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Psychological Resources, Personality Traits and Buddhism: A Study of Italian Young Adults

Marco Giannini¹ · Yura Loscalzo¹ · Daniela Beraldi² · Alessio Gori³

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Abstract We aimed to examine whether young adults practicing Buddhism have elevated levels of psychological resources and specific personality traits compared to Catholics and Atheists. We recruited 184 participants: $Soka\ Gakkai$ Buddhists (n=60); non-practicing Roman Catholic Church believers (n=62); Atheists (n=62). We found that the Buddhists have higher optimism than both Catholics and Atheists. They also have higher self-efficacy and self-esteem than Catholics and higher perceived social support than Atheists. Concerning global personality factors, they are more extraverted than the other groups, and they are less tough-minded than Catholics. Differences also emerged relating some primary personality factors. Since we did not find differences between Catholics and Atheists about psychological resources, we speculate that religion alone does not provide an efficacious source of psychological resources; it could be that religious practice is determinant.

 $\textbf{Keywords} \ \ \text{Buddhism} \cdot \text{Personality traits} \cdot \text{Psychological resources} \cdot \text{Religious community}$

Introduction

In recent years, many studies focused on the correlation between religious practices and mental and physical health (e.g., Gall et al. 2011; Holt et al. 2013; Miller and Thoresen 2003; Peterson and Webb 2006; Seeman et al. 2003). It has been shown, as for example, that there is a positive association of religion with dealing with surgery, especially heart

Department of Human Sciences, LUMSA University of Rome, Rome, Italy



Department of Health Sciences, School of Psychology, University of Florence, Via di San Salvi 12
 Padiglione 26, 50135 Florence, Italy

Florence, Italy

surgery (Ai et al. 2002, 2004, 2010), and this association seems to be mediated by optimism (Ai et al. 2007; Krause 2002). More specifically, a structural equation model demonstrated that optimism mediated the favorable effect of prayer coping (Ai et al. 2002). However, the review of Mouch and Sonnega (2012) found contrasting results regarding the relationship between religion and recovery from cardiac surgery.

As regards mental health, much research in the last century has shown a positive relationship between the practice of mindfulness and lower incidence of stress (Shapiro et al. 1998), as well as between religiosity and less depressive symptoms (Gray 1987; Hirsch et al. 2014; Lee 2007). Faith seems to be generally related to satisfaction with life, in other words, with wealth in the broadest sense (Bergan and McConatha 2000; Lee 2007). Religion and religious practices play an important role for the individual's well-being (Aghababei 2014; Jackson and Bergeman 2011; Lomas et al. 2014; Strawbridge et al. 1997). However, three recent reviews highlighted that a minority of studies have found negative associations between religion and mental health (Joshi et al. 2008; Koenig 2009; Weber and Pargament 2014). This is in line with the review of Mouch and Sonnega (2012) on physical health, and it suggests that major research on this topic is necessary in order to understand what specific aspects of religion have a positive association with health.

The aim of this paper, indeed, is to examine whether belonging to a particular religious community, namely *Soka Gakkai* Buddhism, and practicing in this community, is related to specific psychological resources and personality traits at a specific stage of life (i.e., in young adults).

Psychological Resources

Religious involvement emerges generally as positively associated with some personal resources: self-efficacy, self-esteem, perceived social support and optimism (Abdel-Khalek and Scioli 2010; Ciarrocchi et al. 2008; Hirsch et al. 2014; Hovey et al. 2014; Lee 2007; Maton and Rappaport 1984; Mattis et al. 2004; Njoh and Akiwumi 2012; Rappaport and Simkins 1991; Salsman et al. 2005; Schafer 2013; Simoni and Ortiz 2003; Simoni et al. 2002).

