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# RELIGIOUS ORIENTATION, CONSTRUCTIVE THINKING AND PERCEIVED STRESS – GENDER DIFFERENCES IN SAMPLE OF BULGARIAN RELIGIOUS INDIVIDUALS

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**Abstract.** *There is a lot of evidence about gender differences in religious orientation, constructive thinking and perceived stress. Females are considered more religious than men, prone to different constructive and non-constructive thinking style and coping and perceive more stress. There is no research exploring gender differences in the relationship between religious orientation, constructive thinking and perceived stress in religious groups. The present paper tested these variables on a sample of Bulgarian religious individuals and found gender differences in predictors of perceived stress - Religiosity as end, Religiosity as quest, Emotional coping, and Personal Superstitious Beliefs.*

**Keywords:** Constructive Thinking; Religious orientation; Perceived Stress.

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## Introduction

It is generally acknowledged that women are more religious than men. The empirical data has shown that gender is a substantial indicator of differences concerning religiosity within Christianity. Females are always more frequently and intensively religious than males (Francis, 1997). There are significant differences in religious orientation between men and women, females are significantly more religious than males in terms of psychological extrinsic religiosity and intrinsic religiosity (Flere, 2007). Empirical data specify the relationship between religious orientation and stress. Intrinsic religious orientation (Religiosity as end) is linked to active, problem-solving and adaptive coping strategies and less stress, while extrinsic orientation (Religiosity as means) is related to maladaptive coping strategies and more stress (Pargament et al., 1988; Watson, 1999; Ting et al., 2023). The results about Quest religious orientation are ambivalent. Some research demonstrates that it is linked to maladaptive coping strategies (Watson, 1999), whereas in others it is related negatively to cognitive appraisals of stressful events as either a threat or loss (Maltby, 2003). Recent studies demonstrate the relationship between constructive and non-constructive thinking and perceived stress. Constructive thinking models are related to less stress, whereas different models of non-constructive thinking are linked to higher stress (Karastoyanov et al., 2015; Христова, et al., 2021). There is evidence about gender differences regarding constructive thinking and stress. Females report a higher level of perceived stress and are more prone to apply non-constructive coping strategies (Hristova et al., 2021). There is no research exploring if gender differences in religious groups are factors that differentiate the relationship between religious orientation, constructive thinking and perceived stress. The present paper will test these variables on a sample of Bulgarian religious individuals.

This paper examines data from the study of 235 religious participants from Bulgaria (March 2022-January 2023). The proposed analysis of this data is to study the effect of gender on the relationship between religious orientation, constructive thinking and perceived stress among religious individuals in Bulgaria.

## Religious orientation

The approach that has made the most significant contribution to the study of individual differences in religiosity is based on the theory of mature and in-

fantile religiosity (Allport, 1950). The scientific understanding of various forms of religiosity arose to explore how religious beliefs can reinforce infantile and magical thinking while also promoting a holistic perspective on life that encourages individuals to shift from self-absorption to genuine care for others (Allport, 1954). The most frequently used distinction is intrinsic and extrinsic orientations, provided by the motivational and goal-oriented approach (Allport, 1959; Allport, Ross, 1967). Intrinsic orientation describes an internalized approach to religiosity where individuals engage deeply with their religious experiences and view religion as an important motivational force in their lives. This form of religiosity is marked by deep, meaningful, and thoughtful contemplation of religious matters (Allport, Ross, 1967). It is associated with regular church attendance, open-mindedness, tolerance, and maturity; it negatively correlates with depression (Genia, Shaw, 1991). Evidence has accumulated over the last 20 years linking intrinsic religiosity to several positive outcomes: internal locus of control (Kahoe, 1974), greater perceived meaning and purpose in life (Crandall, Rasmussen, 1975), lack of anxiety (Baker, Gorsuch, 1982), and life satisfaction (Ting et al., 2023). The intrinsic orientation towards religion is negatively related to the use of threat appraisals (Maltby, 2003). One possible explanation of the link between religious orientations and stress is based on the mediating role of religious coping (Hathaway, et al., 1990). Internally oriented religious individuals used specific problem-solving strategies (collaborative and problem-solving) more than externally oriented individuals (Pargament et al., 1990). Furthermore, intrinsic religiousness is associated with religiously based appraisals of critical events and spiritually based coping to attain spiritual rather than self-centered ends (Pargament et al., 1992). When comparing intrinsic religious individuals to extrinsic ones, intrinsic individuals tend to fare better in areas such as psychological well-being (Alker, Gawin, 1978), possessing a strong internal locus of control, and displaying lower levels of existential and trait anxiety (Sturgeon, Hamley, 1979). McClain (1978) discovered that intrinsic individuals surpassed non-religious respondents in self-control, personal and social competence, and stereotyped femininity, while exhibiting lower levels of egocentric sexuality and restlessness (Wiebe, Fleck, 1980). Concerning the empirical data we could expect that the women will be more religious in terms of intrinsic religiosity and that the intrinsic orientation mentioned in research as Religiosity as end, would be a negative predictor of perceived stress.

