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THE MEDIATING ROLE OF SPIRITUAL ENGAGEMENT IN THE RELATIONSHIP BETWEEN RELIGIOSITY AND RELIGIOUS COPING. CROSS-SECTIONAL STUDY AMONG POLISH STUDENTS

ABSTRACT

The coping with stress is an important skill that is vital to human functioning. Spirituality and Religiosity are also determinant factors in the life decisions, experiences, and behavior of young people, which help them take on positive or negative coping strategies in the face of stressors. The aim of this study was to determine how

spiritual engagement may mediate the relationship between an individual's religiosity and their use of religious coping strategies. A total of 342 students from two universities in eastern Poland participated in the study. The average age was 20.85 [95% CI: 20.607-21.095] years old. In the study group, 87.3% of respondents admitted to being Roman Catholic, while in declarations of faith, 65.1% said they were believers, and another 13.9% considered themselves deeply religious. The data were collected using the two standardized scales: the Brief – Religious Coping Questionnaire (Brief RCOPE) and Spiritual Attitude and Involvement List (SAIL). It was observed that positive religious coping strategies prevailed among the students surveyed. The highest-rated SAIL subscale was the Meaningfulness (4.65; 95% CI: 4.571-4.723), while the lowest was Transcendent Experience (3.28; 95% CI: 3.172-3.384). Significant positive correlations were found between the six areas of spirituality assessed by the SAIL scale and positive religious coping strategies. The results showed a significant total effect of religiosity on positive religious coping ($\beta=0,755$; $B=7.665$; $p<0.001$; 95% CI: 6.30; 8.40). The direct effect of religiosity on positive religious coping was significant ($\beta=0,562$; $B=5.706$; $p<0.001$; 95% CI: 4.85; 6.56). The effect of religiosity on positive religious coping was partially mediated by Transcendent Experiences and Spiritual Activities. The total indirect effect was 0.193 (95% CI: 0.125; 0.265). The results showed that transcendental experiences and spiritual activity were mediators in the relationship between religiosity and positive religious stress coping strategies. The mediations were partial. The introducing aspects of spirituality and religiosity into higher education programs can help students of both medical and non-medical faculties to respond to the many difficult situations of daily life and move forward with a sense of achieving their designated tasks and goals.

KEYWORDS: *spiritual attitudes; spirituality; spiritual engagement; stress; religious coping; Poland*

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1. INTRODUCTION

The period of study is a time not only of intensive intellectual development, but also the formation of spiritual and religious attitudes, as well as the search for effective ways to cope with problems. This topic is becoming increasingly relevant due to the hypothesis that in the current period of radical social change associated with many factors of developmental transformation and the global epidemiological situation, the self-identification of faith and religiosity will break down in some sectors of society, such as young people (Mariański, 2011; Niewiadomska, et al., 2022). This challenge forms a need to uncover new evidence confirming the importance of the dimensions of spirituality in dealing with the numerous problems young people face. These issues arise from, inter alia, the crisis of religious faith among young people, which often manifests itself in a lack of trust in the institution of the Church (Choczyński, 2018).

Spirituality and Religiosity (S/R) provides resources for coping with stress which can increase the frequency of positive emotions and reduce the likelihood of stressors causing emotional disorders such as depression, anxiety disorders, suicidal tendencies, and substance abuse (Koenig, et al., 2012; Niewiadomska, et al., 2021). The field of spirituality/religiosity (S/R) is developing rapidly as the scientific evidence accumulates. Several organizations such as the American College of Physicians, the American Medical Association, and the American Nurses Association have recognized the role of spirituality in clinical practice, a consequence of which is the inclusion of these issues in the curricula of various medical universities around the world (Moreira-Almeida, et al., 2014; Lucchetti, et al., 2012; Neely, Minford 2008). A measure of this knowledge might be informed action in education, in creating spirituality resources for the development of religious strategies of coping with stressors and difficulties. The relationship of spirituality and religion (S/R) in using religious coping strategies in the theoretical model of causal paths is described in the literature (Koenig et al. 2012). It is therefore worth taking a closer look at these areas in their empirical dimension. The relationship between religiosity/spirituality and religious coping strategies, however, remains unclear. A few reports do show the importance of this area of research, inter alia, Van Dyke et al. (2009) and Krägeloh et al. (2012).

Zinnbauer and Pargament (2005) concluded that only a minority of people identify as spiritual but not religious and attempt to reject religion, while the majority of people identify as both spiritual and religious. However, these vague generalizations do not indicate which aspects of religiosity and spirituality overlap and which do not. Only a few studies have attempted to define this relationship to detect aspects of spirituality that are more closely related to religiosity and those that are more independent. However, the mechanisms by which these connections occur have rarely been explored (Good, Willoughby, 2006; Hall, Flanagan, 2013; Głaz, 2016; Zarzycka, et. al., 2021; Herzog, et al., 2020; Niewiadomska, et al., 2022).

The main theoretical assumptions of our research are: religiosity, understood as a determinant of an individual's life choices, experiences, and religious practices, is related to the use of religious coping strategies; personal spirituality is understood as a universal experience, a useful resource among students; both religiosity and spirituality are important constructs that make it possible to maintain positive or negative coping strategies in the face of stressors.

In presented study, learning about the religious coping strategies used by students, with the mediating role of (broadly defined) dimensions of spirituality, is an interesting challenge to which the research we present responds.

1.1. SPIRITUALITY AND RELIGIOSITY

In the international literature, spirituality and religiosity are defined as separate but overlapping constructs. Spirituality refers to an individual's search for meaning and purpose in life (Narayanasamy, 2004). It is also defined as a dynamic and intrinsic aspect of being human, through which individuals seek ultimate meaning, purpose and transcendence, and experience relationships within themselves and with family, others, community, society, nature and all that is essential or sacred (Puchalski, et al., 2014). Spirituality is expressed in beliefs, values, traditions and exercises. Religiosity mainly refers to a set of rituals specific to a church institution and belief in God and other religious beliefs, while spirituality can be a non-denominational or denominational pursuit of personal development (Hussain, 2011).

Spirituality is a universal human experience and can be defined as an individual's search for answers to ultimate questions about life, meaning and relationships (Koenig, et al., 2012). According to this approach, spirituality refers to union with the sacred or transcendent (with God, a higher power or ultimate truth). In the non-theistic approach, the experience of union with sacredness or transcendence can also mean experiencing a connection to the essence of life, which includes three main dimensions: connection to oneself; to others and to nature; and to transcendence with nature; and with transcendence (de Jager Meezenbroek, et al., 2012a; 2012b). The various approaches to understanding spirituality are expressed by differences in the putting into operation of the concepts used to measure spiritual experiences (Sloan, et al. 1999). In many studies of spirituality, only one aspect is used, which does not reflect the diversity of spiritual dimensions (Blumenthal, et al., 2007). Being religiously affiliated and religiously unaffiliated may seem like two distinct categories. However, research that delves into the beliefs and practices of cultural groups and their individual members reveals that boundaries between religiosity, spirituality, and secularism are porous. For example, an Irish adolescent can self-identify as atheist and simultaneously be nominated by his community as a spiritual exemplar (Jensen ,2021).

