ABSTRACT

Religiosity is something available to every person, therefore it might be correlated with personality and maturity; this, however, should not be said about causality. This article shows that no matter what aspects of religiosity are studied, religiosity is always more than personality, hence the findings of many authors yield conflicting results. The research presented here serves to explain this problem from the perspective of examining the relationship between religiosity and personality and pseudo-religiosity and maturity. In the first study, Polish university students who declared to be believers and members of the Roman Catholic Church were examined using the Personality Inventory (NEO-FFI) and Scale of Personal Religiosity in order to investigate a relationship between some aspects of religiosity and personal traits. On the other hand, a second study shows that most members of charismatic groups, identified as pseudo-religious, exhibit personality immaturity. In this study pseudo-religious individuals were examined using the Personality Maturity Questionnaire (DoM) based on the Maslow Theory of Personality Maturity.

KEYWORDS: personality traits; religiosity; pseudo-religiosity; maturity.

* Correspondence regarding the paper should be sent to: Anna M. Noworol OV (ORCID: 0000-0001-5459-5247), Pontifical University of John Paul II in Kraków, e-mail: zagrozeniaduchowe@onet.pl; or Stanisław Głaz SJ (ORCID: 0000-0002-2342-0345), Jesuit University Ignatianum in Kraków, ul. Mikołaja Kopernika 26, 31-501 Kraków, e-mail: zjglaz@cyf-kr.edu.pl.
Religiosity and personality traits

Religiosity and pseudo-religiosity

Religiosity is understood in various ways within the field of psychology of religion. However, religiosity is always closely tied to a particular religion and culture (Argyle, 2000). According to Allport and Ross (1967) religiosity consists in a very personal approach of a human being to divinity and can be considered as a factor motivating human activity.

Personality is ambiguously related to religiosity. Priests and religious are generally more religious than laymen, but they display different personality traits and varying degrees of maturity. According to research conducted under the auspices of the NFDK from 2017–2021 (Noworol, 2022), personality does not condition religiosity, but it is related to choosing and living a particular career path. Namely, among others, introverts find themselves mainly in cloistered orders (male or female), diocesan priesthood, individual forms of consecrated life, while extroverts in active religious orders. Furthermore, in order for a person to be happy in a given vocation, and not to leave, it is important not only the charism of the founder (religious aspects), but also the practical activities that a person performs in his/her order, because the professional preferences, e.g., to be a catechist, nurse, etc., are preserved in a person consecrated to God, in a similar way as they are manifested by the laity. It seems that the main reason for leaving religious orders, e.g. during the postulancy, is disregard for the individual needs of the candidates, such as professional preferences and religious preferences regarding specific aspects of experiencing one’s religiosity. On the other hand, it is often forgotten that Jesus said, “It was not you who chose me, but I who chose you” (John 15:16), so if God wanted man to become a Roman Catholic Priest or deacon, He would have made him male (Gen. 1:27). What is most contrary to the growth
of vocations, however, is religious syncretism and the creation of a kind of “communism of religions”, i.e., an erroneous view that everything is for everyone, which leads to many errors and distortions because the laity (including potential candidates for the consecrated life) cease to see the sanctity of celibacy and the value of dedicating one’s life to God, resulting in fewer vocations, and even worse, the spread of slanders against innocent Priests and the erroneous tendency to lump Christians together, ignoring the important differences between the Roman Catholic faith and other beliefs (Noworol, 2022).

Taking into account the fact that religiosity is understood differently by the authors of studies, depending on which aspects of religiosity they take into account and which religion their research refers to, they make different operationalizations. Moreover, some of them include representatives of different religions in their research, on the basis of the same operationalisation, without taking into account differences between religions. For example Zinnbauer, Pargament, and Scott (1999) state that religiosity is the individual or collective search for signs of holiness within organized religious traditions, both Christian and non-Christian denominations. Glock and Stark (1965), identified five different elements of religiosity in which it can express itself. They claimed that religiosity consists of five common and relatively autonomous dimensions. These are: religious convictions (the ideological dimension), religious practices (cult and prayer), religious experience, religious knowledge (the intellectual dimension) and the consequences of religiosity. This concept of religiosity is complementary to Allport’s concept. However, Huber (2003), inspired by Glock’s idea (Glock, 1962), considers religiosity as a system of an individual’s construct, which unifies psychological entity, merging the core dimensions. The relationship between the sociologically defined core dimensions and the psychologically defined system of personal religious constructs can be described as follows: a) intellectual dimension, b) ideology dimension,
c) public practice, d) private practice, and e) religious experience. These five factors of theoretical religiosity, defined as core dimensions of religiosity, are measured using the Huber’s Centrality of Religiosity Scale (CRS) (Huber & Huber, 2012). Jaworski (2006), in turn, referring to Christian religiosity, defined it as a subjective attitude of the human being towards God and the supernatural, visible in chosen aspects, which he operationalized as four factors: 1. faith connected with human familiarity with God; 2. morality, which describes the degree to which a believer’s moral behavior is consistent with their religious convictions; 3. religious practices, which refer to gaining knowledge about God; 4. religious self (self-identification), which defines the consciousness as the closeness of God’s presence. Any religiosity, however, must be considered in absolute relation to the denomination in question thus, research on religiosity in general, or Christians, “lumped together”, does not provide unequivocal conclusions.