Self-esteem and Self-efficacy/Empowerment

Sherkat and Reed (1992), studying the effects of religion and social support on self-esteem and depression among the suddenly bereaved, found that religious participation fosters self-esteem but is not significantly related to depression, while authors such as Simoni and Ortiz (2003) noticed that religious involvement fosters a sense of self-esteem and self-mastery in the face of a potentially deadly disease. In addition, regarding mental health, Lee (2007) found a positive relationship between the practice of forgiveness as well as less private religious practice, and self-efficacy. Finally, some studies found that religion is associated with higher personal empowerment (Maton and Rappaport 1984; Njoh and Akiwumi 2012; Rappaport and Simkins 1991).

Nevertheless, there are also studies contrasting with these findings. Ross (1996), examining 15 regression models, found that main effects of religion and self-esteem are related to certain forms of delinquency, while the combined effects of religion and self-esteem are not related to delinquency. Greenfield et al. (2009) indeed found that greater formal religious participation is associated with less autonomy. Maton and Rappaport (1984) highlighted that empowered people have a greater belief in God, but also a



perception that God has control of the events of their lives. Finally, Schieman et al. (2003) found a negative relationship between religiosity and self-mastery in poorly educated participants, but a positive relationship in people with a higher education. Hence, the relationship between self-efficacy, self-esteem and religion remains an open question.

Perceived Social Support

Belonging to a religious community also has benefits in terms of perceived social support from other faith companions of the same community. Assuming that religious associations are places where religious activities occur and where people meet faith companions and share their beliefs, values and ideas (Ellison et al. 2009; Ikeda 2010), it is not surprising that religious involvement emerges as positively associated with perceived social support (Hovey et al. 2014; Salsman et al. 2005; Simoni et al. 2002).

This is congruent with research suggesting that perceived social support is positively related to reducing the negative effects of stressful events, in the case of serious illness such as cancer as well (Kinsinger et al. 2006; Kudel et al. 2008; Manne et al. 2004; Mellon et al. 2006; Trunzo and Pinto 2003).

Optimism

There is an extensive literature on the association between optimism and health. Many studies have shown that optimists tend to have better health than pessimists. Indeed, there are positive effects for managing stress (Nes and Segerstrom 2006), including in responses to malignant (De Moor et al. 2006; Thornton et al. 2012).

There is also a positive association between some aspects of religiosity/spirituality and hope and optimism (Abdel-Khalek and Scioli 2010; Ciarrocchi et al. 2008; Hirsch et al. 2014; Mattis et al. 2004; Schafer 2013). It seems that religious people have a more positive view of life and the future; these positive expectations are related to perception of life's satisfaction (Koenig et al. 2001; Salsman et al. 2005).

Thus, religious participation seems to correlate with optimism and well-being, a way to deal with a difficult situation or one that requires meeting an urgent challenge. In a wider sense, optimism seems to motivate positive interpersonal relationships and necessary social behaviors for human survival and adaptation (Fiske 2004).

Personality Traits

Saroglou (2002) conducted a meta-analytic review on religion and the Big Five personality factors. The conclusion is that religiosity is mainly associated with high Agreeableness and Conscientiousness, and with low Psychoticism, although the effect sizes are small. More recently, Sarouglu (2010) conducted a second meta-analysis, confirming the previous finding that Agreeableness and Conscientiousness are the main personality characteristics associated with religion. In a research on religious coping and personality in later life, Koenig et al. (1990) used the Sixteen Personality Factor Questionnaire of Cattell (cf. Cattell et al. 1970) to compare religious copers with non-religious copers. Religious copers scored lower on factor E (less aggressive or hostile, more humble and submissive); there was also a tendency toward their being higher on factor G (more responsible, conscientious and moralistic).



Regarding methodology, Henningsgaard and Arnau (2008) used both univariate and multivariate analyses in their study, since Thoresen and Harris (2002) indicated that univariate analysis could be too simplicistic for studying correlates of religion and spirituality. In line with this, their multivariate analysis highlighted relations undiscovered in the univariate analysis. Therefore, they concluded by saying that religion and spirituality are related to the Big Five personality factors and suggested that future studies should analyze religion at a multivariate level, with reference to a comprehensive taxonomy of personality, and going beyond the Big Five. The Sixteen Personality Factor Questionnaire (16PF-5; Cattell et al. 1993), for example, has been found to be effective in a variety of settings where an in-depth assessment of the whole person is needed (Cattell and Mead 2008).