Some researchers (Reed, 1992; Vachon, et al., 2009; Puchalski, et al., 2009a; Puchalski, et al., 2009b; Puchalski, Ferrell, 2010; Nolan, et al., 2011; Mount, 2003; Kellehear, 2000; Austin, et al., 2018) have shown that the most important aspects of spirituality relate to important aspects of relationships with oneself (the need for meaning and coherence), with other people (harmony in relationships with people we care about and the need to feel loved), with nature (a form of primary human relationship with the world around us) and transcendence (the need for hope and a sense of belonging). Adopting a complex and multidimensional concept of describing the characteristics that define spirituality, we set ourselves the goal of finding a tool to measure spirituality with the following characteristics: usability for a wide range of people (secular atheists and believers) that equally includes existential challenges, reflections and attitudes based on universal values, and religious attitudes in its structure.

For the purpose of this research, spirituality shall be specified as a universal human experience and defined as *striving for and experiencing a connection*

to the essence of life in three main areas: connection to oneself, connection to others and to nature, and connection to transcendence (Meezenbroek, et al., 2012a). It takes a non-theistic approach to spirituality, thereby enabling it to measure the spiritual experiences of persons belonging to various religions, or of various secular backgrounds. In the broad sense of the term, spirituality includes both religious and non-religious beliefs (Egan, et al., 2011), recognizing that all human beings have a spiritual dimension in the secular-religious continuum.

An essential aspect of spirituality is a spiritual engagement, which is understood as a two-dimensional factor. It is expressed quantitatively – in the amount of time spent on activities related to the implementation and development of one's spirituality, as well as qualitatively – in the intensity of feelings and sensations accompanying activities aimed at implementing and developing spirituality. The effect of spiritual engagement is the effective combination of the sphere of higher values with everyday action (Kapala, 2017). A spiritual engagement was considered a mediator in this study as one of the six factors of the Spiritual Attitude and Involvement List (SAIL).

In a survey of 112,000 students from American universities conducted in 2008, more than half of them attributed great importance to spiritual engagement and considered essential life goals: achieving life wisdom, developing their own life philosophy that guarantees a sense of meaning, and involvement in activities to improve the general human existential condition (Green, Noble 2010).

1.2. RELIGIOUS COPING WITH STRESS

The social, cultural, and religious contexts in which an individual functions play a significant role in determining psychological responses to stressful life experiences. Exposure to risk from psychological pressure and stress can be mitigated through various support systems, a positive attitude towards seeking help, or other coping mechanisms to protect psychological well-being (Connorton, et al., 2011). Religious coping is an important mechanism, defined as *using religious beliefs or behaviors to facilitate problem solving and to prevent or mitigate the negative emotional consequences of stressful life circumstances* (Koenig, et al., 1998, p. 513). Religious coping reflects the efforts of an individual to use religious techniques to understand coping with stressful

life events and experiences (Pargament, Mahoney, 2005). Religious coping is a multi-dimensional construct with positive and negative aspects (Ano, Vasconcelos 2005). Positive religious coping involves the positive involvement of individual forces in the religious sphere through seeking religious and spiritual support, favourable religious judgment and the individual's interactions with God. Positive religious coping is generally seen as adaptive and reflects a belief in the meaning of life and a secure relationship with a merciful God (Pargament, et al., 1998).

A negative religious coping pattern is manifested, among others, in dissatisfaction with God and the religious community or negative feelings towards a given event, perceived as God's punishment or the action of impure forces (Pargament, et al., 2013). Negative religious coping reflects spiritual tension characterized by a less secure relationship with God, religious dissatisfaction, and a negative reappraisal of God's power. It has also been called *religious warfare* (Pargament, et al., 2011). Positive and negative religious coping is not inherently adaptive or maladaptive, whether harmful or helpful. They are believed to be influenced by the interplay of personal, situational and socio-cultural factors (Pargament, et al., 2011).

It has been shown that religious people use religious coping strategies to deal with stress—for example, in the form of positive religious reevaluation, seeking spiritual support, attending religious meetings, engaging in religious practices, praying—experienced more constructive behavior (growth in spiritual area, self-esteem, social relationships, quality of life) (Ghorbani, et al., 2017).

The meta-analysis results support the conclusion that there is a moderate positive association between positive religious stress-coping strategy and positive effects of stress being experienced (Ano and Vasconcelles 2005). Persons who used positive religious coping strategies (positive religious reevaluation, seeking spiritual support, attending religious gatherings, undertaking religious practices, praying) experienced more constructive behaviors such as spiritual growth, self-esteem, social relationships, quality of life, and at the same time fewer symptoms of disorders (anxiety, depression) (Solomon, Mikulincer 2006; Tedeschi, Calhoun 2004).

Religion and spirituality play a key role in adolescents' experiences of depression. Furthermore, it is surmised that these factors may be important

for improving treatment-seeking behaviors and reducing racial mental health disparities (Breland-Noble, et al., 2015; Serizadeh, 2018). Adolescents tended to employ more positive religious coping styles during the COVID-19 pandemic and restrictions (Kadiroğlu, 2021). Research reports provided information about the importance of religiously in dealing with physical, mental and social problems of young people. Results of research by Talik (2013), De Leon and Balila (2014) and Salas-Wright et al. (2013) showed that religious coping is important for young persons in difficult situations. The research also confirmed that attention should be paid to positive youth development programs and religious coping in adolescents in order to prevent and reduce symptoms of depression (Sarizadeh, et al., 2020)

1.3. RELIGIOSITY, SPIRITUALITY, AND COPING WITH STRESSORS IN LIFE

Religiosity and spirituality are correlated to some extent and, although distinct, are seen as overlapping constructs. Embedding the self-assessment of spirituality and religiosity in an integrative model appears to be under-researched in contemporary approaches if we accept the distinction of two types of spirituality: religious-spiritual and spiritual-but-not-religious (Schnell, 2012). Spirituality can be either a non-denominational or a denominational pursuit of personal growth (Hussain, 2011). High levels of spirituality can be even with low levels of religiosity, while religious practices are not always a manifestation of spirituality and can sometimes even hinder it (Lucchetti, et. al., 2021). Torralba et al. (2021) showed that religious coping has become a minority choice in Spain. Secularization suggests a loss of confidence in religious means and a search for alternative coping strategies. Religious coping works best when associated with religious communities and used in combination with other, non-religious strategies (Torralba, et al., 2021). Casanova (2008) asserted that we are currently observing the individualization of religiosity, understood as creating one's own faith in isolation from the institution of the Church. Privatization also means that religiously important topics are increasingly referred to the private, subjective sphere.

