and Orthodoxy Scale of Funk's Survey of Attitudes toward Religion and Philosophy of Life. Data were analyzed in SPSS v. 20.

RESULTS
Most of the respondents taking part in this study were female and enrolled in third year of MBBS. Multiple regression analysis revealed that emotional empathy was positively associated with female gender. However, there was no significant association of emotional empathy with religious orthodoxy, age or study year of respondents.

CONCLUSION
Our study sought the answer to a much debated question: "Are religious people really more empathic and caring than other people?" The answer we got was no, religious people are not more empathic than non-religious people.

KEY WORDS
Religion, Empathy, Medical students.

INTRODUCTION

Religion has traditionally been viewed as a path towards spiritual perfection, moral enlightenment and emotional contentment. Accordingly, the general public has an overwhelming preponderance towards the belief in religion as a major source of virtuous qualities such as altruism, selflessness and love for humanity. Empirical studies exploring the connection between positive qualities and religion, however, have yielded mixed results.

Religiosity or religious orthodoxy, defined by Hill and Hood as "the tendency to accept the teachings of religious authorities and conform to prescribed religious practices"[1], finds both support and opposition in published literature. On the one hand are studies describing religion as a promoter of "pro-social" tendencies, including altruism[2], agreeableness and conscientiousness[3], empathic behavior[4] and even better mental health in adolescents[5] while on the other hand, we find studies that do not regard religion as highly. Galen, for instance, in a detailed review of the literature favoring the relation between religiosity and pro-sociality in 2012, pointed out several problems commonly encountered in such studies.[6] Similarly, in an extensive survey of adolescents in an evangelical Protestant church in 2006, Ji et al found that while orthodoxy and intrinsic religiousness were positively correlated with views about helping others, they were negatively correlated with actual altruistic behavior, a phenomenon which they term altruistic hypocrisy.[7] In an investigation upon the role of religion in psychiatric illnesses, Koenig et al. propose that while religious beliefs and practices may be associated with positive coping behavior in some psychiatric patients, they may actually be the source of mental pathology in other patients.[8]

Empathy has been defined multiple times by various clinicians and researchers. Hogan (1969) described it as "the intellectual or imaginative apprehension of another's condition or state of mind without actually experiencing that person's feelings".[9] Today, we divide empathy into affective and cognitive types.[10] Its importance for medical professionals, including medical students, is a rather contested subject with many influential articles arguing the need for detached observation on part of the physician to accurately diagnose and treat the patient.[11] Increasingly, however, studies have disputed this view, asserting that empathy leads

to better doctor-patient communication[12], facilitates trust and encourages disclosure which can be directly therapeutic[13]. Simultaneously, there are less chances of physician burnout, due to higher levels of work related satisfaction.[14]

There is a wealth of literature examining the links between empathy and altruism and various other factors including, but not limited to, gender, age, geographical location, ethnicity andreligiosity. For most of these factors, there have been mixed reports but in general, the pattern that has emerged seems to point towards higher levels of empathy among women, the married and the widowed, those with more friends, those belonging to more voluntary associations, those who believe in a strong system of justice and those against the death penalty.[15]The literature on the association between religiosity and empathy is especially diverse with some studies showing no association[16] and others indicating a distinct positive association[4].
The society of Pakistanconsists of a unique amalgam of religious and liberal sects. To our knowledge, no study has been conducted to investigate the relationship of religiosity and empathy in Pakistani medical students. Our study attempts to fill this gap with an aim tofind this relationship among Muslim medical students of our country.

METHODOLOGY

This cross sectional study was conducted at CMH Lahore Medical College from January 1st to February 1st, 2015. Students from 1st year MBBS to fourth Year MBBS were surveyed using a self-administered questionnaire. The questionnaire consisted of three sections: demographics section, multidimensional emotional empathy scale and Orthodoxy Scale of Funk's Survey of Attitudes toward Religion and Philosophy of Life. Only those respondents were included who had consented to take part in the survey. The participants were ensured anonymity and that only group level findings would be reported.

Multidimensional emotional empathy scale devised by Caruso and Mayer was used to assess levels of emotional empathy in these students. This scale has shown excellent psychometric properties in American adults and adolescents (alpha reliability = 0.88).[17] It assesses various facets of emotional empathy. However, the present study analyzes the associations of total score on empathy scale.

Religious orthodoxy of medical students was assessed with the Orthodoxy Scale of Funk's Survey of Attitudes toward Religion and Philosophy of Life.[1] This scale records responses on a 5 point Likert scale and yields a mean score showing the respondents' acceptance of religious teachings.