Psychological Resources and Personality Traits in Young Adults

Although the interest in specific factors associated with different religious orientations is increasing (Abdel-Khalek and Naceur 2007; Allport and Ross 1967; Amer and Hovey 2007; Casini 2010; Clobert et al. 2015; Batson 1982; Suhail and Chaudhry 2004; Khan and Watson 2006), there are still few studies comparing belonging to a particular religious community in relation to specific psychological resources and personality traits, with no research that includes religious practice and young adult groups.

Erikson (1950) stated that at the age of 30 the Intimacy versus Isolation conflict is emphasized, with Identity versus Role Confusion coming to an end. At this stage of life, young adults are sometimes isolated and afraid of rejection. Erikson also adds that Intimacy has as counterpart, namely Distantiation: the readiness to isolate and, if necessary, to destroy those forces and people whose essence seems dangerous to our own (Erikson 1950; Crain 2011). At this stage of life, where relationships tend to stabilize, psychological resources (like self-efficacy and self-esteem) are particularly relevant, while traits like high novelty-seeking and low harm avoidance have been most strongly associated with alcohol abuse in young adults (Cloninger et al. 1988).

Both optimism and social support play an important role in both favorable circumstances and in stressful situations for the individual (Shelby et al. 2008). For example, stigma is related to worse lung function and psychological health in young adult patients with cystic fibrosis, but higher levels of optimism may act as a protective factor (Oliver et al. 2014). Social support plays a central role in protecting against isolation, and being part of a group or a community sharing experiences, emotions, concerns or spiritual aspirations can be of great help. It is known that specific dimensions of religiosity, spirituality and personal meaning in life are predictors of well-being in older people as well (Fry 2000). Hence, in young adults, the membership to a religious community could be related to psychological resources and personality traits.

Religious Communities and Atheism

In Italy, the majority of believers are Catholics. Anyhow, there are also other religious communities, and many practice Buddhism. Another religious-related community wide-spread in Italy is Atheism; indeed, there is also an atheist national association. People belonging to Atheist communities are characterized by the lack of belief in religion.



Soka Gakkai Buddhism

Buddhism is one of the great world religions, and worldwide, about five hundred million people practice Buddhism. Over twelve million of these belong to the Buddhism *Soka Gakkai* that has its roots in the life-affirming philosophy of Nichiren, a Buddhist monk who lived in Japan in the thirteenth century. With over 70,000 practitioners in Italy, Soka Gakkai is the largest Buddhist community in Europe. One reason for this success seems to be the effectiveness of the practice associated with the religion. People come closer to happiness working on themselves and not depending on input from the outside. Those who practice can substantially improve their lives. Members of Soka Gakkai follow a daily practice in the morning and evening, called Gongyo, which consists of chanting "Nammyoho-renge-kyo" and parts of the Lotus Sutra (Soka Gakkai 2002).

Roman Catholic Church

With more than 1.2 billion members, the Roman Catholic Church is the largest Christian Church in the world. The term Catholic was used by the year 110 A.D. to distinguish the Church of the Apostles from other, so-called heretical teachings. The Catholic hierarchy is headed by the Pope, who resides in the Vatican City in Rome. Rome, and hence Italy, have been major centers for Christian pilgrimage since the Roman Empire. Italy is a predominantly Roman Catholic country, and approximately 97% of Italians are baptized according to the rites of the Catholic Church, 75% of the population are believers, and 62% of these practice. The Roman Catholic Church was the state church until it disestablished with the 1948 postwar Italian Constitution, then definitely with the 1984 revision of the Lateran Catholic Treaty. Religious practice revolves around the liturgy and the seven sacraments. Prayer, the confession of sins to a priest, and attendance at Mass are requested for Catholic believers at least on Sundays and Holy Days of Obligation (Hitchcock 2012).