Extrinsic religiousness is instrumental, compartmentalized, prejudiced, exclusionary, immature, and dependent, based on searching for comfort and security. It is utilitarian, self-serving and related to irregular church attendance, defense, or avoidant coping strategies (Allport, Ross, 1967). The study conducted by Maltby and associates indicates that an extrinsic religiosity is connected to perceiving stressful situations as distressing and evoking feelings of sadness and loss (Maltby, 2003). Extrinsic religiosity is called upon in times of personal threat and strained resources and directed toward self-maintenance and protection (Pargament et al., 1992). Extrinsic religiosity positively correlates with prejudice (Allport, et al., 1967), dogmatism and trait anxiety (Baker, Gorsuch, 1982), and negatively related to responsibility, and internal locus of control (Kahoe, 1974). Some study suggests that extrinsic religiosity is positively associated with more stress (Navara et al., 2005), whereas others reveal a negative relationship with stress (Ting et al., 2023).

The differentiation between intrinsic and extrinsic orientation continues to be utilized in examining the religious factors related to significant psychological issues like prejudice. Researchers investigate various levels of meaning tied to religion – cognitive, motivational, societal, and intergroup – to understand how these could both foster and reduce prejudice (Hunsberger, Jackson, 2005). Given the empirical studies, we assume that extrinsic religiousness, operationalized in the survey as Religiosity as means would be a positive predictor of perceived stress.

To overcome the limits of the two-dimensional concept of religious orientation, Batson (1976; Batson, et al., 1981; Batson et al., 1978; Batson et al., 1982) proposed an alternative to the intrinsic-extrinsic conceptualization. These authors argue that the intrinsic scale lacked three key components of mature religiosity: the willingness to confront existential questions without oversimplifying them, a capacity for self-criticism and viewing religious doubts as constructive, and a readiness for change (Batson et al., 1993, Voci et al., 2017). The concept of Quest represents a particular aspect of religiosity characterized by an open-ended, inquiring attitude towards religious matters, engaging in a responsive dialogue with existential concerns. The Religiosity quest scale is designed to capture the religious sentiment of those who, though not necessarily aligned with any formal religious institution or creed, continually raise questions about the existing social structure and the structure of life itself (Batson, 1976). People with quest religious orientation treat their religion not as the centre and meaning of their lives but as a search for

truth, honestly meeting existential questions without reducing complexity and avoiding easy answers (Batson, 1991). Batson and his colleagues (1993) introduced two new concepts to better capture the essence of intrinsic-mature and extrinsic-immature religiosity. The first, Religiosity as an End, views religion as a fundamental goal in itself. The second, Religiosity as Means, sees religion as a tool for attaining other self-serving objectives (Voci, et al., 2017).

People high on the quest orientation have been found to engage in complex thought (Batson et al., 1983) and to be open to varying perspectives (McFarland et al., 1992). Consequently, the relationship between quest and tolerance may partly indicate that individuals with a strong inclination towards Quest tend to approach both religious matters and the concepts of people and diversity with a complex mindset (Hunsberger et al., 2005, Fleischmann, 2022).