The progressive secularization of social life, especially among young adults, has fostered the development of different models between religiosity and

spirituality that are not easy to understand. The religiosity is expressed in an individualized, subjective, diffused way and transforms itself into a multiplicity of combinations and systems of meanings that individuals develop in a way that is increasingly independent from control of religious institutions). Secularization, which leads to the weakening of church-centered religiosity, does not mean that religiosity loses its importance to the same extent or that people abandon religious stress-coping strategies. New forms of spirituality are actually appearing which—paradoxically—are growing out of secularization. These are directed to seeking for offers that bring meaning to life for the individual in the ‘transcendence market,’ often without reference to a personal, or even impersonal, God. Spirituality was understood in the past as an in-depth form of religiosity. In the religious dimension, spirituality is related to the spiritual experiences of a believer and the way he experiences faith in God. Today, spirituality is sometimes described as a modern form of religious belief. Generally speaking, spirituality is associated with some kind of personal experience (something lived, or a feeling), sometimes with something extraordinary, as something experienced directly, often without the mediation of the Church (Mariański, 2022). The differentiation between religiosity and spirituality can also be taken to represent a movement toward multiplicity, since it aims to better reflect the different ways that cultural groups and individuals believe in the supernatural or sacred or ultimate reality, and the diverse behaviors in which those beliefs find expression (Jensen, 2021).

The conceptualization of religiosity is a complex process due to the multidimensional nature of the construct, although, in its simplest form, it means participation in rituals within a particular religion (Robinson, Kewley 2018). Religiousness is perceived as a good source of coping and has an optimistic structure of existence (Wachholtz, Pearce 2009). Religious coping will include aspects of faith and spirituality which are understood as a sense of meaning, purpose, and hope, related to a connection with God or gods, nature, or some life force (Ozcan, 2021).

Spirituality in a broad sense develops in individuals a sense of self-awareness and people pay attention to their behaviour towards transcendence, nature, and its resources. Spirituality directs human behaviour to minimize and conserve resources, which includes using religious coping strategies to deal with life stressors. A sense of connectedness and altruism targets social,

economic, and environmental benefits and determines the pursuit of a sense of satisfaction for individuals, especially in youth development (Quinn, 2008). It is noteworthy that the literature talks about a so-called secular religiosity. Even a secularized person may want to maintain some substitute for religiosity in his life. A bond can be maintained not only with what what gies betibd this world, what transcends it, but also, for example, a bond with nature (Iwanicki, 2016).

Much previous research has emphasized the importance of religious engagement in religious choices of coping strategies and their association with the well-being of adolescents and adults (Ferris, 2002; Abu-Raiya, et al., 2015). Other reports by Krägeloh et al. (2012) examined the level of religiosity and spirituality and its relation to how religious coping is used compared with different coping strategies (n = 616 university students).

In searching for a relationship between religiosity and religious strategies for coping with life stressors, spirituality is considered an intermediary (Narayanasamy, 2004) and, in some cases, coexists with religiosity (Hussain, 2011). In recent analyses by Herzog et al. 2020, global research on religiosity and spirituality was made by conducting a meta-analysis of the main approaches in the field. Although interest in spirituality is growing, scholars have limited data on its importance. The view is being clarified that spirituality cannot be equated with religiosity and deserves separate or combined attention. (Steensland, et al., 2018). Based on a nationwide survey of American adults, Steensland et al. (2018) identified 13 spiritual Dimensions: Monotheistic deity, Higher being, Supernatural phenomena, Transcendence, The unknown, Organized religion, Juxtaposition to organized religion, Nonreligious authority, Other people, Self, Natural world, The past, The after life. In our research approach, we adopted six dimensions of spirituality according to the Spiritual Attitude and Involvement List (SAIL): Transcendent Experience, Spiritual Activit, Connectedness with Nature, Meaningfulness; Acceptance and Trust (de Jager Meezenbroek, et al., 2012a), based on a multidimensional concept of spirituality, with the possibility of considering/taking into account the following features: a qualitative assessment of the intensity of feelings and sensations accompanying activities serving the implementation and development of spirituality and usefulness for a wide range of people (secular atheists

and believers), which equally include existential challenges, reflections and attitudes based on universal values as well as religious attitudes in its structure.

So far, no work has been found on the verification of a model in which a complex construct of spirituality plays the role of a mediator, so in the following part, we present empirical findings on the relationship between religiosity, spirituality in the dimension of engagement and religious coping strategies among youth.

In view of the above, the following questions arise: Does spiritual engagement affect the basic relationship, for example the relationship between religiosity and the use of religious strategies for coping with stress? Does spiritual engagement strengthen this connection? In other words, do religiosity and spiritual engagement complement/fulfill each other? It is hypothesized that spiritual engagement plays the role of mediator the relationship between religiosity and religious coping strategies.

Based on the above-mentioned analyses, we formulated two hypotheses, which would be tested through our research:

H1: The religiosity and spiritual engagement are correlated with religious coping strategies.

H2a: The spiritual engagement is a mediator in the relationship between religiosity and positive religious coping.

H2b: The spiritual engagement is a mediator in the relationship between religiosity and negative religious coping.

The presented study extends the literature in this field by examining a particular aspect of religiosity, specifically religious coping, in relation to spiritual engagement in the broad sense. Spirituality includes both religious and non-religious beliefs. Furthermore, we include religious coping, religiosity, and spiritual engagement in the same study so as to identify the unique contribution of each factor and to show the mediating role of spirituality in this relationship.