Atheism

At the opposite side of religious practice, there are atheists. An atheist in a general sense is one who does not believe in any gods. Atheism differs from agnosticism, which brings together all those who refrain from expressing belief about the existence of a deity, considering this a priori unknowable. Approximately 5% of the Italian population identifies itself as atheist. Seven percentage of these people know about the Italian Atheist Association (UAAR), which is a philosophical non-confessional organization, and democratic and non-political-party (Hyman 2010). Studies on atheism conclude that this group of individuals can take advantage of their strong beliefs so that they become a resource for their lives (Green and Elliot 2010; Pargament 1997; Wilkinson and Coleman 2010).

The Present Study

The aims of our study are to analyze whether membership in a religious community characterized by high participation (Buddhism) is associated with better psychological resources (i.e., more self-efficacy, self-esteem, perceived social support, optimism) and to investigate which personality traits are present at higher levels in this religious group (i.e., warmth, rule-consciousness, sensitivity, vigilance, abstractedness, privateness, apprehension, openness to change, perfectionism). We analyze these aspects in a particular age



group, that is, in young adults. More specifically, we compared young adults who regularly practice Buddhism with young adults who are Catholics and do not regularly attend religious communities, and with young adults atheists, who do not attend community meetings at all and who do not believe in God or other forms of deity. In this study, the atheists are not part of an atheist community (e.g., UAAR); they simply defined themselves as not believing in religion.

We hypothesize that young adults practicing Buddhism: (1) have greater perceived social support (e.g., Hovey et al. 2014) and optimism (e.g., Ciarrocchi et al. 2008; Schafer 2013) compared to non-practicing Catholics and to Atheists; (2) also have greater levels of self-efficacy and self-esteem, despite mixed or lacking studies to date about these resources, since we supposed that the high participation characterizing this religion could have more positive effects than in other religions in which there is less practice (as, for example, in our sample of Roman Catholics; La Stampa Italia 2016); and (3) have differences in personality traits compared to non-practicing Catholics and Atheists.

Method

Participants and Procedures

Participants in this study were 184 young adults (mean age = 31.61; SD = 10.875) recruited in Central Italy and divided into three subsamples: (1) 60 Buddhists, *Soka Gakkai*'s members (22 males; mean age = 36.83; SD= 13.31); (2) 62 Roman Catholic Church believers who are not practitioners (24 males; mean age = 31.73; SD= 9.46); and (3) 62 atheists (14 males; mean age = 26.45; SD= 6.32). Regarding their professions, 39% of the sample are students, 3% unemployed, and the remaining 38% have a job. Years of belonging to a religious community range from a minimum of five year to a maximum of 25 years. Both Roman Catholic Church believers and Atheists included in this study indicated that their choice of religion/non-religion is a component of their family environment, while the Buddhists instead indicated that they did not find the answers they were looking for in Christianity. In our sample, only the Buddhists practiced regularly.

The Atheists included in the sample are not member of any atheist association in Italy; they generally call themselves speculative atheists and completely agree with Rowe's (1998) abbreviated atheism definition; namely, they affirm the nonexistence of God and of all the other forms of deity.

All the participants affirmed they had not benefited from any psychological treatment in their lives. The Catholics and Atheists do not practice any form of meditation. The sampling procedure used for recruitment was non-probabilistic. All participants took part in the research voluntarily, with the guarantee of complete anonymity. After they signed the informed consent form, they filled out the questionnaires. The administration of the instruments took place individually, and the time for each administration was about an hour. The aims of the research were explained to participants in order to motivate their cooperation.