Regarding the Quest orientation - the results are ambiguous (Donahue, 1985). Religious coping studies tied Quest religiosity to active religious struggle in the situation as a means not to problem resolution but to greater meaning and growth (Pargament et al., 1992). The findings of Maltby and colleagues suggest that individuals who are unable to address existential questions without reducing their complexity and are not open to changes in religious belief tend to view stressful events as either a threat or loss. As such, these findings support the view that more reflective aspects of religious orientation (Quest) are related to cognitive appraisals (Maltby, 2003). It was found that higher scores of quest predict less perceived stress (Navara et al., 2005). On the other hand, the openness, flexibility, and skepticism that appear to characterize the quest dimension may carry with them a lack of personal direction and peace of mind (Batson et al., 1991). Also, quest is associated with non-constructive thinking (Watson, 1999), religious conflict and anxiety (Kojetin et al., 1987). Moreover, the validity of the scale has been challenged whether the religiosity as quest scale does not instead measure agnosticism, anti-orthodoxy, or sophomoric religious doubt to ensure that the scale measures precisely what it is intended to measure (Donahue, 1985). Regarding the results we could expect that Religiosity as quest would be a significant predictor of perceived stress.

In accordance with the empirical data revealed gender differences regarding religious orientations we allow that the females will be more religious in terms of psychologically extrinsic orientation and intrinsic religiosity (Flere, 2007). Although the benefits and disadvantages of different religious orientations have been well established, research has yet

to determine whether it is linked to existential information-processing systems. Few research studies have focused on religious people's internal cognitive processes, revealing that such research is promising (Watson et al., 1999). In response to questions about how information-processing systems are connected to religious orientation, part of the answer may be how religious individuals engage in information processing according to the principles of the Cognitive experiential theory (CET).

### Constructive Thinking

Constructive thinking is a concept of Cognitive experiential theory, which is associated with dual process nomenclature of experiential/intuitive (emotion-based) and rational systems (Epstein, 1994; Epstein et al., 1996, Karastoyanov, 2014). CET posited that people process information by two parallel but interacting modes of cognitive styles: analytical-rational style and experiential-intuitive style. The analytical-rational style operates at the conscious level and it is intentional, analytic, logical, and affect-free. In contrast, the experiential-intuitive style is assumed to be automatic, more rapid processing oriented, and associative (Epstein, 1994, Epstein et al., 1996; Epstein, Pacini, 2001; Karastoyanov, 2014). On the positive side, an experiential thinking style is associated with spontaneity, emotional expressiveness, agreeableness, extraversion, and establishing favorable interpersonal relationships. On the negative side, it is associated with superstitious beliefs, naïve optimism, and stereotypical thinking (Epstein et al., 1996; Pacini, Epstein, 1999; Karastoyanov, 2014).

Constructive thinking is a broad, non-intellective cognitive variable that affects one's problem-solving ability (Epstein et al., 1989). It is defined as a degree to which a person's automatic thinking facilitates solving problems in everyday life at a minimum cost in stress (Epstein, 1998). Also, as a set of cognitive productive and counterproductive automatic habitual thoughts Constructive thinking affects one's ability to think in a manner that solves problems (Epstein, et al., 1989, Katz, et al., 1991). Similarly, Constructive thinking refers to cognitions that enable the individual to revise his or her thinking to meet the requirements of various situations, improving his or her ability to manage his or her emotions and cope effectively. Within the constructive thinking theory is the notion that CT represents a mechanism for monitoring repeated intrusive thoughts concerning the self. Also, findings suggest that highly constructive thinkers tend to shift more intentional coping resources away from off-task ac-

tivities and negative self-reaction (Drach-Zahavy et al., 2002). Therefore, by examining the automatic thoughts and interpretations guiding people's behaviour in everyday life, the degree of Constructive thinking determines how effectively people adapt to their environment and manage stress (Epstein, 1998; Karastoyanov, Petkova, 2021).

Good constructive thinkers hold set habitual adaptive thoughts that help them control their feelings and sustain an action-oriented approach to coping (Drach-Zahavy, Somech, 1999). In contrast, poor constructive thinkers possess maladaptive automatic thoughts that interfere with emotion monitoring, for example some forms of overgeneralization-rigid ways of thinking (Categorical Thinking), reliance on superstitious or other forms of magical thinking (Superstitious Thinking), engagement in grandiose self-enhancement (Naïve Optimism) or excessive use of negative overgeneralization (Negative Thinking) to explain the environment. Consequently, they engage in ineffective coping processes through gross overgeneralizations directed towards the self and others. Poor constructive thinking examples would be worrying needlessly, dwelling on negative events, overgeneralizing, thinking in extremely categorical ways, and thinking in ways that increase unhappiness without accomplishing anything worthwhile (Epstein, 1992; Chousou, 2021).

