

# EFFECT OF RELIGIOUS BELIEFS ON CREATIVITY: MODERATING ROLE OF PERSONALITY TRAITS

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#### **Abstract**

Connections between creativity and religious beliefs have become hot subject in society and Academic researches. This study was designed to examine the effects of religious beliefs and creativity through Personality traits of employees. The study was carried out with sample of 365 students in Bahaudin Zakariya University Multan. Their age range was between 20 and 30 years. Participants provided data on Personality traits, Creativity adjective list, and Religious Beliefs Scale along with a demographic variable sheet. Results indicated the religious beliefs significantly predicted the creativity. Findings suggest that religious beliefs is significantly negatively correlated with creativity, extroversion, openness to experience, agreeableness and conscientiousness are positively related with religious beliefs. While neuroticism relates negatively with religious beliefs. Results further demonstrate that creativity is significantly associated with personality traits of conscientiousness and agreeableness. Findings reveal the significant mediating role of openness to experience and extroversion in the association of religious beliefs and creativity.

**Keywords:** religious beliefs, emotional stability, creativity, personality traits

#### **Rationale:**

Despite a lot of researches on creativity and religious beliefs, a gap exists in exploring it further. Religious beliefs and creativity are part of human life and they exist side by side but scarce of literature is present on finding the role of personality traits in linking both among students. Present study focuses on the most important aspect of human life composition that is personality trait of which human is composed of and its role in linking creativity and religious beliefs of a student. It will help the researchers to consider that aspect and its implication in daily life via personality traits. Creativity among students plays vital role and if it is judged by religious beliefs we can find the route that is linked with personality traits, a focus of present study.



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#### **Religious belief:**

In all cultures, religious belief is the most important part of human nature. It can be explained under the umbrella of philosophy, psychology and anthropology and not by academic writer. According to Beyer religion can be defined substantively and functionally. Under substantive definition religion basis and supernatural aspects are defined. (Beyer, 2006). While functionally it can be defined socially and psychologically. It can be observed in communication, the rules, norms, and prohibitions are are observed in it. (Saroglou, Corneille, & Cappellen, 2009). It cover every aspect of human life, social, well being, culture, normas and even sexual behavior (Vilchinsky & Kravetz, 2005),

## **Creativity:**

Creativity, one of the exclusive human abilities, has been on stage an matchless role in human society. According to Amabile production of useful ideas that are novel as well as useful tp situation is called creativity (Amabile, 1983). This definition does not tellus about reson behind its production or what type of idea is usefl in which situation.

- 1. **Responsive Creativity:** Type of creativity in which it is externally driven, participants act according to the situation, problem. Participant has almost no control over the choices to make (see Amabi 1 e, 1996, or Al bert & Runco, 1999).
- 2. **Expected Creativity:** This type of creativity is also externally driven but now the problem is not given by others infact it was discovered by own in order to resolve.
- 3. **Proactive Creativity:** This last type person is internally motivated plus problem is also searched by own. For example perwon giving free advice in order to I improve the quality of product.
- 4. **Contributory Creativity**: This type of creativity is self-determined but problem was clearly told to them. For example, it includes helping behavior of a person in order to resolve the problem which is not directly link with him. They are internally motivated. (Scott and Bruce,1994)

# **Personality trait:**

The Big Five structure of personality traits (Costa & McCrae,1992) has emerge as a vigorous and prudent model for considerate the connection between personality and various academic behaviors (Poropat, 2009). Conscientiousness is defined by being restricted, planned, and achievement-oriented. Neuroticism refers to extent of emotional stability, inclination control, and anxiety. Extraversion is explained all the way through a higher degree of warmth, boldness, and chattiness. Openness is refer to as strong intellectual curiosity and a liking for innovation and variety. Finally, agreeableness refers to being supportive, cooperative, and concerned towards others.

#### Religious belief and creativity:

Technological progression and economic development both can profit from creativity. For countries, creativity has been measured as a key display of national competitiveness (<u>Florida</u>, 2002). Societal and individual outcomes can be strongly shaped via religion (<u>Okulicz-Kozaryn</u>,



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<u>2015</u>), but few studies have examine the effect of religion on creativity. Some researchers hypothesize that religion hinders creativity, because rules and customs are over emphasized by religion while creativity needs people to confront traditions and rules to seek a advance (<u>Gino</u> and Wiltermuth, 2014).