A total of 225 questionnaires were circulated among the students to ensure a good response percentage. Data were analyzed in SPSS v. 20. Frequencies of demographic variables and mean (SD) values for age, empathy scale and Orthodoxy scale were recorded. Multiple linear regression was employed to analyze association of variables with scores on multidimensional emotional empathy scale. All assumptions for linear regression were met.

RESULTS

Total response rate was 84.4% (190/225). Most of the respondents taking part in this study were female and enrolled in third year of MBBS. Detailed demographic data is given in Table 1. Mean age of the respondent was 20.83 (1.7). Mean score (SD) on empathy scale was 105.9 (15.2) and 36.03 (9.5) on orthodoxy scale.

Multiple regression analysis revealed that emotional empathy was positively associated with female gender. However, there was no significant association of emotional empathy with religious orthodoxy, age or study year of respondents. (Table 2)

Table 1: Demographics of medical students

Variable		N (%)
Gender	Male	48 (25.3)
	Female	142 (74.7)
Background	Rural	17 (8.9)
	Semi-Urban	22 (11.6)
	Urban	151 (79.5)
Professional year	1st year	45 (23.7)
	2nd year	45 (23.7)
	3rd year	76 (40)
	4th year	24 (12.6)

Table 2: Multiple regression model for scores on empathy scale

Predictor	B	Std. Error	Beta	P- value
(Constant)	85.894	21.740		.000
Age of the respondent	-.368	.993	-.042	.711
Gender of respondent	10.263	2.489	.294	.000
Background	4.351	3.749	.082	.247
Professional Year	-.182	1.552	-.013	.907
Religious Orthodoxy	.052	.114	.033	.649

Adjusted R^2= .07

DISCUSSION

The only positive finding in our study was the gender difference in empathy. Female gender was associated with higher scores on the empathy scale (p<0.001). Our finding is perfectly in accordance with earlier studies on the subject, which almost unanimously show females to be more empathic. For instance, Mestre et al, in a study of gender differences in empathy on adolescents from Spain, found that females scored higher both on emotional and cognitive empathy than males and the differences between the two genders increased with age.[18] Similarly, Toussaint et al. also found females to be more empathic.[19] Kmiec, in his study on undergraduate psychology students of East Carolina University, USA, found that

while women scored higher on emotional empathy, there were no gender differences in cognitive or state empathy.[20] The exact reason for this generally consistent finding in literature, however, is less clear. One explanation is the evolutionary hypothesis of parental investment according to which females are more receptive to emotional signals than men. This leads them to develop a more caregiving attitude not only towards their offspring but also to other people, which may explain higher empathy in them.[21] Another possible reason is the differing roles that society attributes to the two genders. Kmiec, for instance, argues that the observed gender differences in empathy can be explained simply by the stigma associated with emotional empathy among men causing them to answer negatively to questions concerning emotional empathy; females, on the contrary, answer positively since society considers empathy to be a desirable quality among them.[20] This also is supported by Heisenberg et al, who contend that the gender differences in empathy are seen only in studies that use self-report scales while no sex difference is observed in studies that measure empathy through "psychological or unobtrusive observations of nonverbal reactions to another's emotional state".[22] Further research is needed to elucidate the exact cause of higher empathy among females.

Our research found no significant association of religiosity and empathy. This is surprising since, as mentioned above, religion is generally considered to endow a person with understanding and empathy towards fellow beings thus, making religious people more willing to help those in need. Our finding, thus, seems to contradict the traditional religion-prosociality relationship emphasized repeatedly in literature.[2,3] A study by Ayten also goes against our finding. In his investigation on Turkish Muslims, he found religiosity to be positively correlated with both empathy and helping behavior[4]. At the same time, our finding also finds ample support in literature. For instance, Markstorm et alfound that in a sample of 408 adolescents, religious attendance was not related to empathy.[23] Similarly, Duriez assessed the religion-empathy relation in Belgian psychology students and found that empathy was not related to religiosity; instead, it was related to students' approach to religion.[16] The question arises whether such polarity of findings can be justified by any explanations. Duriez's"religious approach" hypothesis offers an explanation. According to him,the approach of a person to his religion and his individual temperament, rather than the religion he follows, decide whether he's empathic towards fellow human beings or not. Thus, individual differences in approach towards religion and as a consequence, in empathy among religious people may be responsible for the contradictory findings in literature. Our result may also find an explanation in the unique social environment of Pakistan. Over the past few decades, religious extremism and hatred for western civilization have been promoted by many religious sects of the country. This has divided the society into two distinct sects, religious and liberal, each viewing the other with distrust and antagonism. The war against terrorism that has claimed around 50,000 lives since its beginning in 2001 has only served to aggravate the already hostile social environment of Pakistan.[24] Thus, religious extremism and distrust for people with differing opinions may be responsible forlower empathy among the religious Muslim students of Pakistan when compared to theTurkish Muslims of Ayten's study[4]. From our study, it is clear that religiosity-empathy relationship is a complex one defying any simple explanation. We encourage further research into it to explain the diverse and contradictory findings seen inpublished literature.