The phenomenon of pseudo-religiosity is important because false religiosity, for reasons including selfish goals, social status, or sociability, is practiced in pseudo-religious groups that often call themselves charismatic. These need to be distinguished from the fact that there is something in the Church called a charism, and it is a manifestation of God’s grace, a special gift of God – special talents that come from God. True charisms can be ordinary or extraordinary, and they occur in connection with the Church (Strzelczyk, 2013; Słownik Języka Polskiego, 1978; Czyżewski, 2017, Catechism of the Catholic Church, no. 2003). And true charisms come from the Holy Spirit (1 Cor. 12:3–11). The Holy Spirit grants the gifts of: wisdom of the word, cognition, prophecy, discerning spirits, working miracles, healing, tongues, or interpreting tongues (1 Cor. 12:4–11). Exorcists also have God-given power to cast out evil spirits (Mark 16:17, Mark 6:7, Matthew 10:1–8, Mark 3:14–15, Luke 9:1). An exorcist can be a Bishop or a Catholic Priest. Only Priests are true exorcists and only they may perform exorcisms (Code of Canon Law, cann. 1168, 1172). And although some
healings happen very slowly, Priests exorcists save very many people (Amorth, 1999). At the same time, besides true charisms, there appear false ones, i.e., a host of people who are either impostors or not fully sane (people given to delusions) or under the influence of evil spirits, create a plague of false charismatics. For this reason, prudence is needed in evaluating what appears at first glance to be a charism. False charismatics take advantage of the fact that many people seek inappropriate uniqueness, find the Church boring, do not believe in the existence of evil spirits, seek health no matter what, or seek “church” groups while remaining in sin and hypocrisy, which attracts to charismatic groups and other false charismatics (Noworol, 2020; Amorth, 2007). Meanwhile, there is already a warning in Scripture not to believe in the possibility of a lay exorcist (Acts 19:11–16). Lay people, who claim to be “exorcists”, are simply frauds, who “perform exorcisms” for money, and people acting in bad faith, whose actions boil down to hidden occultism and spiritism. Such false exorcisms, performed by unauthorised persons, are a source of serious danger for the soul and the body, they have no power to release, and usually have the opposite power. Contacting these “healers” is dangerous (Noworol, 2020). A similar principle can be applied to prayer for healing; without at least indirect supervision by a Priest, it is possible to end up in a meeting of a sect or other pseudo-religious group (Olszewski, 2013; Noworol, 2018, 2020). Among false charismatics there are many who use occult gifts, which, for example, are the cause, the means of “healings” caused by evil spirits. But such a healing coming from the devil is illusory, because evil spirits are the cause of diseases, which sooner or later also appear after illusory healings (Job 2:7, Luke 13:10–17; Noworol, 2018, 2020; Amorth 2007). Sometimes healers use methods seemingly as if it were a prayer for healing. False charismatics are either frauds or sorcerers working by the power of evil spirits, that is, by demonic gifts. In both cases it is not the work of the Holy Spirit.
Another sign by which one can recognize false charismatics is religious syncretism, esotericism, religious hypocrisy (Noworol, 2020; Amorth, 2007). And, for example, there appear in the groups of the Renewal in the Holy Spirit people after the initiation of reiki, who want the Holy Spirit to perfect in them the method of reiki healing by attending a Renewal seminar (Pindel). The Renewal poses a great threat for people with little knowledge of religion in that they may wrongly separate the Persons of the Holy Trinity (and treat Them as, for example, the elements of the Ying-Yang symbol, which is essentially blasphemous because the one God, the Father, the Son, and the Holy Spirit never do evil). The view that the Holy Spirit is the author of absolutely everything (which some generalize as “everything means also evil” – in fact, evil is done by evil spirits and people who obey them), which is contrary to the obvious fact that the Triune God is never the cause of evil – God is always good. This is how some Renewal groups, meeting in their own circle but without the supervision of a Priest, lead people, consciously or not, into great errors and distortions. In defense of the legitimacy of the Faith against various pseudo-religious meditations and tendencies, the Congregation for the Doctrine of the Faith has issued the Letter to the Bishops of the Catholic Church on Certain Aspects of Christian Meditation *Oracionis formas* (15 Oct. 1989), stressing that in the Christian view, especially in the Catholic one, meditation is closely linked to prayer, which is always defined by faith and takes the form of a personal, interior, profound dialogue between man and God. Deep prayer and transcendental meditation (similarly, the Silva method and yoga) do not fit into the religious dimension of meditation and do not meet the conditions for Catholic meditation (Pawłowicz, 1997). There are also many different sects of a religious and pseudo-religious nature; their leaders create their own systems of ideology. False charismatics separate themselves from the Church, openly acting against God and the Church, especially through satan worship, heresies, and
anti-clericalism. In addition to overt heresies, false charismatics profess, or preach, views contrary to the teaching of the Church and the dogmas of Catholicism, e.g., they refer to the supposed existence of reincarnation (reincarnation is simply an impossible hypothesis; reincarnation does not exist (Amorth, 1999; Noworol, 2018), since man is given once to die and then judgment (Heb. 9:27); to the dualism of good and evil. For false charismatics, faith is indifferent or hinders them, e.g. when they use demonic powers, they do not succeed in performing their “healings” on people who pray with faith. And sometimes they separate themselves from the Church secretly, by deceitfully invoking Priests; they seemingly invoke God, separating Him from the Church, or from the principles of the Catholic faith; they consider their activity as spiritual; they refer to fragments of the Bible (e.g. “out of context”); they often practice religious syncretism. False people, characterized by pride and hypocrisy, sometimes also pretend to have charisms, such as the gifts of healing, tongues, joviality and rest, which are then the result of deception. It also happens that various phenomena may be illusions. People who succumb to illusions and deceivers want to use charisma to attract attention to themselves, having excessive emotionality, which leads them to elitism, isolation, and even sectarianism (Falvo, 1995; Noworol, 2018, 2020). False charisms, of hallucinogenic, fraudulent or demonic origin, come from the fact that people want gifts in a somewhat simplistic way, without God, conversion, work on oneself, the Church, or faith (Markielowski, 2013). And so, detached from the fundamental context, that is, from serving the truth about the real presence of Jesus in the sacraments, in prayer, and in the Word, charisms (often pretended), instead of being a gift for the Church, become dangerous tools in the service of human pettiness, pride, and disordered ambition; and there is more in them shallow emotionality, psychological self-elevation, and the illusion of one’s own uniqueness than the authentic work of the Holy Spirit. False charismatics are often people who seek
their own uniqueness, looking for novelty and sensationalism, finding the Church boring. And their desires usually express a desire to rise above others and pride; sometimes, at best, it is a kind of search for God resulting from an inability to pray and an excessive focus on one’s own emotions; but very often it is an expression of immaturity, since charismatic groups are often populated by immature people, sometimes unable to cope with problems; and if there is a lack of supervision by priests in these groups, there is often a psychologizing of theological problems, or telling members that the whole world is supposedly obliged to compensate them for some past wrongs; as a result of one or the other of these errors, the groups contribute to the deterioration of the souls of these persons. In addition, it causes confusion in the Church, disunity, and even depravity (Strzelczyk, 2013). Out of this multifaceted immaturity comes a great deal of lay interest in charismatic groups, which, albeit ecclesiastical in principle, in practice leave a lot of controversy. And great prudence is needed in distinguishing them in each individual case. If a charism is true, it serves the good not only of the person gifted with it, but also of other people and the Church (Czyżewski, 2017). True gifts of the Holy Spirit serve the realization of a vocation (Gogola, 2005). The measure of the genuineness of a charism is love for God (true love for God consists in fulfilling His commandments (1 John 5:3) without hypocrisy; God comes first, the primacy of God is absolute) and some usefulness for one’s own or others’ salvation (a charism is to serve the Church). Therefore, one should approach these phenomena and their evaluation with caution. Man cannot pray abstractly, because prayer is a conversation with God (Gogola, 2005; 1 Cor. 14:1-40). Sometimes it is possible to immediately assess whether a charism is a true gift of the Holy Spirit or is a devilish gift or deception, but usually it requires a longer period of time and careful evaluation. The best criterion for evaluation is Jesus’ “by their fruits you will know them” (Matt. 7:16). But we must wait for the fruits, sometimes
even for years. First of all, God protects us from the trap of false charismatics, so the most important thing is to live in sanctifying grace, to receive the sacraments and to pray. The judgment on the authenticity of charismatics belongs to the hierarchy of the Church (Falvo, 1995; Noworol, 2018). Besides, in trouble and sickness, prayer will always help the soul, even if it does not heal the body (Sir. 38:1–15, James 5:14–15). For the healing of the soul, prayer and a good confession are often enough to make problems disappear; however, if this does not happen, then one should go to an exorcist Priest, but never to a healer, magician, or the like (Olszewski, 2013; Noworol, 2020).