Measures

Psychological resources and personality traits were measured with self-report measures that have proven to be useful in identifying the examined constructs (Giannini and Gori



2012; Giannini et al. 2008, 2011; Gori et al. 2008, 2012, 2013; Scheier et al. 1994) and in efficiently developing a comprehensive picture of the whole person, including strengths and weaknesses (Cattell et al. 1993; Sirigatti and Stefanile 2001; Cattell and Mead 2008). The three instruments used were:

- 1. Psychological Treatment Inventory (PTI; Gori et al. 2013). It is a multidimensional measure formulated in accordance with recent advances in psychology and psychotherapy research and follows a pluralistic approach to psychotherapy integration. It was constructed in collaboration with clinicians of different orientations, as well as psychometricians. In this study, the Psychological Resources Cluster was used (Self-Efficacy, Self-Esteem, Perceived Social Support). All these scales are unidimensional; Cronbach's alphas are .83, .76 and .84, respectively; and two-week interval test–retest coefficients are .93, .95 and .94, respectively.
- Life Orientation Test (LOT-R; Scheier et al. 1994). This was developed to assess
 individual differences in generalized optimism versus pessimism. In this study, the
 Italian version was used (Giannini et al. 2008). Cronbach's *alpha* is .81; positive
 correlations are found with self-esteem, while negative correlations are found with
 anxiety.
- 3. Sixteen Personality Factor Questionnaire (16PF-5; Cattell et al. 1993). This is a comprehensive measure of normal range personality traits used where an in-depth assessment of the whole person is needed (Cattell and Mead 2008). The 16PF-5 Italian version was used (Sirigatti and Stefanile 2001). For the Primary Factors, test–retest reliabilities average .80 over a two-week interval. The five Global Factors show even higher test–retest reliabilities, averaging .87 for a 2-week interval (Conn and Rieke 1994).

Data Analysis

The Statistical Package for the Social Science version 20 (SPSS Inc.) for Mac was used. After having verified the statistical assumptions, we conducted a MANOVA to test the first two hypotheses [3 Religious communities × 4 Psychological resources (PTI scales: Self-Efficacy, Self-Esteem, Perceived Social Support; LOT-R scale: Optimism] with Bonferroni test to assess whether groups differed on psychological resources. To test the third hypothesis, a second MANOVA with a Bonferroni test was used for the 5 Global Factors and the 3 religious communities. Finally, a one-way ANOVA with post hoc comparison was used to evaluate the groups' differences between the means on the 16 PF-5 Primary Factors.

Results

Psychological Resources

To test the first two hypotheses, namely that young adults practicing Buddhism have greater perceived social support, optimisms, self-efficacy and self-esteem compared to not-practicing Catholics and Atheists, we conducted a MANOVA 3 (Religious communities) \times 4 (Psychological resources). Table 1 shows the descriptive statistics for these analyses.



Resource	Religious community			
	Buddhist $(n = 60)$	Catholic $(n = 62)$	Atheist $(n = 62)$	
Self-Efficacy	25.13 (4.52)	22.42 (4.43)	23.26 (4.69)	
Self-Esteem	19.53 (4.11)	17.89 (3.92)	19.34 (2.86)	
Perceived Social Support	21.12 (4.20)	19.29 (4.57)	19.02 (3.76)	
Optimism	19.27 (3.09)	16.82 (2.87)	16.71 (3.45)	

Table 1 Means (SDs) of the psychological resources by religious community group

The multivariate test showed a statistically significant effect of religion, F(8, 356) = 4.52, p < .001, partial $\eta^2 = .09$. Subsequent ANOVAs showed that religious communities had a significant effect on all of the considered psychological resources: Self-Efficacy F(2, 181) = 5.67, p < .01, partial $\eta^2 = .06$; Self-Esteem F(2, 181) = 3.70, p < .05, partial $\eta^2 = .04$; Perceived Social Support F(2, 181) = 4.51, p < .05, partial $\eta^2 = .05$; Optimism F(2, 181) = 12.81, p < .001, partial $\eta^2 = .12$. These effect sizes range from Medium to Large (Cohen 1988).

