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# Religion and the Submissive component of Depression: An explorative study

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### Riassunto

#### **La religione e la componente remissiva della depressione: uno studio esplorativo**

Generalmente, le persone depresse tendono ad adottare comportamenti sottomessi, ad avere una scarsa considerazione di sé nel confronto sociale, alimentando la paura di una valutazione negativa. Un prolungato comportamento sottomesso, nel tempo, può tradursi in un disturbo depressivo. Allo stesso modo, in un’ottica evolutiva, le convinzioni e gli atteggiamenti religiosi presentano notevoli implicazioni per la vita sociale: stabilire e mantenere gerarchie, figure di potere e relazioni asimmetriche. Tutte queste implicazioni rappresentano esempi di comportamenti sottomessi tra persone religiose e credenti. Nel presente studio, il legame tra orientamento religioso e comportamento sottomesso è stato esplorato in un campione di 391 studenti universitari. I risultati hanno evidenziato che le persone caratterizzate da un orientamento religioso extrinseco sono più propense ad instaurare comportamenti sottomessi. Diversamente, nessuna associazione è stata riscontrata tra depressione e orientamento religioso. In conclusione, un orientamento religioso di tipo extrinseco sociale è funzionale nel perseguire obiettivi attraverso comportamenti sociali, ed è indirettamente coinvolto nella sintomatologia depressiva.

**Parole chiave:** Depressione, Religiosità, Comportamento sottomesso, Orientamento religioso

### Abstract

Generally, depressed people tend to adopt submissive behavior, to have a low self-consideration in social comparison, which causes fear of a negative evaluation. A time-prolonged submission results into a development of depression. Likewise, from an evolutionary view, religious beliefs and attitudes have functional implications for social life: establishing and maintaining hierarchies, figures of power, and asymmetric relationships. All these implications accounted for submissive behavior in religious people. In this study, the link between depression, religious orientation and submissive behavior, and how these were causally related, was explored in a sample of 391 undergraduate students. Results showed that people characterized by an extrinsic religious orientation were more likely to engage submissive behaviors. No evidence of depression-religiosity pattern was found. These results suggest that an extrinsic social religious orientation play a functional goal-pursuit role in social behavior, but indirectly involves depressive symptoms.

**Keywords:** Depression, Religion, Submissive behavior, Religious orientation

## Introduction

Depression is one of the most debilitating and common mental illness in the world and the risk of relapse and the human cost for this disease are consistent (World Health Organization, 1998). Depression is the first cause of dysfunction in subjects between 14 and 44 years, with the overall impact of depressive disorder involves high prevalence from adolescence to older age. It causes significant deficits in social and academic context, and implies difficulty of diagnosis and high probability of relapse (Smith, McCullough, & Poll, 2003).

Rates of depression vary between 2.6% and 12.7% in men and between 7% and 21% in women (Kessler, McGonagle, & Zhao, 1994). Prevalence of major depressive disorder in 18-29 year-old individuals is three times higher than the individuals age 60 years or older. The society is characterized by competition to achieve self-realization. The competitive environment is based on social confrontation, fear of a rejection and the perception of inferiority when we do not reach the social and personal realization (Cheung, Gilbert, & Irons, 2004). Competitiveness is linked to the experiences of life and cultural factors (consumerism or insecurity at work). If we feel inferior, we are more under pressure to achieve our projects, we are more competitive and we could be a higher risk of depression (Gilbert et al., 2007; Balzano, Carlucci, Sergi, Murdock, & Saggino, 2015).

Evolutionary approach sought to explore the evolution mechanisms of the depression and if these processes could be adaptive (Sloman, Gilbert, & Hasey, 2003; Gilbert, 2006). It suggested that depression evolves in aversive social situations (Allen & Badcock, 2003) and the depressed mood could be an involuntary self-protective response (Allan & Gilbert, 1997). In this sense, one of the factor underlying of depression should be the submissiveness (Gilbert & Allan, 1998). The subordinate behaviour could be adaptive mechanism because it reduces the possibility of a failure (Sloman et al., 2003).