**Personality traits**

Personality traits refer to relatively stable elements of personality. One of the pioneering trait psychologists, Allport (1937) described traits as organized mental structures, which influence person behavior. He suggested that some traits are common for everybody and others are specific to only certain individuals. From the contemporary perspective, traits are closely related to the process of measurement, necessary to identify basic personality dimensions. Debate of primary traits must begin with the work of Cattell (1962), who claimed that behavior depends on the factors of motivational and situational nature. By applying the factor analysis he managed to prove the existence of sixteen primary trait constructs and on the basis of which he developed the Sixteen Personality Factor Questionnaire, 16PF (Cattel et al., 1970). Another important approach is the Eysenck model which comprises three broad personality factors: Neuroticism, Extraversion-Introversion, and Psychoticism (Eysenck & Eysenck, 1991). Cattell’s version of 16PF became a standard personality measure. Secondary factors derived from the primary 16PF (Chernyshenko et al., 2001) seem to reveal some correspondence to the personality Five Factors Model (FFM) (McCrae & Costa, 1990).
Thus, developing the trait theories proposed and empirically proven by Allport (1937) and Norman (1963), among others, the FFM is the product of several decades of research on these psychological traits. Generally stated, the FFM can be understood as a descriptive taxonomic theory of normal personality traits, which is built of five relatively independent dimensions (Digman, 1994). The names given to these dimensions sometimes differ. The five factors are frequently labeled Extraversion (E), Agreeableness (A), Conscientiousness (C), Neuroticism (N), and Openness (O) (McCrae & Costa, 1997; Loehlin et al., 1998). In their opinion, human personality consists of five relatively permanent traits:

1. Neuroticism (emotional instability): a trait that mirrors emotional adaptation versus emotional instability and which describes the tendency to experience negative emotions and the vulnerability to psychological stress.

2. Extraversion: a trait which refers to the quality and quantity of social interactions and the level of activity, as well as to the capability to experience positive emotions.