To better understand the effects of religious community, a Bonferroni post hoc test was performed. Buddhists obtained higher scores on Self-Efficacy (Mean Difference = 2.71, p < .01), Self-Esteem (Mean Difference = 1.65, p < .05), Perceived Social Support (Mean Difference = 1.83, p = .05) and Optimism (Mean Difference = 2.44, p < .001) compared to Catholics. As regards the comparison with Atheists, Buddhists had higher scores in the areas of Perceived Social Support (Mean Difference = 2.10, p < .05) and Optimism (Mean Difference = 2.56, p < .001). No significant differences emerged between Christians and Atheists on the four psychological resources.

Thus, the results partially supported our hypotheses. Buddhists demonstrated greater psychological resources than the other two groups, but they showed greater levels than both not-practicing Catholics and Atheists only on the scales of Perceived Social Support and Optimism. Regarding the other psychological resources, the Buddhists had higher level of Self-Efficacy and Self-Esteem only compared to Catholics.

Personality Traits

A second MANOVA 3 (Religious communities) \times 5 (Global personality factors) and the subsequent one-way ANOVAs on the 16 Primary Factors tested the hypotheses that

Table 2 Means (SDs) of the global personality factors by religious community group

Global factor	Religious community			
	Buddhist $(n = 60)$	Catholic $(n = 62)$	Atheist $(n = 62)$	
Extraversion	7.42 (1.46)	6.64 (1.88)	6.57 (1.02)	
Anxiety	5.09 (2.00)	5.65 (1.79)	5.30 (2.18)	
Tough-Mindedness	4.36 (1.73)	5.91 (2.18)	5.19 (2.39)	
Independence	5.77 (1.80)	5.05 (2.06)	5.69 (1.62)	
Self-Control	5.04 (1.85)	5.52 (2.10)	4.22 (1.95)	



religiosity is associated with differences in personality traits. Tables 2 and 3 show the descriptive statistics of these analyses.

The multivariate test showed a statistically significant effect of religious communities, F(10, 354) = 4.891, p < .001, partial $\eta^2 = .12$. Subsequent ANOVAs showed a statistically significant effect of religion on Extraversion F(2, 181) = 5.97, p < .01, partial $\eta^2 = .06$; Tough-Mindedness F(2, 181) = 8.17, p < .001, partial $\eta^2 = .08$; and Self-Control F(2, 181) = 6.93, p < .001, partial $\eta^2 = .07$. These effect sizes range from Medium to Large (Cohen 1988). There is no significant effect of religious group on the Anxiety and Independence scales.

To understand these results better, a Bonferroni post hoc test was performed. Buddhists, compared to Catholics, obtained higher scores on Extraversion (Mean Difference = .78, p < .05) and lower scores on Tough-Mindedness (Mean Difference = -1.55, p < .001). Compared to Atheists, Buddhists had higher levels of Extraversion (Mean Difference = .84, p < .01). Buddhists did not differ on Self-Control either with Catholics or with Atheists. There was a difference on this personality trait between Catholics and Atheists, with the former having higher Self-Control (Mean Difference = 1.30, p < .001).

To deepen the analysis of differences related to personality traits, we also conducted ANOVAs on the 16 Primary Factors of the 16 PF-5. Results showed that nine factors showed statistically significant group differences: Warmth F(2, 183) = 13.10, p < .001; Rule-Consciousness F(2, 183) = 9.04, p < 001; Sensitivity F(2, 183) = 7.25 p < .001; Vigilance F(2, 183) = 5.25, p < .01; Abstractedness F(2, 183) = 4.16, p < .05; Privateness F(2, 183) = 7.15, p < .001; Apprehension F(2, 183) = 4.08, p < .05; Openness to change F(2, 183) = 4.40, p < .05; and Perfectionism F(2, 183) = 3.72, p < .05).