In the evolutionary approach, the Social Rank Theory suggested that both humans and animals have similar display in social aversive contexts: subjects in low rank tend to be subordinate and they are seen such inferior by similar (Allan & Gilbert, 2002; Byrne, et al., 2007). Submissive strategies are useful to promote hierarchical conflict termination (Sloman

et al., 2003). Aversive contexts are often unfavorable in social evaluations, in which individuals see themselves as inferior to a potential evaluating. On these bases, within the Social Rank Theory, depression and its symptomatology are linked to the perceptions of social status and fear of negative evaluation in social comparison (Gilbert, Price, & Allan, 1995).

Emotions, thoughts and moods are influenced by perceptions of our status or rank. Poor perceptions of the social position lead to feeling of inferiority, involuntary subordination, feeling defeated and lower and submissive behavior (Gilbert, 2000; Gilbert et al., 2007). The involuntary subordination is a relatively adaptive and stable trait, characterized by social comparison, defeat and submissive behavior (Sturman, 2011). Existing literature underlined that many depressed people tend to adopt submissive behavior (Allan & Gilbert, 1997; Forrest & Hokanson, 1975). For example, low self-consideration in social comparison produces fear of a negative evaluation. These processes lead to a submissive behaviour (Cheung et al., 2004; Gilbert, 2000). A time-prolonged submission results into a development of depression (Allan & Gilbert, 1997; Cheung et al., 2004; Gilbert, 2000; Gilbert & Allan, 1998; Swallow & Kuiper, 1988). Social comparison evaluation and hierarchical system play a key role in the understanding of the relation between submissive behavior and depression (Cheung et al., 2004). Given the importance of social context in the development of depression, also religion as specific social context could be involved in depression.

Religious beliefs or attitudes, from an evolutionary view, have functional implications for social life (Atran & Norenzayan, 2004; Boyer, 2001), for example, to establishing and maintaining hierarchies, figures of power, and asymmetric relationships (Kirkpatrick, 2005), and conditioning morality through reward or fear of punishment (Johnson & Bering, 2006). Bowing and kneeling represent behavioural expressions of veneration typical of religious practices. These display a form of submission of low-rank individuals to high-rank ones in human and nonhuman species (Burkert, 1996). Religions promote a God Image as similar to humans but, at the same time a superior one (thus, a promoted low rank of believers); this dualistic view of rank seems facilitate both prosocial and antisocial (i.e. the legitimization of

outgroup prejudice) behavior (Saroglou, Corneille & Van Cappellen, 2009).

Many self-report measures have been used in research to test the relation between religious and submission behavior (Altemeyer & Hunsberger, 2005; Saroglou, Delpierre, & Dernelle, 2004; Schwartz & Huismans, 1995). However, all these studies included obedience, compliance, conformity, dependence, restriction of free will, as measures of submission. For instance, intrinsically religious and fundamentalists people showed high rate of right-wing authoritarianism; in which the submission of authority is a key component (Altemeyer & Hunsberger, 2005). Religious young adults tend to give high importance to values maintaining the social order, such as tradition and conformity, and low importance to self-direction (Picconi, Carlucci, Balsamo, Tommasi, & Saggino, 2014; Saroglou et al., 2004; Schwartz & Huismans, 1995). In addition, aspects like trust of authorities and acceptance of their decisions (Skitka, Bauman, & Lytle, 2009), and submission to unjustified hypothetical request (Buxant & Saroglou, 2008) represent explicit religious-submission attitude. Similarly, using experimental task, Saroglou et al. (2009) showed how religious priming activates submission-related thoughts like obedience, or dependence, and increase among submissive individuals, compliance to an experimenter request for vindictive behavior. Exposure to religious cues may enhance people's willingness to assimilate their decisions to those of others, for the better or the worse depending on the specific content of the social influence (Van Cappellen, Corneille, Cols, & Saroglou, 2011). People living their religious experience in every aspect of their life have been described as individuals with intrinsic orientations (Allport, 1966). People who have an extrinsic orientation often-use religion to reach for example a social status (Allport & Ross, 1967) and participation in powerful in-group (Genia & Shaw, 1991). The intrinsic religious orientation is associated with a better psychological well-being, while the extrinsic religious orientation is related to a poorer well-being (Maltby, Lewis, & Day, 1999).