3. Openness to experience: a trait that indicates seeking for novelty (cognitive curiosity).

4. Agreeableness: a trait that depicts a person’s attitude to other people, e.g. reflected in altruism, submission.

5. Conscientiousness: a trait that defines the degree of a person’s organization, determination and motivation in goal-oriented actions. In McCrae and Costa’s view (1992) the distinguished traits really exist. They are significant for the individual’s adaptation to the environment, for instance conscientiousness is the main indicator of the quality of one’s professional work and academic achievements, and it is also related to life satisfaction. They are universal and stable, meaning independent of one’s race, gender or cultural background, and biologically determined (Bouchard & Loehlin, 2001; McCrae & Costa, 1997; Wiggins & Trapnell, 1997; Yamagata et al., 2006).
Maslow, on the other hand, distinguished the characteristics of a mature personality. The characteristics of self-actualizing people are: clearer perception of reality, greater openness to experience, increased integration of the person, spontaneity (as naturalness) and expression, good functioning, real consciousness (self)-decided identity and autonomy and uniqueness, increased objectivity and detachment, creative ability, ability to combine the concrete with the abstract, democratic character structure, and capacity for love (Maslow, 1986). Next, the characteristics of mature people are: realistic attitudes, acceptance of self and others, spontaneity, concentration on a problem, need for seclusion, autonomy, unconventional evaluation of people and things, mystical experiences, identification with humanity, close relationships with others, democratic attitudes, not confusing means with ends, philosophical and non-malicious sense of humor, creative abilities, independence from culture, rising above the environment. Self-actualizing individuals are rare in society, their lives are subordinated to higher values (Hall & Lindzey, 1998).

Religiosity and personality

Saroglou (2002) reviewing studies on religiosity and personality reported that some aspects of religiosity are significantly related only to high agreeableness and conscientiousness. Taylor and MacDonald (1999) conducted the study to examine the relation of religiosity, concerning such aspects as religious orientation, religious affiliation and religious involvement to the five factor model of personality as measured by the NEO-PI-R. The study was conducted on a religiously heterogeneous sample of Canadian university students (302 males and 827 females; $M = 20.98$, $SD = 4.13$). Results indicate that Agreeableness and Conscientiousness are significantly related to and affected by religion as measured across all measures: demographic sheet, NEO-PI-R and Religious Orientation Scale (ROS) (Allport & Ross, 1967). Neu-
roticism was found to differ as a function of religious affiliation. Significantly higher scores were indicated, particularly by females, reporting no-religion than those declaring any religion for their affiliation. Extraversion did not significantly relate to any aspect of religiosity measured by ROS. Openness was significantly negative correlated with a measure of extrinsic religious orientation, only.

Chosen aspects of Christian religiosity of examined women students measured by Jaworski’s SPR in Bukiš (2009) study show high level of Faith ($M = 4.6$) and Religious Practices ($M = 5.0$), and average level of Morality ($M = 4.2$), and Religious Self ($M = 3.8$).

Familiar studies conducted by Franczyk (2009) revealed that some aspects of Christian religiosity in examined women students measured by Jaworski’s SPR have high level of Faith ($M = 5.6$), Morality ($M = 5.1$), Religious Practices ($M = 5.0$) and average level of Religious Self ($M = 4.3$). In the same studies personality traits measured by McCrae & Costa’s FFM show high level of Extraversion ($M = 6.2$), Agreeableness ($M = 6.6$), Conscientiousness ($M = 7.3$), and Openness ($M = 6.2$) while average level of Neuroticism ($M = 5.0$). All aspects of religiosity correlate positively with Extraversion, Agreeableness, Conscientiousness, Neuroticism ($r = 0.19, -0.34, p < .05$). None of the personality traits correlates significantly with Openness.

Other studies conducted by Soiński (2010) show that examined woman students by Jaworski’s SPR reveal a high level of Faith ($M = 5.6$), Morality ($M = 5.8$), Religious Practices ($M = 5.7$) and Religious Self ($M = 6.0$), and a high level of Agreeableness ($M = 6.4$), and an average level of Extraversion ($M = 5.2$), Conscientiousness ($M = 5.8$), Neuroticism ($M = 5.1$), and Openness ($M = 5.3$).

The mentioned research deals with many studies related to the relationship between personality traits and various aspects of religiosity in many religion traditions (Głaz, 2015a, 2015b). However, there are not many studies in the literature that concern research on personality traits and religiosity aspects members of the Roman Catholic Church. Głaz (2006, 2019) conducted a study on relation-
ship of FFM and religious experience. The study concerns the relation of religion experience measured by the Scale of Religion Experience (SRE), containing two factors: experience of God’s presence, and experience of God’s absence (Głaz, 2006) and personality measured by FFM (McCrae & Costa, 1990). The sample comprises 134 students (70 men and 64 women) who declared to be Roman Catholics. The study revealed the significant relation between experience of God’s presence and Conscientiousness, Agreeableness and Openness to experience, and between experience of God’s absence and Extraversion in the group of men. However, in the group of women the experience of God’s presence is significantly related to the Conscientiousness, and the experience of God’s absence is significantly related to the Openness to experience.