 Table 3 Means (SDs) of the primary personality factors by religious community group

Primary factor	Religious community			
	Buddhist $(n = 60)$	Catholic $(n = 62)$	Atheist $(n = 62)$	
Warmth	5.85 (1.56)	4.68 (2.25)	4.15 (1.75)	
Reasoning	4.98 (2.15)	4.98 (2.17)	5.47 (2.30)	
Emotional stability	6.42 (1.93)	5.82 (1.82)	6.03 (2.38)	
Dominance	5.43 (1.85)	4.90 (2.09)	5.26 (1.55)	
Liveliness	6.02 (2.02)	5.69 (2.56)	5.66 (1.87)	
Rule-Consciousness	5.12 (1.88)	5.50 (2.22)	3.98 (2.08)	
Social boldness	5.73 (1.95)	4.97 (2.29)	5.21 (2.05)	
Sensitivity	6.55 (1.65)	5.27 (2.10)	5.47 (2.17)	
Vigilance	5.70 (2.04)	6.39 (1.90)	6.81 (1.75)	
Abstractedness	6.03 (1.74)	5.66 (1.70)	6.60 (2.00)	
Privateness	4.85 (1.84)	6.00 (1.80)	6.02 (2.18)	
Apprehension	5.80 (1.94)	5.45 (1.72)	4.90 (1.58)	
Openness to change	6.23 (2.22)	5.13 (2.31)	6.03 (2.06)	
Self-reliance	5.60 (1.92)	6.23 (1.88)	6.03 (1.80)	
Perfectionism	5.40 (2.25)	5.76 (2.24)	4.71 (2.04)	
Tension	5.03 (2.00)	5.58 (1.75)	5.16 (2.39)	



To understand these results better, a Bonferroni post hoc test was performed. Buddhists, compared to Catholics, had a higher level of Warmth (Mean Difference = 1.17, p < .01), Sensitivity (Mean Difference = 1.28, p < .01) and Openness to change (Mean Difference = 1.10, p < .02), while they had lower levels of Privateness (Mean Difference = -1.15, p < .01). Compared to Atheists, Buddhists showed higher scores on Warmth (Mean Difference = 1.71, p < .001), Sensitivity (Mean Difference = 1.08, p < .01), Rule-Consciousness (Mean Difference = 1.13, p < .01) and Apprehension (Mean Difference = 90, p < .02). They also had lower scores on Vigilance (Mean Difference = -1.11, p < .01) and Privateness (Mean Difference = -1.17, p < .01). Regarding the comparison between Catholics and Atheists, the former had higher levels of Rule-Consciousness (Mean Difference = 1.52, p < .001) and Perfectionism (Mean Difference = 1.05, p < .03), and they had lower levels of Abstractedness (Mean Difference = -.94, p < .02).

As hypothesized, Buddhists showed different levels of personality traits compared to the other religion communities. Regarding the Global Factors, they had higher levels of extraversion than both Catholics and Atheists and also lower levels of tough-mindedness than Catholics. Regarding the 16PF-5 Primary Factors, Buddhists have higher warmth and less privateness than both the other two groups. In addition, they are more open to change than Catholics, and they have higher levels of sensitivity, rule-consciousness and apprehension (and also less vigilance) than Atheists.

Discussion

The purpose of this cross-sectional research is to examine whether belonging to a particular religious community and practicing, at a particular stage of life, is related to specific psychological resources and personality traits. The literature, indeed, suggests that religion can provide necessary resources to deal with stressful life events (e.g., Ai et al. 2010; Gray 1987).

We found that Buddhists have higher psychological resources compared to not-practicing Catholics and Atheists. More specifically, they are more optimistic and perceive more social support than the other two groups, and they have higher self-efficacy and self-esteem than Catholics. Interestingly, there are no differences between Catholics and Atheists; hence, it seems that religion alone does not provide an efficacious source of psychological resources: it could be that religious practice is determinant, and neither of these two groups here analyzed engage in religious practice.