Several psychologists of religion and scientists have long been fascinated by the role that religion plays in everyday psychological adjustment, i.e. in the response to life events, stressor or physical injury, and how this manifests itself (i.e. coping effects, an

external useful resource). Different reviews of the literature showed contradictory findings and did not all arrive at consistent conclusions (Hackney & Sanders, 2003). These contradictory results were in great part due to author operationalization's of religiosity (often mistake with spirituality) and mental health (well-being, remission of symptoms or disorder, social or cognitive functioning).

Religion is a complex dimension and several aspects of it, are differentially related to mental health. For example, religious supports, closeness to God, prayer were aspects of religiosity positively associated with mental health; only few aspects presented negative impact to mental health, like the religious doubt and spiritual struggle (Hill & Pargament, 2003).

Generally, most researches in the field of psychology of religion and mental health take into account religious orientations dimension and its relation to depression (Genia & Shaw, 1991; Koenig, 1995; Maltby & Day, 2000; Maltby et al., 1999). Different studies investigated the relationship between depression and religion, but their results are controversial (Koenig, 1998). Early and recent studies underlined how the prevalence and the incidence of depression were related to religious affiliations. Specifically, secular Jews, Pentecostals, and those with no affiliations presented a higher risk for depression (Koenig, King, & Carson, 2012). Particularly, eastern Europe Jewish males' exhibit higher prevalence of depressive symptoms: i.e. dysphoria, insomnia, fatigue, and loss concentrations compared with no Jewish males, and were more to complain about symptoms. This relationship could be explained by genetic factors, to the extended use of mental health services and the verbalization of their emotional pain (rather than suppress it with alcohol, typical of no Jewish). On the contrary, higher rates of depression among Pentecostal and no religious affiliations were related, respectively, to their socioeconomic status and lack of social support (Koenig et al., 2012).

Concerning religious orientation, an intrinsic religiousness was associated with lower scores on depression measures: an intrinsic faith may be intrinsically therapeutic for the religious individuals (Genia & Shaw, 1991; Koenig, 1995; Maltby & Day, 2000; Maltby et al., 1999). On the other hand, extrinsic orientation was associated with higher scores on de-

pression measures (Genia & Shaw, 1991; Maltby & Day, 2000; Park, Cohen, & Herb, 1990). Finally, some studies failed to find correlation between religion and depression (Bergin, Masters, & Richards, 1987), as well as between fundamentalist intrinsically oriented with depression and anxiety (Carlucci, Tommasi, Balsamo, Furnham, & Saggino, 2015). Research on patients with medical illnesses found that the intrinsic religious orientation allowed for a faster remission of disease in 70% of medical cases (Koenig, 1998). The lack of clarity about the association between religiousness (in particular, religious orientation) and depression was due to several factors. Some limits maybe due to the use of the certain instruments and the limited use of multiple measure for each constructs. Moreover, in the light of the findings presented above, religiousness potentially play an important role and significant implications in social behavior (Van Cappellen et al., 2011) and mental health (Koenig, & Larson, 2001), as well as submissive behavior on depression.

Thus, the study aimed firstly to explore the relationship between religion, depression and submissive behavior; secondly, the predicting role of religious orientation on submissive behavior and depression was tested. Based on the current literature, we expected to find significant and positive correlations between submissive behavior and depression, similarly with extrinsic religious orientation measure. As the association between religiousness and depression, no a priori hypothesis was formulated.