The findings of the research on the relationship between personality traits and various aspects of religiosity conducted so far are ambiguous. However, the strong rational for present study is statement of McCrae and Costa (1997), who supposed that religiosity is a cultural adaptation resulting from the FFM of personality traits. Further studies confirm to some degree the belief of McCrae and Costa, and reveal that Conscientiousness and Agreeableness are related to some aspects of religiosity (Aghababaei, 2012; Saroglou, 2010; McCullough et al., 2003). Another reason is that due to the current qualitative studies, it is a tendency of young people in Poland to move from the institutional aspects of religiosity to very personal approach of a human being to divinity and is considered as one of the factors motivating human activities (Mariański, 2001). It seems quite normal for students living in a country with a deep Catholic tradition, where 93% of the population declares to belong to the Roman Catholic Church. Youth entering adulthood is looking for answers to fundamental questions, while adopting new social roles (Klinkosz & Iskra, 2008, 2010).
Purpose of the article and hypotheses

The main purpose of the article is to show that personality does not condition religiosity, and that any relationship between personality and religiosity depends on the bilateral operationalization of these concepts. In addition, it is important to see who the subjects are because by depending on that you may get different results even with the same operationalization. In this connection, two empirical studies are presented. The first one shows correlations between certain personality traits and some aspects of religiousness in a specific group of people claiming to be believers. In contrast, the second study was intended to empirically verify the theoretical assumptions that personality immaturity is linked to pseudoreligiosity, because, as discussed earlier, the community of people professing one faith includes pseudoreligious individuals.

Hypotheses

The following hypotheses are formulated:

Hypothesis 1. University students reveal a high level of Conscientiousness and Openness to experience.

Hypothesis 2. University students reveal a high level of Faith and high level of Religious Self.

Hypothesis 3. Personality traits are statistically significant related to aspects of religiosity among university Catholic students.

Hypothesis 4. Pseudo-religious people (members of charismatic groups) reveal a low level of personality maturity.
METHOD

Participants
In one study a sample of 105 university students was surveyed. The participants were studied in their fourth and fifth college years, and their age ranged from 22 to 25 years (\(M=22.9, SD=2.09\)). All the students were female and studied humanities at the Jesuit University Ignatianum, a private school in Kraków. All of them were Polish natives. They declared to be believers and members of the Roman Catholic Church.

The second study examined 173 individuals who were members of charismatic groups. The sample included 102 females and 71 males aged 18–32 years (\(M=25.0, SD=4.47\)). All of them were Polish natives, and they declared to be members of the Roman Catholic Church. A criterion was used to select pseudo-religious individuals. The criterion consisted of 10 survey questions.

Procedure
In order to collect empirical data the first study was conducted in 2015 in Kraków among female students of humanities at a private university, and the sample consisted of 119 students. 14 questionnaires (either NEO FFI or SPR) were completed only partially, which excluded the students from the study. For further analysis a sample of 105 questionnaires was used, completed by students who provided answers to all the items. The examinees filled optional questions concerning their personal faith and church membership.

The second study was conducted in 2017 in Poland to verify Hypothesis 4, on 173 charismatic group members surveyed. In this study, pseudo-religious individuals were examined using the Personality Maturity Questionnaire (DoM) based on the Maslow Theory of Personality Maturity. The missing responses were estimated.
Measures
Personality Inventory (NEO-FFI) by Costa and McCrae (the Polish adaptation of NEO-FFI was done by Zawadzki, Strelau, Szczepaniak, and Śliwińska [1998]) was used to measure scores on the standard “big five” personality traits: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The scores are recalculated to the sten scale. The low scores are below 4, average from 4 to 6, and highs over 6. The internal consistency reliability of the Polish adaptation of NEO-FFI was generally adequate (Cronbach alphas: Neuroticism – 0.80, Extraversion – 0.77, Openness – 0.68, Agreeableness – 0.68, and Conscientiousness – 0.82). In the reported research Cronbach alphas are from 0.62 to 0.79.

Relevant aspects of Christian religiosity of the examined students was measured by Jaworski’s Scale of Personal Religiosity, SPR (2006). It was constructed on the basis of the four theoretical aspects of Christian religiosity. The reliability and validity of the SPR was examined on the sample of 480 questionnaires filled by Roman Catholic students. The pre-questionnaire comprised 51 statements. The students were asked to rate their responses to each statement on the Likert 7 point scale (from 1 = strongly disagree to 7 = strongly agree). The law scores are below 3.5, average from 3.5 to 4.5, and high scores are over 4.5. All data were subject to factor analysis. The items with loadings exceeding 0.4 were taken into account. The final scale (SPR) comprises thirty statements. The scale comprises four factors: 1. Faith (8 items), 2. Morality (7 items), 3. Religious Practices (9 items), and 4. Religious Self (6 items). Cronbach’s alpha coefficients of internal consistency were from 0.81 to 0.93. The scale was tested on several samples in Poland only, therefore all results refer to a single population (Jaworski, 2006; Chaim, 2000). The correlation coefficients between factors are positive (0.51 to 0.62). The reliability of the scale estimated by the test–retest method (in the period of 3 weeks) was $r=0.69$ to $r=0.85$ between subscales.
The measures of personality maturity was done using DoM questionnaire by Noworol, based on the Maslow Theory of Personality Maturity. The questionnaire consists of 42 items. Each one is scored on the 4-point scale spread from definitely no to definitely yes. It contains questions measuring level of personality maturity. Scores were converted to sten scores of 9–10 high (high maturity), 4–8 medium (average maturity), 1–3 low (immaturity).

In the reported studies, Cronbach’s alpha coefficient of internal consistency was 0.889, and standardized alpha was 0.895.