But according to some other researchers religion may be useful for creativity because religion enhances personal virtues (e.g., hard-working) and cognitive representation that are positively related with creativity (<u>Day, 2005</u>; <u>Assouad and Parboteeah, 2018</u>). In fact, empirical studies support a negative relationship between religion and creativity. <u>Berry (1999)</u> investigated the relationship between religious backgrounds and creativity. He found that protestant background achievers were high in science area, while the achievers in art-related areas were maximum from Catholic background.

#### Religious belief and personality traits:

Religiousity is considered as personality factor plus it is related to other aspects of personality. Personality and religious beliefs are interlinked. In Eysenck had searched relation between religiousuty and personality traits extraversion, neuroticism, and psychoticism. In that extraversion and neuroticism do not correlate with religiosity (e.g., Argyle, 2000). Studies on neuroticism have low negative as well as low positive correlations; extraversion has been reported to be correlated in a negative (but low) way with religiosity and negative correlations with psychoticism. According to relations with big five personality traits agreeableness and conscientiousness are positively associated with religiosity, and that openness to experience is positively related to spirituality (Altemeyer and Hunsberger2005; Saroglou 2010).

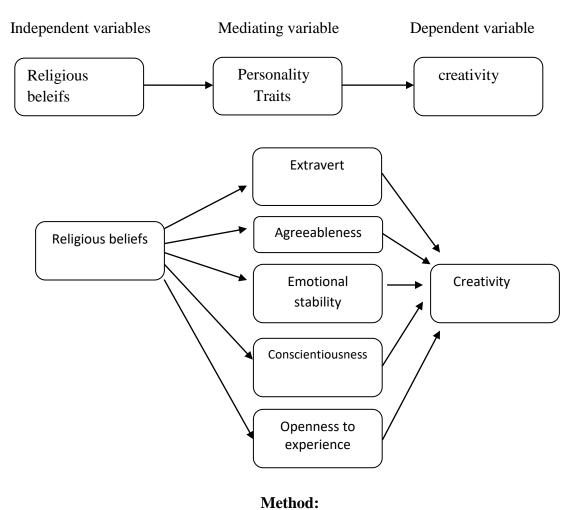
#### **Creativity and personality traits:**

Personality traits and creativity are in link with each other in a way that specific traits are more indulged in creativity. McCrae (1975) found one of the five factors (openness-to-experience) was correlated with various measures of creativity. According to Gelade creative adults have score higher on Neuroticism and Openness but lower on Conscientiousness among big five personality. (Gelade '1977)

Based on the literature review available on the relationships between religious beliefs, personality traits, and creativity, this study was plotted to see the mediating role of personality traits in the connection between religious beliefs and creativity. To achieve this objective the following hypotheses were formulated; 1) religious beliefs will predict creativity. 2) creativity will be correlated with personality traits. 3) Personality traits will predict creativity 4) personality traits will mediate the predictive relationship of religious beliefs with creativity.



Figure 1: Hypothesized Model



# **Participants**

365 students were approached via convenient sampling from Bahaudin Zakariya University Multan. All the participants were more or less similar with education level.

## **Instruments:**

The Basic Religious Beliefs Questionnaire (BRBQ): This questionnaire was made by Rajaei and colleagues in 2009, and includes 50 items in three subscales of religious beliefs, human, existence and God. The BRBQ was made based on religious Cognitive—Emotional Theory. Each item asks subjects to rate their opinions about their religious beliefs on a scale of 1(strongly agree) to 5 (strongly disagree). In one study on 440 university students, Cronbach's coefficient alpha for the total score was 0.96, and the reported acceptable reliability for BRBQ (Rajaei AR,2009)

**Gough personality scale**: Creativity was measured via Gough personality scale containing 30, The Adjective Check List manual. Checking 18 items shows creative element while 12 item show absence of creativity. (Gough, 1979).