2. MATERIALS AND METHODS

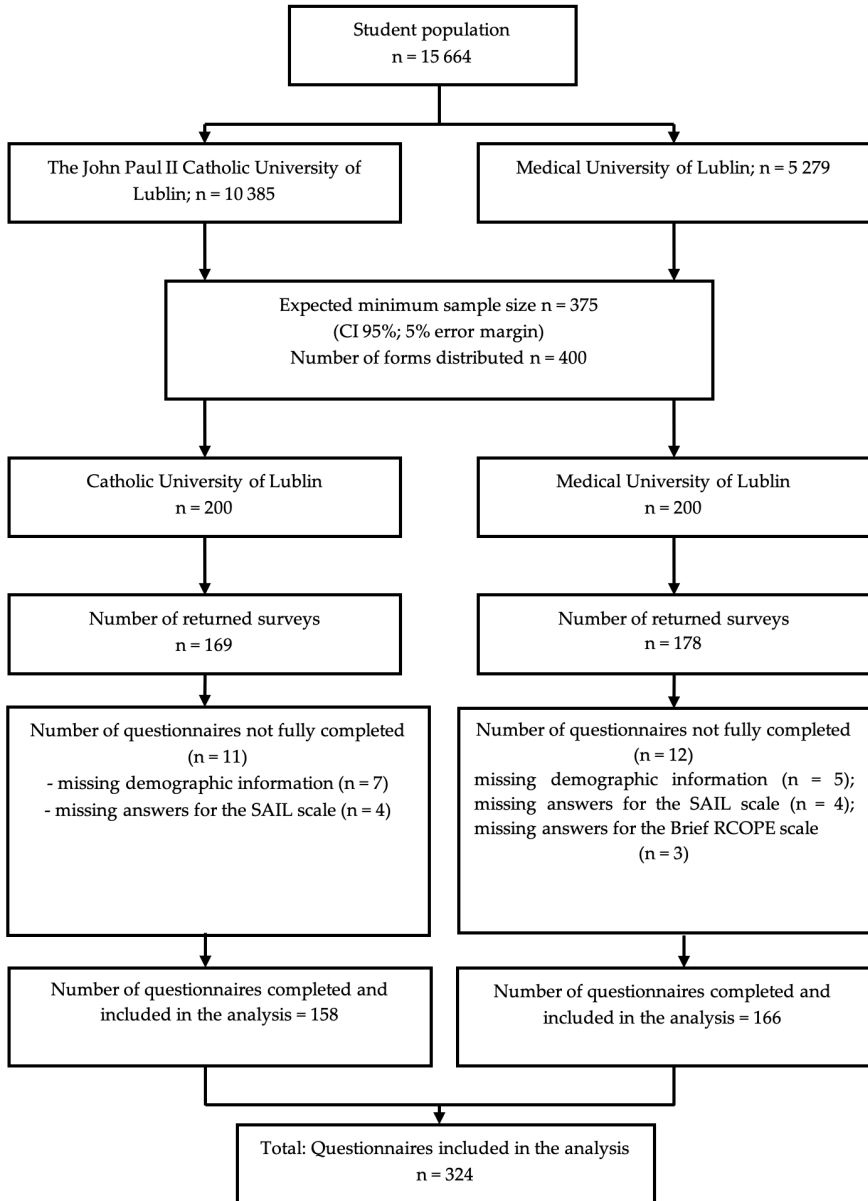
2.1. RESEARCH DESIGN

This is a cross-sectional study conducted in 2018 and 2019 in accordance with the Strengthening the Reporting of Observational Studies in Epidemiology guidelines (STROBE) (von Elm et al. 2008). In this study, convenience sampling method was used. The study included students from two universities in eastern Poland: the John Paul II Catholic University of Lublin (KUL) and the Medical University (UM) in Lublin. The choice of these two universities was dictated by their self-identification with the community of believers, in comparison with other universities and colleges in the territory covered by the study. As seen in research carried out by Kozak (2014) under the title *Religiosity of academic youth*, among all the surveyed students of the largest universities in Lublin (n = 1025), it was the students of the Catholic University of Lublin and the Medical University of Lublin that had the highest percentage of persons describing themselves as *believer* or *deeply religious*. Despite the progress of globalization, Poland is known as a Catholic nation. The selection of a homogeneous group of Catholic students from the youth community was advisable in our process as it can be assumed that in such a group there will be people who are spiritually/religiously engaged.

Inclusion criteria consisted of: being a person studying in one of the two abovementioned universities, and expressing informed and written consent to participate in the study. Exclusion criteria: withdrawing from or lack of interest in participating in the study, lack of informed and written consent of participation in the study, or completing the questionnaire incorrectly.

The study was conducted using the paper-and-pencil (PAPI) method. The interviewer, specially trained for the study, explained to the students the purpose and method of filling in the questionnaire. Each participant received a questionnaire form and an informed consent form. The respondents were allowed to ask the interviewer questions while filling out the questionnaire. After completing the research, the consent forms and the questionnaires of all the participants were dropped into a ballot box, which was opened after the interviewer had left the room. Participation in the study was voluntary and anonymous.

Figure 1. Procedure for collecting respondents' forms.



The student population of the two universities was 15 664. The minimum number of respondents was estimated at 375 (with a maximum error of 5% and a confidence level of 95%). In total, 400 questionnaires of 200 sheets were distributed among students from each university. A total of 347 questionnaires were collected, of which 324 were correctly completed (return rate 86.7%). Figure 1 presents the procedure for including the collected questionnaires in further analyses.

The research protocol was accepted by the Bioethics Commission of the Medical University of Lublin (ethical approval number: KE-0254/128/2018). All the students participating in the study were informed about the study, and their informed consent was given.

2.2. PARTICIPANTS AND PROCEDURE

A total of 324 students took part in the study. The average age was 20.85 [95% CI: 20.607-21.095] years old (ranging from 18 to 35 years). Female constituted 79.3% of the respondents; 61.1% of respondents live in cities. The respondents were 87.3% Roman Catholics, whereas in declaring faith, 65.1% said that they were persons of faith, 13.9% identified as deeply religious, 13.6% as religiously indifferent, and 7.4% described themselves as non-believers. Table 1 presents the socio-demographic characteristics of the students in the study.

Table 1. *Descriptive characteristics of the studied students (n = 324).*

Characteristics	n	%
Gender		
Female	257	79.3
Male	67	20.7
Place of residence		
City	198	61.1
Rural area	126	38.9
Denomination		
Roman Catholicism	283	87.3
Other	41	12.7
Declaration of faith		
Deeply religious	45	13.9
Believers	211	65.1
Religiously indifferent	44	13.6
Non-believers	24	7.4

2.3. MEASURES

2.3.1. THE SOCIO-DEMOGRAPHIC VARIABLES

The personal data form consisted of socio-demographic questions such as age, gender, place of residence, religious affiliation, and religiosity (declaration of faith). The declaration of faith has been defined as religiosity consisting of three components: 1. piety (belief in and reverence for), 2. practice (practicing what the religion or the founder of the religion preached), 3. participation in activities (participation in activities of observance of the religion, and participating in other social activities with one's religious community) (Iddagoda, Opatha, 2017). To assess religiosity in the dimension of the declaration of faith, the following categories of answers to choose from were distinguished: Deeply religious, Believers, Religiously indifferent, Non-believers.

2.3.2. THE BRIEF RELIGIOUS COPING QUESTIONNAIRE

The Brief Religious Coping Questionnaire (Brief RCOPE), authored by Pargament et al. (2011), and linguistically and psychometrically adapted to Polish conditions by Jarosz (2011), consisted of 14 items and measures two religious stress coping strategies: positive and negative. The positive coping subscale (seven items) identifies references to religion at times of stress which enable constructive coping with difficulties. The negative coping subscale (seven items) identifies references to religion at times of stress which are not conducive to constructive coping with the difficulties being experienced. The internal consistency coefficients for the scales in the Polish version of Brief RCOPE were as follows: positive coping subscale Cronbach's $\alpha = 0.86$ and negative coping subscale Cronbach's $\alpha = 0.74$. Examples of Brief RCOPE items: Looked for a stronger connection with God; Tried to see how God might be trying to strengthen me in this situation; Felt punished by God for my lack of devotion; Decided the devil made this happen.