Buddhists often speak of Buddhism as a practice rather than a faith, and the practice of meditation is central to nearly all forms of Buddhism. Moreover, the members conduct their daily practice at home and meet regularly in discussion meetings held locally to study the principles of Buddhism and how to apply them in everyday life. For these reasons, we hypothesize that the practice of Buddhism could have more positive impacts on the believer than, for example, the Catholic religion that over time, at least in Italy, has lost many of the daily rituals and practices (as for example the rosary).

Our findings are in line with previous studies which found an association between religion and optimism (e.g., Hirsch et al. 2014) and perceived social support (e.g., Hovey et al. 2014). With regard to the other two psychological resources, we found, in line with Simoni and Ortiz (2003), higher self-efficacy and self-esteem in the Buddhists. However,



the study of Simoni and Ortiz (2003) is the only one to analyze self-esteem, and it is also in contrast to other studies on self-efficacy (e.g., Greenfield et al. 2009).

A possible explanation for our findings related to self-efficacy could be that they are due to the peculiar religions analyzed. Buddhists are both religious and practicing, and their daily religious practice could explain the differences with previous studies. We have to note, indeed, that we did not find any differences in psychological resources between Christians (who are religious but not practicing) and Atheists (who are neither religious nor practicing). Hence, studying the relationships between religion and psychological resources, future studies should make a distinction between religious people and practicing people to disentangle these possible effects. It would be interesting, for example, to compare believers and practitioners of the same religion community.

We also found some differences relating to personality traits. Buddhists are more extroverted than Catholics and Atheists, and they are also less tough-minded than Catholics. Consistent with the results for the global personality factors, the analysis on the primary factors showed a similar picture. Buddhists are warmer, more sensitive and show less privateness than both Catholics and Atheists. Namely, they are more expansive and thoughtful with others, and they are more sincere and genuine. Compared to Catholics, they are also more open to change. As regards the comparison with Atheists, Buddhists have also greater rule-consciousness and less vigilance; they are also more apprehensive. Hence, they are more romantic, sentimentalist and esthetic, more conscientious and respective of rules, more confident, non-suspicious and accepting. As a unique negative personality trait, Buddhists are more apprehensive; that is, they are more insecure and worried than Atheists, who are instead confident, satisfied and peaceful.

The results relating to personality traits highlight that Buddhists have more positive traits than Catholics and Atheists, but especially than Atheists. We could hypothesize that the belief in God or in a form of deity could be related to positive personality characteristics, while being Atheist, and hence not having a religious guide, could be related to having less positive traits, even if we found that Atheists are less apprehensive than Buddhists.

It is worthwhile to highlight that we found many positive personality traits in Buddhists; however, we found these positive traits only for two of the five Global Factors and seven of the 16 Primary Factors analyzed. Moreover, we found that Buddhists showed higher levels of apprehension as compared to Atheists.

Limitations of the current study include the following: (1) because this is the first study on young adults and it is cross sectional, specific considerations of cause and effect cannot be made; (2) the study is based on a convenience sample; as a consequence, there are age differences between the three groups. However, the use of this type of sample was necessary given the limited number of participants willing to participate in the study.

The merits of the study include its having analyzed a psychological resource that has been understudied in the literature, namely self-efficacy, and having compared a group of Buddhists characterized by high practice with two control groups: Catholics, who are religious but not practicing, and Atheists, who do not believe in any form of deity and also do not practice. This allowed us to study the presence of psychological resources and particular personality traits not only in comparison with non-believers, but also with religious people who, despite having a religious guide, do not practice. Therefore, we were able to study a specific aspect of religion, namely *daily practicing*. Another merit is having studied Buddhism, which has not yet received attention in the literature on psychological resources and personality traits, despite the recent wide attention to the positive effects of



mindfulness, a practice deriving from Buddhism. Finally, we used multivariate analysis, as well as ANOVA, as suggested by Henningsgaard and Arnau (2008).

Future studies could examine other values that contribute to psychological health such as coping style and locus of control, and they could compare the same religious group divided into practicing and not practicing. Finally, other researches could try to answer this question: is there something in religious members beyond personality traits that contributes to health?

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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