**Big five inventory (BFI):** 44-item inventory that measures an individual on the Big Five Factors (dimensions) of personality Each of the factors is then further divided into personality facets. This inventory contains 8 items for measuring extraversion, 9 items for Agreeableness, 9 items for conscientiousness, 8 for emotional stability and 10 for measuring openness to experience. (John & Srivastava, 1999)

#### **Procedure:**

Three questionnaires including personality inventory, creativity adjective list, and religious beliefs scale were given to students to fill out. All the sufficient instructions about how to fill the questionnaires and guidelines for better understanding of questionnaires were given to them. An assurance for their response confidentiality was also briefed to them and they were told that all responses given by them will be kept hide from others and only be utilized for the research purpose. Collected information was analyzed using SPSS-17

#### Results

To test the hypothesized model of the study, Descriptive statistics, Pearson Correlations, Linear Regression Analyses, and sobel tests were performed.

**Table 1** *Mean, SD, & Correlations Matrix for the Scores on Religious beliefs, Creativity, & Personality Traits* 

		M	SD	1	2	3	4	5	6	7
1	Religious beliefs	180.9	30.3	1						
2	Creativity	9.25	3.7	21**	1					
3	Openness to experience	30.74	9.3	.20	.50**	1				
4	Extroversion	34.7	8.0	.25	.42**	.32**	1			
5	Conscientiousness	22.50	7.3	.46**	.05	23*	.06	1		
6	<b>Emotional Stability</b>	23.51	6.4	12	.29*	22*	14*	.02	1	
7	Agreeableness	21.96	5.4	.53**	04	.12	.09	.05	.37**	1

<sup>\*</sup>p>.05, \*\*p>.001

Table 1 indicates the mean, standard deviations, and correlations coefficients among study variables. Findings suggest that religious beliefs is significantly negatively correlated with creativity, extroversion, openness to experience, agreeablesness and conscientiousness are positively related with religious beliefs. While neuroticism relates negatively with religious beliefs. Results further demonstrate that creativity is significantly associated with personality traits of conscientiousness and agreeableness.

Table 2
Standardized Coefficients and t-values from Path analysis of the trans-contextual Model

Hypothesized Paths	Path Coefficients	t Statistics
Religious beliefs -> Openness to Exp	0.12	0.92
Religious beliefs -> Extroversion	0.17	0.95
Religious beliefs -> Conscientiousness	1.341**	8.13**

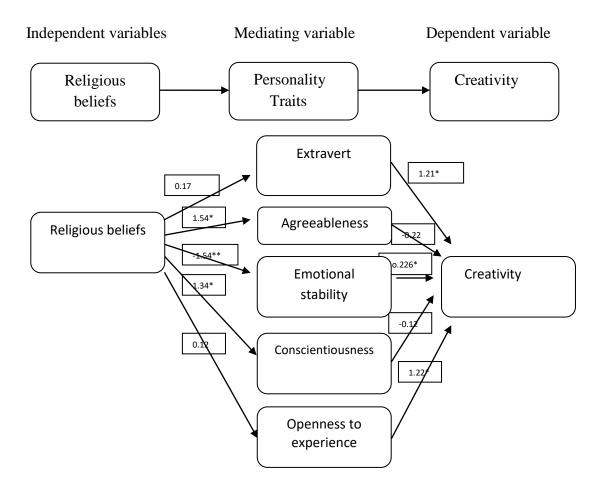


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Religious beliefs -> Emotional Stability	-1.45**	6.31**
Religious beliefs -> Agreeableness	1.54**	7.49**
Openness to Exp -> Creativity	1.22**	6.27**
Extroversion -> Creativity	1.21*	4.99*
Conscientiousness -> Creativity	-0.12	0.67
Emotional Stability -> Creativity	0.226*	2.16*
Agreeableness -> Creativity	-0.22	0.65

<sup>\*</sup>p>.05, \*\*p>.001

Results in Table 2 present the beta coefficients and t-values for the hypothesized paths. Findings entail that religious beliefs significantly predicts the traits of conscientiousness, agreeableness and emotional stability. Results further shows that extroversion, openness to experience traits are significantly predicting the creativity.