2.3.3. THE SPIRITUAL ATTITUDE AND INVOLVEMENT LIST

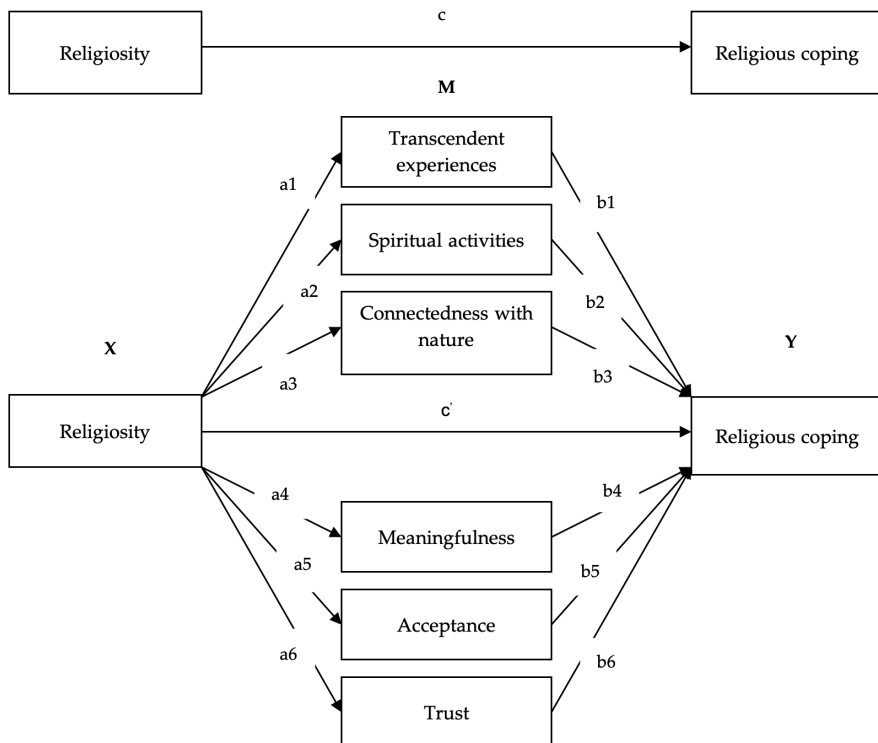
The Spiritual Attitude and Involvement List (SAIL), authored by de Jager Meezenbroek et al. (2012a), adapted to Polish conditions by Deluga et al. (2020), was used for examining spiritual engagement. The SAIL scale is a relatively

new measuring tool and captures many dimensions of spirituality in psychometric evaluation. It has already been used clinically on patients to study the overlapping aspects of spirituality and feelings of well-being, as well as for further clarification in measuring spirituality (Visser, et al., 2017), examining the relationship of spirituality with negative emotions (Ginting, et al., 2015), and the acceptance of illness (Nowicki, et al., 2020). It has also been used among nurses and nursing students, to learn about their spirituality and to investigate its correlation with competency in spiritual nursing care (Ross, et al., 2018; van Leeuwen, Schep-Akkerman 2015; Ross, et al., 2014; Ross, et al., 2016). The Polish version of the SAIL scale consists of six factors: Transcendent Experience (transcending reality, entering into a new level of human experience and thought, experiencing the Absolute/God/a Higher Power); Spiritual Activity (efforts and involvement in the world of values, connection to the Absolute/God/a Higher Power); Connectedness with Nature (connection to the natural world, delighting in nature); Meaningfulness (feeling the meaning and value of one's own life, seeing the value of a life dedicated to others); Acceptance (ability to cope with life, acceptance of the difficulties of life) and Trust (trust in life, a sense that I do not influence every affair of life, faith in providence). The scale is composed of twenty-five items. Reliability for individual factors ranges from 0.627 to 0.812; Cronbach's alpha for the Polish version of the questionnaire is 0.711. In our study we used the SAIL scale because it was developed in order to make possible research on the spirituality of both religious and non-religious persons. In addition, it should be emphasized that in our study we did not ask about subjective feelings of religiosity, which may be understood in various ways, sometimes without reference to a personal God. Moreover, the original version of the tool has been validated by, inter alia, students, healthy individuals, and cancer patients. Research has confirmed the factor, convergence, and discriminant validity of the tool, as well as adequate internal consistency and test-retest reliability. Examples of SAIL items: I am aware that each life has its own tragedy; I know what position is in life; The beauty of nature moves me; My life has meaning and purpose; I accept that life will inevitably sometimes bring me pain; I accept that I am not in full control of the course of my life.

2.4. STATISTICAL METHODS

The data were analyzed with IBM SPSS Statistics for Windows, version 25 (IBM Corp., Armonk, NY, USA). Sociodemographic data were presented in numbers and percentages. Continuous variables are expressed as mean, standard deviation (SD), and range. The Kolmogorov-Smirnov test was used to verify the normality of the data distribution. Correlations between the variables were carried out, and then we examined whether the relationship between religiosity and religious coping is mediated by spiritual engagement (Figure 2). We analyzed the total effect of religiosity on religious coping (path c). The total effect is the sum of the direct effect (c') of religiosity on religious coping while controlling for the mediator (spiritual engagement) and all indirect effects (paths a_1 - b_1 ; a_2 - b_2 , a_3 - b_3 etc.) of religiosity on religious coping by the mediating role of aspects of spiritual engagement. We performed an analysis using the SPSS add-on Process. The mediation analysis was conducted under the guidelines provided by Preacher and Hayes (2004). Following the bootstrapping (5000 bootstrapped samples) approach, indirect (mediated) effects whose confidence intervals (CI 95%) did not include zero were considered statistically significant. Our sample size ($n = 324$) was sufficient to reach 0.8 power and to detect a significant mediating effect (Monte Carlo simulation).

Figure 2. Theoretical model. Multiple mediation model in which c' is the direct effect of the independent variable X upon the dependent variable Y when the mediator variables are controlled for. The specific indirect effect of the independent variable on the dependent variable via the mediators $M1, M2, M3, M4, M5, M6$ is quantified as $a1, b1, a2, b2$, etc. The total effect of the independent variable upon the dependent variable is the sum of the direct effect and the specific indirect effects.