Constructive thinking is usually measured by the CTI (Constructive Thinking Inventory: Epstein, Meier, 1989). CTI measures adaptive experiential functioning (Epstein, 1993; Epstein, Meier, 1989) associated with cognitive flexibility, reasoned optimism, acceptance of self and others, and active, direct, problem-focused coping. The constructive components of the experiential system are global constructive thinking, emotional coping, and behavioural coping and their respective subscales. The destructive components are personal superstitious thinking, categorical thinking, esoteric thinking, and naïve optimism (Epstein, et al., 1989; Karastoyanov, 2018). Good emotional coping emphasises self-acceptance, absence of negative over-generalisation and dwelling. Behavioural coping focuses on positive thinking, action orientation and conscientiousness. Categorical thinking, Superstitious thinking, Naïve optimism, and Esoteric thinking refer to patterns of cognitive distortion or irrational thinking which reflect the veridicality of a person's interpretations of reality (Epstein, et al., 1989). There is evidence that constructive thinking relates to various aspects of success in everyday life, such as work, marriage, and social relationships (Epstein, Meier, 1989). Emotional and behavioural coping are re-

lated to maintaining a sense of self-esteem and self-worth, rational thinking, whereas categorical thinking, superstitious thinking, naïve optimism, and negative thinking are negatively related to rational thinking and self-esteem measures (Hurley, 1990; Karastoyanov, 2018, Karastoyanov, et al., 2021). Latest research reveal a negative relationship between constructive thinking, behavioural coping and emotional coping with perceived stress, whereas personal superstition thinking and esoteric thinking are positively related to perceived stress (Hristova et al., 2021, Karastoyanov et al., 2021, Hristova, et al., 2022; Ghorbani et al., 2005).

Based on the previous surveys we could expect that there would be gender differences in constructive and non-constructive components of the experiential system and that they will affect differently to perceived stress in men's and women's group.

## Perceived Stress

Following Lazarus and Folkman's (1984) definition of the stressful situation as depending on individual access (mainly unconsciously) on the demands related to the situation which exceed his resources to deal with it, the survey examines the subjective perspective of perceived stress, rather than objective presence or frequency of stressful events. It is focused on the assessment of the influence of important events and changes in life, everyday troubles and stressors from the environment. At the same time, it is sensitive to the influence of unexpected single stressful events or chronic stress through the processes of assessment and reassessment. Survey investigates the perceived ability to manage stress and the extent to which the individual access his life as unpredictable, uncontrollable and overloaded (Cohen et al. 1983).

A substantial amount of evidence indicates that women and men react differently to stress (Costa, 2021). The contemporary research continues to reveal that women experience more stressful life events (Kessler et al., 1985). They also employ distinct coping strategies, which are defined as the cognitive and behavioral methods that individuals use to manage stressful situations perceived as challenging, overwhelming, hostile, or detrimental (Azale et al., 2018, Costa, 2021).

## Method

### *Research aim, tasks, and hypotheses*

The aim of the study is to establish whether there are gender differences in predictive role of religious orientations, constructive and non-constructive cop-

ing strategies to perceived stress among Bulgarian religious individuals.

This aim is realized through completing the following tasks: 1) Identifying the religious orientation of Bulgarian religious individuals as they are measured by Religious orientation and life inventory 2) Identifying the constructive and non-constructive coping strategies of Bulgarian religious individuals as they are measured by Constructive thinking inventory. 3) Establishing whether there are gender differences in respect to religious orientation, constructive and non-constructive coping strategies and perceived stress among Bulgarian religious individuals. 4) Defining the predictive roles of religious orientation and the constructive and non-constructive coping strategies noted above regarding the perceived stress in men's and women's group.

In the light of the results of previous studies concerning the religious orientation, constructive thinking and perceived stress, we assume that there are significant gender differences concerning perceived stress, religiosity as end and religiosity as means, and constructive and non-constructive coping strategies.

Based on the previous surveys we could expect that religious orientation and constructive thinking will predict differently perceived stress in two groups.

### *Sample*

Participants' demographics are presented in detail in Table 1 (N= 235), the majority of the participants are women (85% to 15% men) with higher education (87%). About 68% of the sample is in the age interval 30-50 years, 10% (18-30) and 21,5% (50-80) and about 90% are Christians.