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Table 3

Sobel Test Showing Mediation effect of Personality Traits for the relationship between Religious beliefs & Creativity

Paths	$B_A$	$SE_A$	$B_{B}$	$SE_B$	Sobel Test	P
RB→OPE →C	1.34	0.28	0.32	0.17	5.14	0.00*
RB→EXT—C	1.16	.243	.040	.143	4.65	0.00*
RB→CON→C	0.17	0.18	0.12	0.18	0.54	0.15
RB→EMO→C	2.201	.452	32	.226	0.01	0.18
RB→AGR → C	-0.17	0.19	0.22	0.26	-0.61	0.03

<sup>\*</sup>p>.001

Table 3 indicates the mediation effects of five personality traits between the relationship of religious beliefs and creativity. Findings reveal the significant mediating role of openness to experience and extroversion in the association of religious beliefs and creativity.

#### **Discussion:**

In the present study we explored the relationships among students' religious beliefs, big five personality traits, and creativity. The study basically aimed to know whether religious beliefs has any connection to personality traits (emotional stability, extroversion, agreeableness, conscientiousness, and openness to experience) and creativity. We found the significant negative relationship between religious beliefs and creativity. These findings entail that when student who perform and act with religious beliefs, they can prove themselves as creative persons. The hypothesis stated in a manner explaining the predictive role of religious beliefs in creativity has been supported in the current study.

This finding is consistent with the previous researches that claim for the same connection between religious beliefs and creativity like according to previous researches data showed that basic religious beliefs have a significant negative correlation with neuroticismas shown by previous researches it was anticipatedd that participants who exhibit high inclusion of transcendence and accurate understanding of religious content would be correlated with lower creativity. (Nguyen, 2012). A significant positive relationship with extraversion, conscientiousness, openness and agreeableness Also, the results of the regression analysis showed that basic religious beliefs can anticipate neuroticism, extraversion, agreeableness and conscientiousness, but they cannot anticipate the openness factor significantly. (Khoynezhad, 2012)

Findings pertaining to another path suggesting the association between religious beliefs with personality traits revealed that the constructs of religious beliefs and big five personality traits have associations with each other. We found that religious beliefs was significantly positively correlated with personality traits of extroversion, emotional stability, and agreeableness, while is significantly negatively correlated with openness to experience. However, no connection has been found between religious beliefs and conscientiousness.



#### Conclusion

By investigating the previous literature and in light of the current study, it does appear reasonable to deduce that religious beliefs is a consistent predictor of creative behaviors. It was explored that individual differences in personalities in general also affect creativity patterns. However, all dispositional traits are not the significant determinants of creativity. In relation to the Big Five personality characteristics, some predictors (e.g., conscientiousness, agreeableness and emotional stability) were found more substantial as compared to others. Study also proposed that one agreeableness, openness to experience and, conscientiousness personality dimension from the Five Factor Model were not always enough to anticipate the creative behaviour. This study has shed light on an interesting finding that openness to experience and extroversion mediated the relationship of religious beliefs and creativity. It does mean that religious beliefs when is combined with personality traits of openness to experience and extroversion produce the creative students.

#### **Limitations and Suggestions**

The study has made several interesting findings to understand the role of personality characteristics in religious beliefs and creativity, the study also acknowledge its limitations. The sample size and sampling technique are the threats to the external validity of the findings and the results have no potential to be generalized to the whole population of students. Therefore, the future study should involve larger sample through random sampling selection. Further as tis study measures the religious beliefs and creativity via self report measure which would be biased by responders so, further researchers should use other parameters for getting second opinion in this aspect this study has just explored the big five personality traits while many other personality dimensions need to be examined in the context of religious beliefs and creativity. For instance, optimism vs. pessimism, Type A/B, and internal vs. external causal attribution should be investigated in respect to creativity. On the basis of these findings the behaviors of creative students can be interpreted in the light of their levels of religious beliefs and type of personality. Therefore, it is recommended that all other personality traits should be consider in next researches plus besides religious beliefs other religious orientations and practices should be in consideration.

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