3. RESULTS

3.1. BASIC ASSOCIATIONS: RELIGIOSITY, POSITIVE AND NEGATIVE RELIGIOUS STRATEGIES AND SPIRITUAL ENGAGEMENT

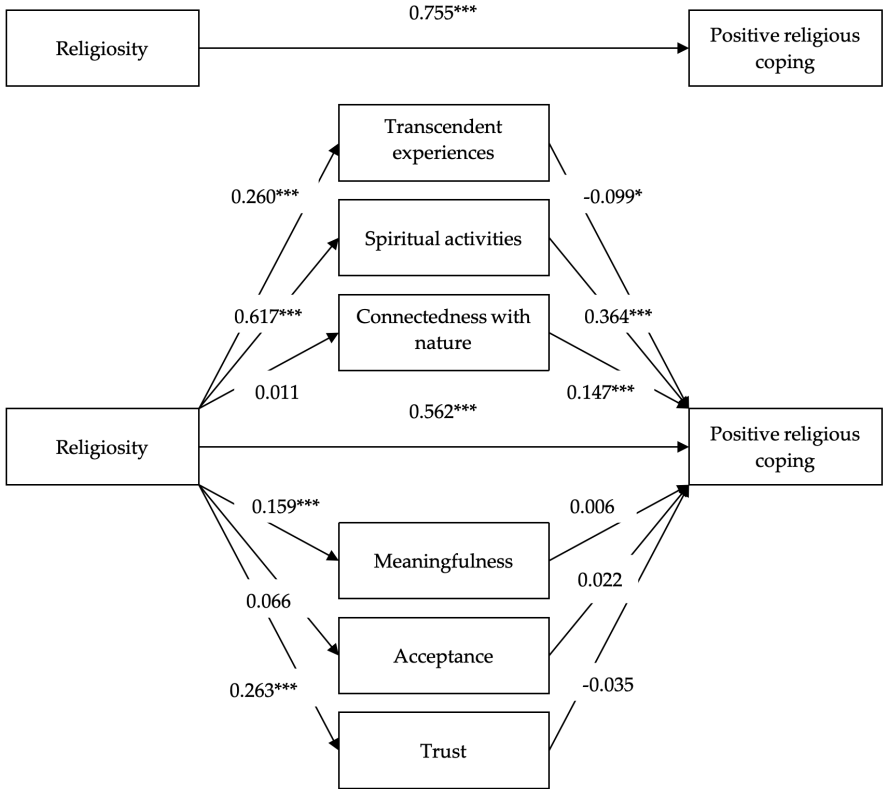
Supplementary Table A1 shows the correlation between the analyzed variables. Significant positive correlations between the six areas of spirituality assessed with the SAIL scale and positive religious stress coping strategies were observed. In the case of negative religious ways of coping with stress, a significant positive correlation was observed with the SAIL – Spiritual Activity subscale. An analysis of the Spearman's rank correlation between the declaration of faith and the assessment of individual SAIL subscales was carried out. A positive significant correlation was observed between declaration of faith and the following SAIL subscales: Transcendent Experience (Rho = 0.259, $p < 0.001$; 95% CI: 0.151-0.361), Spiritual Activity (Rho = 0.625, $p < 0.001$; 95% CI: 0.551-0.689), Meaningfulness (Rho = 0.136, $p = 0.014$; 95% CI: 0.024-0.245) and Acceptance (Rho = 0.265, $p < 0.001$; 95% CI: 0.157-0.366). In the case of Connectedness with Nature and with Trust, the direction of the correlation is the same, but it is not statistically significant (Rho = 0.010, $p = 0.860$; 95% CI: -0.103-0.122 and Rho = 0.052, $p = 0.351$; 95% CI: -0.061-0.163 respectively).

Additionally, Table A1 presents the mean Brief RCOPE, SAIL scores and religiosity of the students studied. It was observed that positive religious strategies of coping with stress prevailed among the students (21.43; 95% CI: 20.604-22.253) according to the Brief RCOPE scale. Within the group of students in the study, the highest-evaluated SAIL subscale was Meaningfulness (4.65; 95% CI: 4.571-4.723), while the lowest was Transcendent Experience (3.28; 95% CI: 3.172-3.384).

3.2. RELIGIOSITY AND RELIGIOUS COPING: THE MEDIATING ROLE OF SPIRITUAL ENGAGEMENT

The bootstrap results showed a significant total effect of religiosity on positive religious coping (beta = 0.755; $B = 7.665$; $p < 0.001$; 95% CI: 6.30; 8.40). The direct effect of religiosity on positive religious coping was significant (beta = 0.562; $B = 5.706$; $p < 0.001$; 95% CI: 4.85; 6.56) (Figure 3).

Figure 3. Multiple mediation model of the relationship between religiosity and positive religious coping mediated through domains of spiritual involvement. Standardized regression coefficients for the significance level: *** $p < 0.001$; ** $p < 0.01$.



The effect of religiosity on positive religious coping was partially mediated by Transcendent Experiences and Spiritual Activities. In other words, Transcendent Experiences ($a_1 \times b_1$) and Spiritual Activities ($a_2 \times b_2$) were significant mediators. The total indirect effect was 0.193 (95% CI: 0.125; 0.265) (Tables 2 and 3).

Table 2. *Indirect effect of religiosity on positive religious coping through spiritual involvement domains.*

Mediator	BC 95% CI		
	Effect	LL	UL
Transcendent experiences	-0.026	-0.054	-0.002
Spiritual activities	0.224	0.157	0.292
Connectedness with nature	0.002	-0.017	0.019
Meaningfulness	0.001	-0.011	0.016
Trust	0.002	-0.004	0.010
Acceptance	-0.009	-0.030	0.011

BC, bias corrected; CI, confidence interval; LL, lower limit; UL, upper limit

Table 3. *Multiple mediation model of the relationship between religiosity and positive religious coping mediated through domains of spiritual involvement.*

Paths	BC 95% CI		
	B #	LL	UL
Religiosity - Transcendent experiences	0.399	0.200	0.478
Religiosity - Spiritual activities	0.762	0.655	0.870
Religiosity - Connectedness with nature	0.017	-0.159	0.193
Religiosity - Meaningfulness	0.149	0.047	0.252
Religiosity - Trust	0.061	-0.042	0.164
Religiosity - Acceptance	0.314	0.187	0.440
Transcendent experiences – Positive religious coping	-0.744	-1.363	-0.184
Spiritual activities – Positive religious coping	2.984	2.186	3.782
Connectedness with nature – Positive religious coping	0.938	0.508	1.369
Meaningfulness – Positive religious coping	0.069	-0.728	0.866
Trust – Positive religious coping	0.244	-0.562	1.050
Acceptance – Positive religious coping	-0.302	-0.936	1.050
DIRECT EFFECT	5.706	4.853	6.558
TOTAL EFFECT	7.665	6.930	8.400

#, unstandardized coefficients; BC, bias corrected; CI, confidence interval; LL, lower limit; UL, upper limit

In the second model, we analyzed the relationship between religiosity and negative religious coping mediated by spiritual engagement. All indirect effects were statistically insignificant, thus excluding the presence of mediation effects.