**Table 1.** Demographic characteristics of the sample

Gender	men	55
	women	179
Education	bachelor	47
	master's degree	129
	PhD	42
	Secondary education	17
Age	18-30	11
	30-50	171
	50-80	51
	Islam	6
	Catholicism	2
	Orthodoxy	126
	Protestant	11
	Christianity	45
	others	3

The following analytical tools were utilized for the purposes of the study:

1. Religious Life and Orientation Scale (RLOS) (Voci et al, 2017) included 18 items belonging to three subscales: religiosity as end, religiosity as means, and religiosity as quest. The End scale's items were created to measure how much an individual's religion fulfills their needs for strength, direction, and certainty, which are aspects of an intrinsic-end orientation. This intrinsic-end dimension is closely connected to the desire for clear answers to existential inquiries. For example, one sample item is, "I try hard to carry my religion over into all my other dealings in life."

The external scale aimed to evaluate a particular facet of the extrinsic-means orientation, specifically how one's social environment influences their religious experiences. This scale assesses the significance of social institutions or authority figures on an individual's faith, with a sample item such as, "My religion serves to satisfy needs for fellowship and security."

Lastly, the quest scale was designed to gauge an individual's inclination to engage in open-ended exploration of existential questions while maintaining their complexity, along with a willingness to embrace change and a positive view of religious doubts. A sample item from this scale is, "It might be said that I value my religious doubts and uncertainties." (Voci et al., 2017).

The respondents estimate the statements via seven point Likert scale ranging from absolutely wrong (1) to absolutely correct/right (7).

2. The Constructive Thinking Inventory (Epstein, 1998, adapted for Bulgaria by Karastoyanov & Hristova in 2015) recognizes the main components of constructive and destructive thinking. It contains 30 items of two scales for constructive thinking, three scales for destructive thinking and one scale that can be referred to both types of thinking depending on the level of expression. The inventory distinguishes the following styles for coping with stressful events: Emotional coping (the ability to cope with the internal world of the feelings) (I don't let little things bother me), Behavioral coping (the ability to cope with the external world) (I am kind of person who takes action rather than just thinks or complains about situation).

Categorical thinking (rigid thinking, the world is seen in "black and white colours"): (*Basically, there are two types of people in this world - good and bad*), Personal superstitious beliefs (Does not refer

to traditional superstition. It addresses the personal or mental games that people play in order to prepare for disappointment), Esoteric thinking (believes that unusual and paranormal phenomena are the reason for the events): (*I believe in ghost*). Naïve optimism is a tendency to believe that one separate positive result guarantee that every time things will end positively (*If I were accepted at an important interview, I would feel very good and think that I would always be able to get a good job*)

The respondents estimate the statements via five point Likert scale ranging from absolutely wrong (1) to absolutely correct/right (5).

3. Perceived Stress Scale (Cohen et al., 1983, adapted for Bulgaria by Karastoyanov & Rusinova-Hristova in 2000) examines the subjective perspective for perceived stress, rather than objective presence or frequency of stressful events. 10-items scale detects the perceived ability to manage stress and the extent to which the individual access his life as unpredictable, uncontrollable and overloaded (Cohen et al. 1983). Participants use a five point Likert scale ranging from never (1) to very often (5).

## Results and Discussion

Table 2 below presents the descriptive statistics, reliability indicators of the three scales of Religious orientation, the six scales of Constructive thinking inventory, and the Perceived Stress Scale. The values of Cronbach's alpha for Religious orientation vary from  $\alpha = 0.75$  (Religiosity as quest) to  $\alpha = 0.84$  (Religiosity as end). The alpha of Religiosity as means  $\alpha = 0.47$  is lower. The alphas of the six scale of Constructive thinking vary from  $\alpha = 0.75$  (Personal Superstition thinking) to  $\alpha = 0.45$  (Categorical thinking). The alphas of the other scales of CTI are generally lower than the value of  $\alpha = 0.70$  that is recommended as a cut-off point, but they indicate a reasonable level of internal consistency for the number of items (only 5 items per subscale). In addition, these coefficients are similar to or higher than those reported in previous research (Hristova et al. 2021). Considering that the internal consistency depends on the size of the scale, for scale with less than 10 items it is allowed to be close to 0.50, as the average correlation between items should be within the range from 0.20 to 0.40 (Briggs, et al., 1986). We therefore assume that the internal consistency of the subscales is fully acceptable.