## Methods

### Participants

The sample was composed of 391 undergraduate students who participated for course extra credit. The sample was composed of 86.4% females and 13.6% males, with a mean age of 20.78 ( $SD = 3.64$ ) years. Participants' religious affiliation was as follows: 81.8% Catholic, 0.5% Jews, 0.3% Orthodox, 0.3%, Protestant and 17.1% other or no Affiliation. The religious sample professed regular churchgoers.

### Instruments

*Teate Depression Inventory.* The Teate Depression Inventory (TDI; Balsamo & Saggino, 2013, 2014) is a new 21-item self-report instrument de-

signed to assess major depressive disorder as specified by the latest editions of the DSM (American Psychiatric Association, 2000, 2013; Balsamo & Saggino, 2013). It was developed via Rasch logistic analysis of responses, within the framework of item-response theory (Andrich, 1995), to overcome inherent psychometric weaknesses of existing measures of depression, including the BDI-II (Balsamo & Saggino, 2007). Each item is rated on a 5-point Likert-type scale, ranging from 0 "always" to 4 "never". A small but growing literature suggests that the TDI has strong psychometric properties in both clinical and nonclinical samples (Balsamo, Carlucci, et al., 2015; Balsamo, Carlucci, & Sergi, 2016; Balsamo, Giampaglia, & Saggino, 2014; Balsamo, Imperatori, et al., 2013; Balsamo, Innamorati, Van Dam, Carlucci, & Saggino, 2015; Balsamo, Macchia, et al., 2015; Balsamo, Romanelli, et al., 2013). In a recent study, three cutoff scores were recommended in terms of sensitivity, specificity, and classification accuracy for screening for varying levels (minimal, mild, moderate, and severe) of depression severity in a group of patients diagnosed with major depressive disorder (Balsamo & Saggino, 2014).

*Submissive Behavior Scale.* The Submissive Behavior Scale (SBS, Allan & Gilbert, 1997) is a 16-item unidimensional self-report measure adapted from Buss and Craik (1986) to assess submissive social behavior. Respondents rate a series of statements on a 5-point scale (ranging from 0 to 4). Items refer to behaviors such as avoiding eye contact with others or walking out of a shop, the measure is a response scale based on behavioral frequency. This scale has satisfactory internal consistency and test-retest reliability, in both student and depressed group (Allan & Gilbert, 1997). It has been used in a number of studies concerned with assertive behavior (Gilbert & Allan, 1994), and depression (i.e., Gilbert, Allan, & Trent, 1995).

*Religious Orientation Scale-Revised.* The Religious Orientation Scale-Revised (I/E-R, Gorsuch & McPherson, 1989) is a 14-item self-report measure revised of the Gorsuch and Venable's 20-items "Age-Universal" IE scale. Items were rated on 5-likert point from "strongly disagree" to "strongly agree". The scale measures both intrinsic and extrinsic religious orientation originally posited by Allport (1950). Based on Kirkpatrick's (1989) conclusion, the scale

measures the intrinsic orientation (I, 7 items) and two extrinsic subscales: 1) personally oriented (Ep, 3 items), and 2) socially oriented (Es, 3 items).

Also, we administered two single items that assess both religiosity and church attendance. The first was assessed by a 7-point Likert scale from 1 “not religious” to 7 “very religious”. For church attendance (how frequently people participate in worship), the scale ranged from 1 “once a day”, 3 “once a week” to 6 “never”.

## Results

Means, standard deviations and reliability for the submissive, depression and religiousness measures were presented in Table 1. The univariate normality test showed skewness and kurtosis indices within the range  $\pm 1$  (Curran, West, & Finch, 1996). All the measure showed a good internal consistency, with Cronbach's  $\alpha$  coefficients range from .70 to .93.