4. DISCUSSION

In this study, we evaluated the link between religiosity and religious coping strategies, with the mediating role of spiritual involvement, in a group of students. We found that positive religious stress coping strategies were favorably related to the religiosity of students. At the same time, two factors of

spiritual involvement played an important mediating role in this relationship: Transcendent Experiences and Spiritual Activities. To our knowledge, this study is one of only a few which explore the thesis of spiritual engagement in its many forms as a mediator between religiosity and positive religious coping strategies. However, in a meta-analysis of 49 studies quantifying the relationship between religious coping and psychological adaptation to stress, Ano and Vasconcelles (2005) noted that positive and negative forms of religious coping are related to positive and negative psychological adaptation to stress, respectively. The results of empirical research on the role of religiosity and spirituality in coping with stress are often contradictory. In a study by Krägeloh et al. (2012) in a group of college students, researchers found that the way religious coping was used compared to other coping strategies depended on an individual's level of religiosity and spirituality. In a study of cancer patients ($n = 129$) with moderate spiritual distress, it was found that spiritual distress positively correlated with negative religious/spiritual coping, and the use of positive religious coping was statistically significant in those who practiced religion (Silva, et. al., 2019). However, various religious variables have been found to serve as a buffer against the detrimental effects of stressors on well-being, such as faith (Ellison, 1991) and integration of spiritual life (Fabricatore, et al., 2000).

In this study, we selected spirituality (spiritual engagement) as a buffer against the harmful effects of stressors and as an individual subject resource. The relationship between religiosity and positive religious coping was partially mediated by 2 subscales of spiritual engagement (Transcendent Experiences and Spiritual Activities). These are significant mediators. The second part of hypothesis 2 was not confirmed concerning the relationship between religiosity and negative religious coping mediated by spiritual engagement, as all indirect effects were statistically insignificant.

Similar references can be found in studies by Greenway et al. 2007, which attempted to show that the severity of Spiritual Transcendence is related to positive and negative coping strategies. The results did not confirm this assumption in the practising Anglicans and Catholics group ($n = 190$). The results were interpreted as suggesting that Spiritual Transcendence in the perception and relationship with a caring and merciful God and the use of positive coping strategies reduce hard feelings associated with negative coping strategies, allowing the Transcendence contained in them to be revealed.

The results of our research undoubtedly extend the knowledge of specific dimensions of spiritual life, for example Transcendent Spiritual Experiences and Activities, as essential factors in shaping effective positive patterns of coping with life stressors. However, these mechanisms are not fully understood. Two mechanisms may be at play here. The results showed that religiosity enhances spiritual engagement, which has its *formal, institutional, and external expression* in the form of positive religious coping (Cotton, et al., 2006). The positive pattern is associated with adaptive adjustment and the individual's positive engagement with religion. Examples of forms include seeking religious spiritual and social support, voluntary religious re-evaluation, and the individual's interaction with God. The second mechanism shows that religious individuals may have profound transcendent experiences, but this does not necessarily correlate with more frequent use of positive coping strategies. Adolescents who consider themselves religious experience the human desire for transcendence, introspection, interconnectedness, and the quest for meaning in life. But at the same time, *transcendent experiences* do not translate into more frequent use of positive religious coping strategies. One can perceive an attitude oriented towards self-observation, self-interpretation, and self-reflexivity, which results in the privatization and individualization of religion (Worthington, et al., 2011). Thus, religion changes its state of focus, moves from the field of communal worship to the interior, and becomes subjective religiosity. Another phenomenon that may lie behind our results is the treatment of spirituality as a purely *inner experience*, contrasted with an *outer*, blind faith in dogma. People do not go to church in search of God, but in search of ambiance, energy, or elation (Motak, 2010).

The results obtained in this study are an important voice in the broader discussion on changes in religiousness among Polish youth. Referring to Mariański (2021), you could say we are dealing with the so-called realistic view of changes.

On the one hand, secularisation tendencies and those related with religious and moral individualisation are strong, as are the opposing anti-secularisation and evangelisation tendencies. Among young people, not only in Poland, the number of regular practitioners is decreasing. The importance of the institution of the Church as a socialising agenda is visible, for example. On the other hand, in Poland a withdrawal from religion has not been noted. We are

dealing rather with a shift from the institutional (external) to the existential (internal) element of religiosity. The level of acceptance of festive rituals or the sense of belonging to the Catholic Church is high. For some young people, these rituals remain the mainstay of religious meanings and content, although they are increasingly mediated by pop culture. In recent years, the processes of secularisation and privatisation of religion have accelerated among young Poles, which does not mean that young people have abandoned religion as such, but may indicate a change in its character and function. The processes of de-institutionalization and privatization of religion mean primarily the weakening of bonds with the Church and a *de-Christianificatio* of religion itself. Zarzycka and Rydz (2011), whose research among Polish students indicated that religiosity is not associated with social desirability.

The results of our research involving students professing to have faith do not confirm the mediating role of spiritual engagement in the relationship between religiosity and negative religious coping. Pargament et al. (1998) noted that the activation of harmful methods of religious coping with a difficult situation may occur when the appearing stressor hits a person with an external orientation in religion, fearful attachment to God, and a lack of religious activity.

Negative religious coping (or spiritual struggle) expresses conflict, questions, and doubts concerning God and faith (Ano, Vasconcelles, 2005). James and Wells (2003) proposed a self-regulating mechanism by which religious beliefs and actions guide the flow of thoughts, observations, and behavior. This can reduce the negative impact of stressful experiences. Persons who use positive religious coping are likely to seek out spiritual support and look for meaning in traumatic situations. Religious coping is rooted in culture and is part of a larger whole, which is the orientation system of the individual. This system is a general disposition in relation to the world, associated with beliefs, emotions, actions and relationships resulting from man's religious, personality and social spheres. (Pargament et al. 2005). Therefore, it does not work independently of the general dispositions of the individual because the applied methods of religious coping depend not only on such variables as orientation or type of religiousness but also on personality variables (neuroticism, depression or self-esteem). It is generally reported that religious coping is more effective when a person is more spiritual, for example when the religious system is

a more central personal construct. However, the centrality of religiosity changes with age, so a regularity can be observed that positive coping appears more often in older than younger people and people involved in institutional religion (Pargament, et al., 2003). The presented research was conducted on a fairly homogenous group with declared religiosity and spiritual engagement, which might have predetermined a tendency in the choice of positive religious strategies for coping with difficulties. For this reason, further research should include groups of young adults with contrasting religious views. For example, in a study conducted in Spain (n= 531) to assess coping styles (religious and secular) and their relationship with other variables, findings suggest that religious coping has become a less frequent choice in the group. Moreover, it correlates positively with age and mixes with secular coping strategies (Torralba, et al., 2021)