CONCLUSION

Our study sought the answer to a much debated question: "Are religious people really more empathic and caring than other people?" The answer we got was no, religious people are not more empathic than non-religious people. However, as pointed out above, explaining our answer is a complex task with several factors coming into play including the unique social and cultural situation of our country.

REFERENCES

1. Hill P, Hood R. Measures of religiosity. Birmingham, Ala: Religious Education Press 1999.
2. Zhao L. Exploring religiosity's effects on altruistic behaviour. UBCUJP [Internet] 2015;1 [cited 2015 Jun 31].Available from: http://ojs.library.ubc.ca/index.php/ubcujp/article/view/2433/182445
3. Saroglou V. Religiousness as a cultural adaptation of basic traits: A five-factor model Perspective. Pers Soc Psychol Rev: 2009;14(1):108-125.
4. Ayten A. Are religious people benevolent people? A study on the case of Turkish Muslims. J Intercult Stud: 2013;(4):63-76.
5. Wong Y, Rew L, Slaikeu K. A systematic review of recent research on adolescent religiosity/spirituality and mental health. Issues Ment Health Nurs: 2006;27(2):161-183.
6. Galen L. Does religious belief promote prosociality? A critical examination. Psychol Bull: 2012;138(5):876-906.
7. Ji C, Pendergraft L, Perry M. Religiosity, altruism, and altruistic hypocrisy: Evidence from Protestant adolescents. Rev Relig Res:2006;48(2):156-178.
8. Koenig HJ. Research on religion, spirituality and mental health: A review. Can J Psychiatry:2009 May;54(5):283-91.
9. Hogan R. Development of an empathy scale. J Consult Clin Psychol 1969;33(3):307-316.
10. Rogers K, Dziobek I, Hassenstab J, Wolf O, Convit A. Who Cares? Revisiting empathy in Asperger syndrome. J Autism Dev Disord: 2006;37(4):709-715.
11. Blumgart H. Caring for the Patient. N Eng J Med: 1964;270(9):449-456.
12. Suchman A, Markasis K, Beckman H, Frankel R. A model of empathic communication in the medical interview. JAMA: 1997;277(8):678.
13. Halpern J. What is clinical empathy? J Gen Intern Med: 2003;18(8):670-674.
14. Krasner M, Epstein R, Beckman H, Suchman A, Chapman B, Mooney C et al.Association of an educational program in mindful communication with burnout,empathy, and attitudes among primary care physicians. JAMA: 2009;302(12):1284.
15. Fehr B, Sprecher S, Underwood L. The science of compassionate love. Malden, MA: Wiley-Blackwell 2009.
16. Duriez B. Are religious people nicer people? Taking a closer look at the religion–empathy relationship. Ment Health Relig Cult: 2004;7(3):249-254.
17. Caruso DR, Mayer JD. A measure of emotional empathy for adolescents and adults. Unpublished manuscript:1998. Available from:http://www.unh.edu/personalitylab/Assets/measures-MultEmpathy/Empathy%20Article%202000.pdf
18. Mestre MV, Samper P, Frías MD, Tur AM. Are women more empathetic than men? A longitudinal study in adolescence.Span J Psychol: 2009 May;12(1):76-83.

19. Toussaint L, Webb JR. Gender differences in the relationship between empathy and forgiveness. J Soc Psychol: 2005 Dec;145(6):673–685.
20. Kmiec SM. An Analysis of Sex Differences in Empathy and Forgiveness [master's thesis on the Internet]. East Carolina University: 2009 Aug [cited 2015 Jun 1]. Available from: http://thescholarship.ecu.edu/handle/10342/2224
21. Hojat M, Gonnella JS, Nasca TJ, Mangione S, Vergare M, Magee M. Physician empathy: definition, components, measurement, and relationship to gender and specialty. Am J Psychiatry: 2002 Sep; 159(9):1563-9.
22. Eisenberg N, Lennon R. Sex differences in empathy and related capacities. Psychol Bull: 1983; 94:100–131.
23. Markstrom CA, Huey E, Stiles B, Krause AL. Frameworks of caring and helping in adolescence: Are empathy, religiosity, and spirituality related constructs? Youth Soc: 2010; 42(1):59–80.
24. Raja M. Pakistani victims: War on terror toll put at 49,000. The Express Tribune [Internet] 2013 March 27 [cited 2015 Jun 1]. Available from: http://tribune.com.pk/story/527016/pakistani-victims-war-on-terror-toll-put-at-49000/