**Table 1: Descriptive Statistics and Reliability of the measures used in the study (N=391)**

	Reliability	Mean	Std. Dev.
Intrinsic	.83	24.39	7.86
Extrinsic Social	.81	4.36	2.20
Extrinsic Personal	.81	9.10	3.59
TDI	.93	30.24	13.44
SBS	.79	20.11	7.77
Religiosity	-	5.21	2.57
Church Attendance		3.62	1.12

Note: TDI = Teate Depression Inventory; SBS = Submissive Behavior Scale.

Correlations were carried out (see Table 2), using the Bravais-Pearson  $r$  and the Spearman's rho correlation coefficients, showed that the three subtests of I/E-R scales did not significantly correlate with depression measure. The correlation trend underlined the negative association between Intrinsic ( $r_{TDI} = -.078$ ) and Extrinsic Social ( $r_{TDI} = -.054$ ) religious orientation and a trivial association with Extrinsic personal ( $r_{TDI} = .035$ ). In addition, the two extrinsic religious orientation dimension presented slightly positive correlations with Submissive Behavior Scale ( $r_{Es} = .110$ ,  $p < .05$ ;  $r_{Ep} = .135$ ,  $p < .05$ ). The SBS, also, correlated positively and significantly with depression measure ( $r_{TDI} = .378$ ,  $p < .01$ ). Moreover,

religiousness indices showed positive and significant association only with I-E/R dimensions (ranged from  $\rho = .340$  to  $\rho = .689$ ;  $p < .01$ ).

In order to pursue our second aim, we carried out two linear regression analyses with stepwise method (see Table 3). Depression, submissive behaviour and extrinsic social and personal variables were entered each time as the predicted variable. In all the models only the variables correlated with submissive behaviour were included. In the first regression (Model 1), submissive behaviour variable was entered as criterion, and depression and the extrinsic dimensions of religious orientation as predictor. In the second (Model 2), depression became the criterion and religious orientation dimension and submissive behaviour were introduced as predictor variables. In Model 1, the depression ( $\beta = .382$ ,  $t = 8.116$ ;  $p < .001$ ) and only the extrinsic social religious ( $\beta = .13$ ,  $t = 2.763$ ;  $p < .001$ ) orientation resulted to predict submissive behaviour. In Model 2, as expected, the submissive behaviour predicted depression ( $\beta = .385$ ,  $t = 8.120$ ;  $p < .001$ ), better than extrinsic social religious ( $\beta = -.096$ ,  $t = -2.019$ ;  $p = .044$ ). Additionally, a third model was tested, in which extrinsic personal and social orientation were entered as criterion and submissive and depression were introduced as predictor variables. None of the variables included in the model as a predictor succeeded to explain extrinsic religious orientation.

## Conclusions

Up to now, there is good evidence about the link between submissive behavior with depression (Cheung et al., 2004; Gilbert, 2000) and submissiveness and religion (Altemeyer & Hunsberger, 2005; Saroglou et al., 2004; Schwartz & Huismans, 1995; Van Cappellen et al., 2011). Nevertheless, no evidence concerned religious orientation and depression relationship, it was found in this study. However, literature showed an unclear relationship between religion and depression (i.e., Smith et al., 2003). Studies focused on religious orientation, as a specific dimension of religion, underlined that extrinsic orientation was correlated with depressive measure more than intrinsic religious (Genia & Shaw, 1991; Koenig, 1995; Maltby & Day, 2000; Maltby et al., 1999). Therefore, our goal was to explore, the presence of a relationship between submissive behavior, religious orientation

**Table 2: Correlations between I-E/R, Submissive Behavior, Depression and Religiosity measures**

	Es	Ep	TDI	SBS	R <sup>†</sup>	CA <sup>†</sup>
Intrinsic	.323**	.665**	-.078	.059	.689**	.619**
Extrinsic Social (Es)	-	.273**	-.054	.110*	.340**	.371**
Extrinsic Personal (Ep)	-	.035	.135*	.636**	.431**	

Listwise comparison N=381. \*p< .01, \*\*p < .05; † = Spearman Rho

Note: TDI = Teate Depression Inventory; SBS = Submissive Behavior Scale; R = Religiosity; CA = Church Attendance.