In our study, in addition to the mediations described earlier, we showed that a higher level of a declaration of faith (*believer* and *deeply religious*) correlates with substantial significance to the levels of Transcendental Experience, Spiritual Activity, and Acceptance. This may indicate that for young people spirituality is important, expressed, inter alia, through effort and commitment to the world of values, experience, and connection to an Absolute/to God/to a Higher Power, along with the ability to cope with life. *Spiritual Transcendency*, in the opinion of Piedmont (1999), is a characteristic common to people around the world and is associated with religiosity and a deeper experience of faith. Transcendent Experience is understood as transcending everyday reality, entering a new level of human experience and thought, experiencing the Absolute/God/Higher Power. For academic youth, the period of potentially greatest religious and spiritual anxiety is already behind them, as they have already provisionally chosen the direction of their path in life. For this reason, their manner of evaluating it may be impaired precisely by a feeling of limited self-realization in a world characterized by non-transparency and multiple value systems (Wysocka, 2007). Zarzycka et al. (2021), in her research, showed that religious people may give up internal control, believing that their matters are in God's hands. Being subject to God's power provides them with a replacement form of control, which reduces problems of self-regulation. The current situation for young people in Poland in terms of their identification with the community of believers is very complex. Non-believers and non-participants

in religious practices are steadily increasing, but the fraction of deeply believers and those who practice several times a week remains stable. The religion of young is weakening, but contrary to highly secularizing theories, does not die, remains in statutory movement, takes various forms, adapts to the origins of modernity, and changes globally quantitatively, but in some circles, gaining qualitatively (Boguszewski, Bożewicz 2019).

The students in our study were characterized as strongly aware of the declaration of faith, which was a deliberate action in selecting the group. In future studies, it would be worthwhile to broaden the analysis with a control group of youth not identifying with faith, to confirm the observations of our current research in a wider scope. In the research of many researchers, including Kane and Jacob (2010), and Johnstone et al. (2012), who have conducted nationwide studies on the topic of the spiritual life of college and university students, results indicated that more than two-thirds of students (69%) say that their religious/spiritual convictions give them strength, support, and guidance, and 74% of respondents say they feel a connection to God/a Higher Power which transcends their ego. Results of preliminary and follow-up studies conducted by Astin (2004) showed that students see spirituality as an integral part of their lives. Research by Kane and Jacobs (2010) also confirmed that students agree that religious and spiritual convictions are important in their lives and help them to cope in difficult situations. Astin et al. (2011) suggest that cultivating spirituality in higher education will help students respond to the many stresses and strains of a rapidly changing society and move forward with a sense of purpose and goals.

Our findings also showed that Spiritual Activity and Transcendental Experiences are mediators in the relationship between religiosity and positive stress coping strategies. This result is important for understanding the mechanisms that create pathways for choosing positive coping strategies in spiritually engaged young adults. Whether such mechanisms also operate in young adults who do not prefer religious value systems in their lives? The search for an answer to this question is a direction that researchers will explore in further research, including studies on comparison groups.

LIMITATIONS

The study have some limitations. The surveyed group of students was recruited from two universities in southeastern Poland, so it is not representative of the entire community of young people studying at higher education institutions. Non-random sampling and limited sample size reduced the possibility of generalizing results in this study; a larger study sample could help overcome this limitation. Secondly, the study used self-identification of faith, which is saddled with a risk of social burdens. In the study, it is also worth noting the lack of an appropriate representation of the group of students who declare themselves as atheists. Our research did not show a mediating role of the remaining elements of spiritual engagement: Connectedness with nature; Meaningfulness; Trust; Acceptance. In these cases, no strengthening of the basic relationship between religiosity and religious coping with stress was observed. Perhaps such a role would be revealed if a comparison were made between two groups: believers and non-believers. In addition, the study was cross-sectional; a cause-and-effect relationship cannot be determined, or at most examine relationships between factors

5. CONCLUSIONS

A relationship exists between religious coping strategies and the dimensions of spirituality indicated by the students. Positive religious strategies for coping with stress are favorably linked to religiosity; Transcendent Experiences and Spiritual Activities were mediators in the relationship between religiosity and positive religious coping. The implementation of knowledge about positive religious coping strategies in stressful situations through psycho-education and religious cognitive restructuring of students can be an important factor in reducing mental health problems in this vulnerable demographic. In summary, findings from this study can help counsellors, clinicians, educators, and researchers better understand adolescent coping strategies. Future research should focus on the mediation between religiosity, spirituality and dimensions of mental health, in groups with different attitudes toward religious involvement, to better understand the relationship between these factors.

Table A1. Descriptive statistics and bivariate correlations between the variables included in the study (n = 324).

Measure	1	2	3	4	5	6	7	8	9
SAIL									
[1] Transcendent Experience	-								
[2] Spiritual Activity	0.522*** [0.438-0.597]	-							
[3] Connectedness with Nature	0.219*** [0.113-0.321]	0.230*** [0.125-0.331]	-						
[4] Meaningfulness	0.273 *** [0.169-0.371]	0.359 *** [0.260-0.450]	0.226 *** [0.120-0.326]	-					
[5] Trust	0.276*** [0.172-0.374]	0.301*** [0.199-0.397]	0.161 ** [0.053-0.265]	0.360*** [0.262-0.451]	-				
[6] Acceptance	0.167 ** [0.059-0.271]	0.326*** [0.225-0.420]	0.195*** [0.088-0.298]	0.359*** [0.260-0.450]	0.406*** [0.310-0.493]	-			
Brief RCOPE									
[7] Positive religious coping	0.268 *** [0.163-0.367]	0.690 *** [0.628-0.744]	0.213 *** [0.106-0.316]	0.231 *** [0.124-0.332]	0.150 ** [0.041-0.255]	0.255 *** [0.149-0.354]	-		
[8] Negative religious coping	0.015 [-0.095-0.124]	0.142 ** [0.033-0.248]	-0.020 [-0.129-0.090]	-0.026 [-0.135-0.084]	-0.019 [-0.129-0.090]	-0.024 [-0.134-0.085]	0.303 *** [0.200-0.399]	-	
Religiosity									
[9] Declaration of faith ^Δ	0.259*** [0.151-0.361]	0.625*** [0.551-0.689]	0.010 [-0.103-0.122]	0.136** [0.024-0.245]	0.052 [-0.061-0.361]	0.265 *** [0.157-0.366]	0.730*** [0.672-0.779]	0.160** [0.048-0.268]	-
M	3.28 [3.174-3.384]	3.61 [3.514-3.715]	4.12 [3.978-4.238]	4.65 [4.567-4.719]	4.07 [3.990-4.141]	3.74 [3.641-3.835]	21.43 [20.604-22.253]	15.86 [15.262-16.457]	2.86 [2.781-2.944]
SD	0.97	0.91	1.18	0.69	0.69	0.87	7.50	5.43	0.74
Range	1.4-6	1.4-6	1-6	2.4-6	1.5-6	1.5-7	7-35	7-31	1-4
Alfa Cronbacha	0.782	0.702	0.807	0.726	0.691	0.619	0.951	0.830	-

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