The expectations of gender differences in Perceived stress, Religious orientations and Constructive thinking is partly confirmed, with the results

**Table 2.** Means, Standard Deviations, Cronbach's Alpha of the six scales of CTI, three scales of Religious Orientation and PSS scale

	N	Cronbach's Alpha	Min	Max	Mean	SD
Constructive thinking	212		128.00	174.00	148.95	7.93
Emotional coping	230	.67	7.00	25	<b>16.03</b>	3.87
Behavioral coping	227	.68	7.00	25.00	<b>19.01</b>	3.40
Categorical Thinking	229	.45	6.00	22.00	13.38	3.20
Personal Superstition thinking	227	.77	5.00	25.00	12.31	4.28
Naïve optimism	228	.47	9.00	25.00	<b>18.50</b>	3.12
Esoteric thinking	231	.75	5.00	25.00	13.16	4.50
Religiosity as end	234	.84	7.13	49.88	<b>35.66</b>	8.70
Religiosity as quest	235	.75	4.2	28.4	13.76	5.98
Religiosity as means	234	.47	4.2	23.4	14.52	3.87
Perceived stress	221	.77	15.1	38.5	25.92	4.65

being presented in Table 3 below. Although there were no differences concerning gender in respect to Religious orientation, global Constructive thinking, Behavioral coping, Personal superstition thinking and Naïve optimism, such differences are found in respect to Perceived stress, Esoteric thinking and Emotional coping. In spite of the uneven distribution by gender in our sample, we can nevertheless link the results obtained with the findings for constructive and non-constructive thinking and coping.

The survey reveals significant differences in Perceived stress and Esoteric thinking, higher in women. This finding aligns with other research indicating that women tend to report a greater number of stressful life events (Kessler et al., 1985). Additionally, extensive population-based studies conducted in Europe have revealed that women have higher average Perceived Stress Scale (PSS) scores than men (Costa et al., 2021; Nielsen et al., 2008; Klein et al., 2016; Remor, 2006).

The possible explanation is in further analysis which show that religious women are more engaged in non-constructive thinking (Esoteric thinking), characterised by belief in strange, magical and scientifically questionable phenomena. At the same time Emotional coping or the ability to face potentially stressful situations like a challenge rather than with fear, and thus suffering less stress than others, is higher in religious men. This result is supported by the data from different research which specify that women exhibit higher levels of superstition than men (Dag, 1999; Wiseman & Watt, 2004) and higher levels of Esoteric thinking (Karastoyanov et al., 2015; Hristova et al., 2021). Latest research established that non-adaptive coping strategies, such as Esoteric thinking, are related to more stress. In contrast Emotional coping is constructive thinking style regarding challenges, and as adaptive coping strategies it is negatively related to stress (Hristova et al., 2021).

**Table 3.** T-test results for gender differences in six scales of CTI, Religious orientation and Perceived stress

Gender		N	Mean	SD	t	p
Global CT index	Women	164	149.01			
	Men	47	148.55		0.35	0.73
Perceived Stress	Women	168	28.73	5,34		
	Men	52	27.06	5,32	1.98	<b>0.05</b>
Emotional coping	Women	177	15.75	3,92		
	Men	52	16.85	3,48	-1.93	<b>0.056</b>

Esoteric thinking	Women	175	13,47	2,08		
	Men	55	12,04	1,99	1,99	<b>0,05</b>
Behavioral coping	Women	174	19,06	3,46		
	Men	52	18,73	3,18	0,65	0,52
Cathegorical thinking	Women	176	13,41	3,32		
	Men	52	13,37	2,77	0,09	0,92
Pers. superstition thinking	Women	173	12,46	4,43		
	Men	53	11,94	3,70	0,85	0,40
Naive optimism	Women	174	18,59	2,97		
	Men	53	18,13	3,54	0,86	0,39
Religiosity as end	Women	178	39,16	10,21		
	Men	55	40,71	9,87	-1,01	0,32
Religiosity as quest	Women	179	17,43	6,85		
	Men	55	16,96	7,45	0,41	0,68
Religiosity as mean	Women	179	17,42	4,67		
	Men	64	17,24	4,56	0,26	0,80

Concerning the relation between researched variables and perceived stress the analysis reveals some differences between two groups. As it shown in Table 4 Emotional coping and Behavioral coping are strongly negatively related with perceived stress, whereas Personal superstitious beliefs are strongly positively related in two groups. Global constructive thinking is related moderately negatively with perceived stress, whereas Religiosity as quest is moderately positively related with perceived stress only in

women group.