**Table 3: Summary of Linear Regression analysis for variables predicting, in turn, Submissive Behavior and Depression**

	R	R <sup>2</sup>	R <sup>2</sup> adj.		B	SE	β	t	Sig.
<b>Model 1</b>									
Step One	.375	.140	.138	TDI	.217	.027	.375	7.911	.000
Step Two				TDI	.221	.027	.382	8.116	.000
	.397	.157	.153	Es	.458	.166	.130	2.763	.006
<b>Model 2</b>									
Step One	.375	.140	.138	SBS	.648	.082	.375	7.911	.000
Step Two				SBS	.666	.082	.385	8.12	.000
	.387	.150	.145	Es	-.584	.289	-.096	-2.019	.044

and depression. In line with the literature, this study highlighted how religious attitude and beliefs were not directly associated with depression (Berginet al., 1987; Carlucci et al., 2015). The results showed that depression was significantly correlated with submissive behavior, as suggested by the existing literature (Allan & Gilbert, 2002; Cheung et al., 2004; Gilbert, 2000; Sturman, 2011; O'Connor, Berry, Weiss, & Gilbert, 2002). Moreover, submissive behavior presented slight positive correlations with both religious orientation, personal and social extrinsic. Only the extrinsic social religious orientation predicted submissiveness, like depression. On the contrary, extrinsic religious orientation seems not determined by submissiveness behavior and depression mood. Finally, neither intrinsically religious orientation, church attendance, and religiosity indices have been correlated significantly with depression and submissive behavior measures.

In addition, results suggested how extrinsically oriented people use religion to have social status and participation in powerful in-group (Allport & Ross, 1967; Genia & Shaw, 1991). Both personal and social extrinsic religious orientations could be framed

as goal-pursuits through behavior; but extrinsic-personal orientation consists of the use of the religion to gain comfort, security or protection, while extrinsic-social consists of the use of the religion to gain social contact. The maintenance of hierarchies and an asymmetric relationships, lead individuals to see themselves as inferior to a potential evaluating. An extrinsic religious orientation, indirectly, contribute to a self-perceived submissive behavior trait; leading individual to develop a depressed mood.

Summarizing, the slightly positive significant correlations between extrinsic religious orientation and submissive behavior, found in this study, suggest how religiousness carry out a functional goal-pursuit role in social behavior, and may be involved indirectly in depressive symptoms. Religious attitude and beliefs were associated with submission concepts in people who tends to use religion as a way to achieve their goals and people with the tendency to comply and to conform to the others (Van Cappellen et al., 2011). Depression, in this way, can be seen as the repeated consequence of the failure of this strategy.

This study presents different limitations. The sample was composed exclusively by undergraduate stu-

dents, so the generalizability of the results is limited. Moreover, older adults are more religious oriented than younger and depressive symptoms are more prevalent among the elderly (Koenig, 1998). Methodologically, a sample size effect can be observed, and the analysis carried out here were not exhaustive, and did not covered all the effect-cause role of the variables involved into the study. Future researches should generalize these data in clinical sample and in a specific religious sample, as suggested by Koenig, McCullough, and Larson (2001). Likewise, to confirm the hypothesis that religious orientation may be involved indirectly in depression development is necessary to use more robust statistic techniques, i.e. the mediation/moderation analysis. This study represents a first attempt to understand how religious orientation influence individual's perception and behavior. Future studies and findings, in this direction, will provide useful clinical indications, developing intervention or therapeutic innovations programs for depression, and adjustment disorders, i.e. the compassionate mind training (Gilbert & Irons, 2005).

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