**Analysis and results**

In order to measure the strength of the relationship between variables the Pearson’s $r$ correlation coefficients were calculated. Moreover, to show the relationship between personality traits and some aspects of Christian religiosity of university students that is to study the impact of the independent variables on the dependent variables the procedure of multiple regression analysis was applied.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean value</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personality Inventory NEO FFI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>6.2</td>
<td>1.09</td>
</tr>
<tr>
<td>Extraversion</td>
<td>6.5</td>
<td>1.84</td>
</tr>
<tr>
<td>Openness</td>
<td>4.2</td>
<td>1.59</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>5.4</td>
<td>1.31</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>6.2</td>
<td>0.77</td>
</tr>
<tr>
<td><strong>Scale of Personal Religiosity SPR</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith</td>
<td>4.2</td>
<td>0.99</td>
</tr>
<tr>
<td>Morality</td>
<td>3.7</td>
<td>1.10</td>
</tr>
<tr>
<td>Religious Practices</td>
<td>3.9</td>
<td>0.89</td>
</tr>
<tr>
<td>Religious Self</td>
<td>3.2</td>
<td>1.12</td>
</tr>
</tbody>
</table>

Table 1. Mean values and standard deviations obtained from the Personality Inventory (NEO-FFI) and from the Scale of Personal Religiosity (SPR).
Table 2. The results of the Pearson’s $r$ correlations within the Personality Inventory (NEO-FFI) as well as between it and the Scale of Personal Religiosity (SPR).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Faith</th>
<th>Morality</th>
<th>Religious Practices</th>
<th>Religious Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>0.15</td>
<td>0.103</td>
<td>0.11</td>
<td>0.02</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.16</td>
<td>0.21*</td>
<td>0.16</td>
<td>0.17</td>
</tr>
<tr>
<td>Openness</td>
<td>0.11</td>
<td>0.38***</td>
<td>0.35***</td>
<td>0.31**</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>–0.03</td>
<td>–0.21*</td>
<td>–0.18</td>
<td>–0.26**</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.18*</td>
<td>0.27**</td>
<td>0.21*</td>
<td>0.17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Neuroticism</th>
<th>Extraversion</th>
<th>Openness</th>
<th>Agreeableness</th>
<th>Conscientiousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuroticism</td>
<td>1.00</td>
<td>–0.20*</td>
<td>0.14</td>
<td>–0.38***</td>
<td>–0.26**</td>
</tr>
<tr>
<td>Extraversion</td>
<td>–0.20*</td>
<td>1.00</td>
<td>0.21*</td>
<td>0.17</td>
<td>0.27**</td>
</tr>
<tr>
<td>Openness</td>
<td>0.14</td>
<td>0.21*</td>
<td>1.00</td>
<td>0.15</td>
<td>–0.39***</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>–0.38***</td>
<td>0.17</td>
<td>0.15</td>
<td>1.00</td>
<td>0.22*</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>–0.26***</td>
<td>0.27**</td>
<td>–0.39***</td>
<td>0.22*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001.
The results from current research focus the relation of personality measured by NEO-FFI and chosen aspects of religiosity, measured by SPR. The means and standard deviations for the measures are given in Table 1.

As can be seen in Table 1, the studied group of students reveal the average level in Openness and Agreeableness, and the high level in Extraversion, Neuroticism and Conscientiousness. In addition, the aspects of religiosity are on the average level, except Religious Self, which is on the low level.

To investigate the relations between personality traits, measured by NEO-FFI and aspects of the students’ Christian religiosity, measured by SPR, the Pearson correlations were calculated (Table 2).

As indicated in Table 2, Conscientiousness is significantly correlated with the Morality scores \( r = 0.27 \) and with Faith \( r = 0.18 \), and Religious Practices \( r = 0.21 \). They have a positive relationship. Openness has a significant correlation with Morality \( r = 0.38 \), Religious Practices \( r = 0.35 \), and Religious Self \( r = 0.31 \), and they are positive. Extraversion is significantly positively correlated with Morality \( r = 0.21 \). However, Agreeableness is significantly negatively correlated with Morality \( r = -0.21 \) and Religious Self \( r = -0.26 \).

The interrelations within the personality traits, measured by NEO-FFI show seven significant correlations. Neuroticism correlates with Extraversion \( r = -0.20 \), Agreeableness \( r = -0.38 \) and Conscientiousness \( r = -0.26 \). Extraversion correlates with Openness \( r = 0.21 \) and Conscientiousness \( 0.27 \). Openness correlates with Conscientiousness \( r = -0.39 \), and Agreeableness correlates with Conscientiousness \( r = 0.22 \).

In order to show the relationships between personality traits, measured by NEO FFI and the chosen aspects of university students’ Christian religiosity, measured by SPR, the multiple regression analysis was conducted.