Regression analyses specify the predictive roles of the variables related to the perceived stress in men's and women's group.

The results of the regression analysis are presented in Table 4, 5 below. First, we examined the degree to which religious orientation predicts the perceived stress, and found that two of the three subscales contribute significantly to predicting perceived stress.

**Table 4.** Correlation analysis results on gender differences in relationship between constructive and non-constructive coping and perceived stress, and religious orientations and perceived stress

PSS	Global CT	EC	BC	CT	PSB	NO	ET	Rel End	Rel Quest	Rel Means
women	-.20*	-.52**	-.42**	.20*	.47**	-.19*	0.09	-0.08	.25**	-0.03
men	-0.27	-.63**	-.41**	.16	.31*	-.19	0.18	-0.26	0.03	-0.18

Global CT – Global constructive thinking; EC- Emotional coping; BC- Behavioral coping; CT- Categorical thinking; PSB – Personal superstitious beliefs; NO – Naïve optimism; ET – Esoteric thinking; Rel End – Religiosity as end; Rel Quest – Religiosity as quest; Rel Means – Religiosity as means; PSS – Perceived stress.

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).



**Table 5.** Predictors of perceived stress in women’s group

Model	ANOVA	R <sup>2</sup>	Predictors	Standardized Coefficients		
				Beta	t	Sig.
I	F=3.38 (p=0.02)	.04	Religiosity as end	-.03	-.31	.76
			Religiosity as quest	<b>.24</b>	3.02	<b>.003</b>
			Religiosity as means	-.02	-.22	.83
II	F=15.57 (p=0.001)	.35	Religiosity as end	0.07	1.02	0.31
			Religiosity as quest	0.11	1.60	0.11
			Religiosity as means	0.02	0.22	0.83
			Behavioral coping	<b>-0.22</b>	-2.93	<b>0.004</b>
			Emotional coping	<b>-0.29</b>	-3.47	<b>0.001</b>
Personal superstitious beliefs	<b>0.24</b>	3.20	<b>0.002</b>			

**Table 6.** Predictors of perceived stress in men’s group

Model	ANOVA	R <sup>2</sup>	Predictors	Standardized Coefficients		
				Beta	t	Sig.
I	F=1.71 (p=.18)	0.04	Religiosity as end	<b>-0.28</b>	-1.80	<b>0.08</b>
			Religiosity as quest	-0.08	-0.53	0.60
			Religiosity as means	-0.14	-0.98	0.33
II	F=7.31 (p<0.001)	0.47	Religiosity as end	-.15	-1.09	.28
			Religiosity as quest	-.13	-.89	.38
			Religiosity as means	-.10	-.85	.40
			Behavioral coping	-.10	-.69	.49
			Emotional coping	<b>-.55</b>	-3.93	<b>.00</b>
Personal superstitious beliefs	.17	1.30	.20			

In the first model Religiosity as end has the negative coefficient only in the men group, whereas Religiosity as quest has significant positive coefficient only in the women group. The value subscales explained 4% of the variance in perceived stress in the women group and 4% of variation in the men group. This results are in accordance to the previous findings, which describe Religiosity as end as related with less stress, in contrast to Religiosity as quest which in some research appears as linked to maladaptive coping strategies which are related to more stress (Watson, 1999).

The three scales – Behavioral coping, Emotional coping and Personal superstitious beliefs were

added in Step 2. Together with three religious orientation scales they explain 35% of the variance in perceived stress in the women group and 47% of variation in the men group.

In respect to the values variables in II-nd model, Emotional coping, Behavioral and Personal superstitious beliefs contribute significantly to the regression model; and the contribution of the Religiosity as end and Religiosity as quest is reduced to non-significant when the EC, BC and PSB variables are added to the model.

The results thus show that the perceived stress of religious individuals is largely linked to and predicted negatively by Emotional coping and Behav-

ioral coping. The main difference in gender's predictors is regard Personal superstitious beliefs which positively influence the perceived stress only among religious women.

Although religiosity as end has a negative effect and religiosity as quest is associated with high perceived stress, they are of lesser importance. Behavioral coping (negative), Emotional coping (negative) and Personal superstitious beliefs (positive) appeared to be equally average predictors of perceived stress in the women group, and Emotional coping is a strong negative predictor of perceived stress in men group. The results are in accordance with the evidence in the literature that Emotional coping and Personal superstitious beliefs are significant predictors of perceived stress (Hristova et al., 2021).

Researchers provide a possible explanation. It has been proposed that engaging in religious practices may help with reappraisal by transforming negative thoughts in order to change emotional states (Dolcos et al., 2021). In terms of CET religiosity provides learning a set of habitual adaptive thoughts promoting emotional coping through reappraisal. Insights from emotion science suggest potential connections between specific religious coping strategies and cognitive reappraisal as a method of emotion regulation (Dolcos et al., 2021, Gross, 1998). Cognitive reappraisal entails reframing or reevaluating negative thoughts to influence emotional responses, often leading to improved management of adverse situations (Dolcos et al., 2021, Gross, 1998). Positive reappraisal is viewed as an especially effective emotion regulation technique, as it helps sustain emotional balance during difficult or stressful times and shields against distress symptoms (Dolcos et al., 2021, Llewellyn et al., 2013; Resick et al., 2013). In conclusion, the results suggest during specific challenging situations, the set of habitual constructive or non-constructive thoughts is the most important predictor of perceived stress, regardless of gender and religious orientation.

## Conclusion

Based on our findings, we may draw certain conclusions concerning the gender differences in predictive role of religious orientations, constructive and non-constructive coping strategies to perceived stress among Bulgarian religious individuals.

First, the survey confirms the gender differences in constructive thinking and perceived stress. Females are prone to experience more stress respect men. The data about the gender differences in constructive thinking offer a possible explanation. The

religious women in the sample are more engaged in non-constructive thinking, characterised by belief in strange, magical and scientifically questionable phenomena. Recent research confirmed that esoteric thinking as a maladaptive coping strategy influences higher levels of perceived stress (Hristova et al., 2021). Constructive thinking such as emotional coping is higher among religious men. Results demonstrate that men's and women's perceived stress is highly negatively related by the automatic constructive thoughts as problem-orienting, active approach to treat stressful situations as challenges, with self-acceptance, absence of negative over-generalisation and dwelling. In the same time the perceived stress is positively linked to Personal superstitious belief and Religiosity as quest among women.

Second, specific constructive and non-constructive component of experiential system are approved as a predictors with a significant influence on perceived stress among religious people. The data synchronizes with the research among the non-religious individuals (Hristova et al., 2021, Hristova et al., 2022). The results demonstrate that Emotional coping is the strongest negative predictor of perceived stress in the two groups. The ability to cope with one's inner emotions, embrace self-acceptance, and refrain from engaging in negative over-generalization and dwelling can result in a reduced level of stress for individuals who are religious.

In addition, regression analysis demonstrates Religiosity as quest and Personal superstitious beliefs as positive predictors of perceived stress only among religious women. The results support the previous surveys which linked openness, flexibility, and skepticism that appear to characterize the Quest dimension to lack of personal direction and peace of mind (Batson et al., 1991), non-constructive thinking (Watson, 1999), religious conflict and anxiety (Kojetin et al., 1987). This mindset can lead to higher perceived stress among religious women for several reasons. Continuously questioning and exploring one's faith can create inner conflicts and cognitive dissonance. This ongoing tension between doubt and belief can increase stress levels. Religiosity as a quest lacks the certainty can be stressful, especially when dealing with life's challenges and seeking guidance or support from one's faith. Constantly questioning and seeking deeper meaning can lead to existential anxiety. Concerns about life's purpose, the nature of God, and the afterlife can be sources of stress when answers are not readily found. The process of questioning and seeking can be emotionally taxing. Doubts and uncertainties about one's faith can evoke feelings of guilt, fear, or

confusion, contributing to higher levels of perceived stress. Overall, the open and questioning nature of religiosity as quest, combined with the emotional dynamics of being a religious woman, can lead to higher levels of perceived stress.

Questions that have arisen but are yet to be resolved: Whether there is a relationship between different religious orientations and constructive and non-constructive thinking or coping strategies in searching for a possible explanation of the relation with perceived stress.

The study provides data related to the gender differences in perceived stress and the coping strategies among the religious individuals and also clearly points out possible factors predicting the stress. These results might advise the practitioners supporting the adaptation of religious people in coping with stressful situations. There is no doubt that further research in this direction is needed to support the received results and to establish a stable background for any strategies for prevention and coping with stress among religious individuals.

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