Personality traits, were the independent variables and the aspects of Christian religiosity were the dependent variables. Two
Table 3. The results of multiple regression analysis for the Personality Inventory (NEO-FFI) and the Scale of Personal Religiosity (SPR).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression summary for dependent variable: Morality</th>
<th>( R = 0.53, R^2 = 0.28, \text{Adjusted } R^2 = 0.24, F(5, 99) = 7.62, p &lt; 0.01, ) SE of estimate = 1.06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>( \beta ) \quad \text{SE} \ \beta \quad b \quad \text{SE} b \quad \text{Partial} \quad \text{correl.} \quad \text{Semi-partial} \quad \text{correl.} \quad R^2 \quad t(99) \quad p )</td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-0.36 \quad 0.09 \quad -1.16 \quad 0.30 \quad -0.36 \quad 0.11 \quad 0.16 \quad -3.82 \quad &lt; .01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.33 \quad 0.09 \quad 1.18 \quad 0.33 \quad 0.33 \quad 0.09 \quad 0.17 \quad 3.53 \quad &lt; .01</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression summary for dependent variable: Religious Practices</th>
<th>( R = 0.46, R^2 = 0.22, \text{Adjusted } R^2 = 0.18, F(5, 99) = 5.48, p &lt; 0.01, ) SE of estimate = 0.68</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>( \beta ) \quad \text{SE} \ \beta \quad b \quad \text{SE} b \quad \text{Partial} \quad \text{correl.} \quad \text{Semi-partial} \quad \text{correl.} \quad R^2 \quad t(99) \quad p )</td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-0.32 \quad 0.10 \quad -0.63 \quad 0.19 \quad -0.31 \quad 0.08 \quad 0.16 \quad -3.25 \quad &lt; .01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.32 \quad 0.10 \quad 0.72 \quad 0.22 \quad 0.32 \quad 0.09 \quad 0.17 \quad 3.32 \quad &lt; .01</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Regression summary for dependent variable: Religious Self</th>
<th>( R = 0.47, R^2 = 0.22, \text{Adjusted } R^2 = 0.18, F(5, 99) = 5.67 p &lt; .01, ) SE of estimate = 0.81</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreeableness</td>
<td>( \beta ) \quad \text{SE} \ \beta \quad b \quad \text{SE} b \quad \text{Partial} \quad \text{correl.} \quad \text{Semi-partial} \quad \text{correl.} \quad R^2 \quad t(99) \quad p )</td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>-0.36 \quad 0.09 \quad -0.87 \quad 0.23 \quad -0.35 \quad 0.11 \quad 0.16 \quad -3.76 \quad &lt; .01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.33 \quad 0.10 \quad 0.88 \quad 0.26 \quad 0.33 \quad 0.09 \quad 0.17 \quad 3.44 \quad &lt; .01</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Only statistically significant relationships are reported.
personality traits, Agreeableness and Openness, display significant relationships with Morality (Table 3). The relationship between Openness and Morality is positive (partial correlation = 0.33), whereas the relationship between Agreeableness and Morality is negative (partial correlation = –0.36). The regression with Morality as the dependent variable is significant with the total model multiple \( R^2 = 0.28 \). Agreeableness has squared semi-partial correlation = 0.11 and Openness has squared semi-partial correlation = 0.09. In total, this leaves approximately 0.08 of the multiple \( R^2 \) attributable to the shared variance across all predictors. In this regression, Agreeableness uniquely accounts for 39.7% and Openness uniquely accounts for 32.5% of the explained variance as represented in the multiple \( R^2 \) for the total model.

The Agreeableness and Openness have also a significant relation with Religious Practices. Openness displays a positive relationship (partial correlation = 0.32) with Religious Practices, whereas Agreeableness a negative (partial correlation = –0.31). The regression with Religious Practices as the dependent variable is significant with an overall model multiple \( R^2 = 0.22 \). Agreeableness has squared semi-partial correlation = 0.08 and Openness has squared semi-partial correlation = 0.09. In total, this leaves approximately 0.05 of the multiple \( R^2 \) attributable to the shared variance across all predictors. This means that 37% of multiple \( R^2 \) is uniquely accounted for by Agreeableness and 41.7% by Openness.

Openness and Agreeableness are the only significant predictors for Religious Self. Openness shows a positive relationship (partial correlation = 0.33) with Religious Self, whereas Agreeableness a negative one (partial correlation = –0.35). The regression with Religious Self as the dependent variable is significant with a model multiple \( R^2 \) of 0.22. Agreeableness has squared semi-partial correlation = 0.11 and Openness has squared semi-partial correlation = 0.09. This means that 50% of multiple \( R^2 \) is uniquely explained by Agreeableness and 40.9% is explained by
Openness. The remainder of multiple $R^2$ (about 9.1%) is accounted for by the shared variance of all predictors.

Regarding Hypothesis 4, it has been confirmed that immaturity of personality is related to pseudo-religiosity practiced by members of the so-called charismatic groups. As a 2017 research shows, members of charismatic groups are characterized by immaturity of personality. Of those surveyed, 87% showed immaturity of personality (low scores), and 13% had a medium score. This means that pseudo-religious people are primarily characterized by immaturity of personality.

**SUMMARY**

Religiosity is part of a person’s mental life as a whole (Głaz, 2013). Hypothesis 1, which suggests that university students reveal a high level of conscientiousness and openness to experience was partially confirmed. Investigated students show a high level of conscientiousness and an average level of openness (Table 1). The obtained results are supported in other research findings, showing that scores of conscientiousness are higher than the score of openness to experience (Franczyk, 2014; Soiński, 2010). The average level of openness to experience presented by university students seems to be slightly surprising for it could be expected that young people who are gaining knowledge at university would display greater openness to experience.

Hypothesis 2, which suggests that university students have a high level of faith and a high level of Religious Self, was not supported. Faith appears in the investigated students on the average level and Religious Self as low (Table 1). It suggests that students feel responsible for the current state of their religiosity, and they usually seek knowledge about God. However, they reveal rather moderate feeling of closeness of God. It is expected that university students who declared to be believers and live in
a country where the Catholic Religion dominates will reveal high level of the both religiosity aspects. But it turns out that students of a Catholic university might not be necessarily more religious than students of other universities.

Hypothesis 3, which states that personality traits are statistically significantly related to aspects of religiosity among Catholic University students, was partially confirmed by the results of the study. From among five personality traits only two (openness and agreeableness) have significant relationship with the aspects of female students’ Christian religiosity (Table 3). Openness displays a positive relationship with three aspects of religiosity (morality, religious practice and religious self). This suggests that with the increase of Openness to Experience there is an increase in the consistency of the student’s moral behavior, religious practices, and the feeling of God’s presence. However, Agreeableness reveals a negative relationships with the three aspects of religiosity (Morality, Religious Practice and Religious Self). It means that with increased Agreeableness also the inconsistency of the students’ moral behavior with their religious convictions increases, but conversely with religious practices and a sense of God’s presence. As stated in Hypothesis 3, which followed many studies that confirm to some degree the belief of McCrae and Costa and reveal that the conscientiousness and agreeableness are positively correlated with some aspects of religiosity (Aghababaei, 2012; Saroglou, 2002, 2010; McCullough et al., 2003), the present study however, do not support the hypothesis among Catholic university female students. It shows no statistically significant relationship with Conscientiousness but negative and statistically significant correlations with Agreeableness. The results of the studies seem to be ambiguous mainly for the reason of different definition of religion and aspects of religiosity.

This study confirms to some extent the general theoretic concepts of relationship between personality traits and some aspects of religiosity. To some extent, because Personality is not uniquely
related to Religiosity, as other studies by Noworol (2022) have shown, there are people with different personality traits among Priests, Religious, and Nuns, yet they are by definition more religious than lay people. Any study of the relationship between personality traits and religiosity looks at specific aspects of one and the other. Therefore, knowledge of personality traits can be helpful in discerning whether a person prefers group religiousness (e.g. church confraternities, parish groups) or to pray alone. Also, for example, the choice of method of catechesis depends on the personality of the catechist. The application of the method depends on his age, his approach to a given truth, to the student. An older catechist has a different style of work than a younger one. Over time each catechist should develop his own style of working with students (Chodurek). However, personality traits cannot be linked to religiosity, only to aspects of it. Also, some personality traits may be related to involvement in charitable activities (Kossowska & Łaguna, 2018), which are also carried out by church institutions. There is no such relation that religiosity depends on the personality traits because there is a bilateral relationship and many times it happens that the religiosity modifies personality traits, e.g., in the case of converts, who after his conversion radically changed his life. The well-known example would be Saint Peter, who was very timid (he renounced Jesus fearing for his life), then became a brave man (he preached the gospel in times of persecution of Christians) and died a martyr’s death (Soiński, 2010). In addition, personality traits have some relationship to entanglements with spiritual threats and pseudo-religiosity, because an evil spirit uses a person’s personality to entangle them in evil (Noworol, 2018, 2021). It may be important in pastoral counselling for members of various church and charismatics groups, especially those who seek their spiritual development.

The article shows that religiosity can only be compared between members of a single denomination; furthermore, it does not depend on or condition specific personality traits; any associations
of personality traits with religiosity are associations of certain aspects of religiosity, with some single personality trait, and furthermore, the findings of different authors may be contradictory depending on which denominations are being discussed. Ultimately, it is concluded that one cannot create a psychology of faith that would make a person’s faith dependent on earthly conditions. On the contrary, faith is something beyond any personality, temperament, character; God is one and only for everyone, no matter what personality people have; the paths to salvation are open to everyone. Christ died for all to redeem all, and Christ rose for all to give everyone the hope of resurrection (Ratzinger, 1996).

REFERENCES


Głaz, S. (2015b). The importance of the experience of God’s absence, and of
meaning in life, in the development of sensitivity of conscience among Polish
doi.org/10.3390/rel60x000x
Głaz, S. (2019). The relationship of forgiveness and values with meaning in life
org/10.1007/s10943-019-00860-4
spirituality, and personality: A multivariate analysis. *Personality and Individual
Differences, 45*(8), 703–708.
Religiosität* [Centrality and content. A new multidimensional measurement
model of religiosity]. Leske + Budrich.
Huber, S., Huber, & O. W. (2012). The Centrality of Religiosity Scale, *Religions,
*Katechizm Kościoła Katolickiego* [Catechism of the Catholic Church] (1994). Poznań:
Pallottinum.
Klinkosz, W., & Iskra, J. (2008). The Myers-Briggs typology system and the NEO4
personality structure in a Polish sample. *Polish Journal of Applied Psychology,
1*, 54–63.
Klinkosz, W., & Iskra, J. (2010). Examination of the relations of the Myers-Briggs
type indicator and the NEO-4 Personality Inventory in a Polish sample. *Psychological Reports, 107*(2), 578–586.
Kossowska, M., & Łaguna, M. (2018). Personality, job resources, and self-efficacy
Krok, D. (2015). The role of meaning in life within the relations of religious
coping and psychological well-being. *Journal of Religion and Health, 54*(6),
2292–2308. https://doi.org/10.1007/s10943-014-9983-3


Maslow, A. H. (1986). *W stronę psychologii istnienia* [Towards a psychology of existence]. Instytut Wydawniczy PAX.


Noworol, A. M. (2022) Zatroszcz się o Pasterza a pomnożą się owce [Take care of the Shepherd and the sheep will be multiplied] (in preparation).


Słoński B. J. (2010). Osobowość a nawrócenie [Personality and conversion]. Wydawnictwo UAM.


